



Alabama Department of Environmental Management
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AUGUST 2, 2021

MR. GERALD LONG GENERAL MANAGER
UTILITIES BOARD OF THE CITY OF TUSKEGEE
POST OFFICE BOX 831050
TUSKEGEE AL 36083

RE: Draft Permit
NPDES Permit No. AL0048763
Tuskegee North WPCP
Macon County, Alabama

Dear Mr. Long:

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.

Please be aware that Part I.C.1.c of your permit requires participation in the Department's web-based Electronic Environmental (E2) Reporting System Program for submittal of DMRs upon issuance of this permit unless valid justification as to why you cannot participate is submitted in writing. Please also be aware that Part I.C.2.e of your permit requires participation in the Department's web-based electronic environmental (E2) reporting system for submittal of SSOs unless valid justification as to why you cannot participate is submitted in writing. SSO hotline notifications and hard copy Form 415 SSO reports may be used only with the written approval from the Department. The E2 Program allows ADEM to electronically validate, acknowledge receipt, and upload data to the state's central wastewater database. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. The Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes> or you may obtain a hard copy by submitting a written request or by emailing e2admin@adem.alabama.gov.

Please also be aware that Part IV. of your permit requires that you develop, implement, and maintain a Sanitary Sewer Overflow Response Plan.

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.

Should you have any questions, please contact the undersigned by email at storbert@adem.alabama.gov or by phone at (334) 271-7800.

Sincerely,

Shanda Torbert
Municipal Section
Water Division

Enclosure

cc: Environmental Protection Agency Email
Ms. Elaine Snyder/U.S. Fish and Wildlife Service
Ms. Elizabeth Brown/Alabama Historical Commission
Advisory Council on Historic Preservation
Department of Conservation and Natural Resource

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3664 Dauphin Street, Suite B
Mobile, AL 36608
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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: UTILITIES BOARD OF THE CITY OF TUSKEGEE
POST OFFICE BOX 831050
TUSKEGEE, ALABAMA 36083

FACILITY LOCATION: TUSKEGEE NORTH WPCP (3.0) MGD
2485 MACON COUNTY ROAD 8
FRANKLIN, ALABAMA
MACON COUNTY

PERMIT NUMBER: AL0048763

RECEIVING WATERS: TALLAPOOSA 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: NOVEMBER 22, 2019

EFFECTIVE DATE: DECEMBER 1, 2019

EXPIRATION DATE: NOVEMBER 30, 2024

MODIFICATION ISSUANCE DATE:

MODIFICATION EFFECTIVE DATE:

Modification

Alabama Department of Environmental Management

MUNICIPAL SECTION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT

TABLE OF CONTENTS

PART I	DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS	4
A.	DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS	4
1.	Outfall 0011 Discharge Limits	4
2.	Outfall 0011 Discharge Limits (continued)	5
3.	Outfall 001T Discharge Limits - Toxicity	6
4.	Outfall 002S Discharge Limits - Storm Water Monitoring	7
5.	Outfall 003S Discharge Limits - Storm water monitoring	8
B.	DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS	9
1.	Representative Sampling	9
2.	Measurement Frequency	9
3.	Test Procedures	9
4.	Recording of Results	9
5.	Records Retention and Production	10
6.	Reduction, Suspension or Termination of Monitoring and/or Reporting	10
7.	Monitoring Equipment and Instrumentation	10
C.	DISCHARGE REPORTING REQUIREMENTS	10
1.	Reporting of Monitoring Requirements	10
2.	Noncompliance Notifications and Reports	12
D.	OTHER REPORTING AND NOTIFICATION REQUIREMENTS	14
1.	Anticipated Noncompliance	14
2.	Termination of Discharge	14
3.	Updating Information	14
4.	Duty to Provide Information	14
E.	SCHEDULE OF COMPLIANCE	14
1.	Compliance with discharge limits	14
2.	Schedule	14
PART II	OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES	15
A.	OPERATIONAL AND MANAGEMENT REQUIREMENTS	15
1.	Facilities Operation and Maintenance	15
2.	Best Management Practices (BMP)	15
3.	Certified Operator	15
B.	OTHER RESPONSIBILITIES	15
1.	Duty to Mitigate Adverse Impacts	15
2.	Right of Entry and Inspection	15
C.	BYPASS AND UPSET	15
1.	Bypass	15
2.	Upset	16
D.	DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES	16
1.	Duty to Comply	16
2.	Removed Substances	16
3.	Loss or Failure of Treatment Facilities	16
4.	Compliance With Statutes and Rules	17
E.	PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE	17
1.	Duty to Reapply or Notify of Intent to Cease Discharge	17
2.	Change in Discharge	17
3.	Transfer of Permit	17
4.	Permit Modification and Revocation	17

5.	Termination.....	18
6.	Suspension	18
7.	Stay	18
F.	COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION.....	19
G.	NOTICE TO DIRECTOR OF INDUSTRIAL USERS.....	19
H.	PROHIBITIONS.....	19
PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS.....		20
A.	CIVIL AND CRIMINAL LIABILITY	20
1.	Tampering.....	20
2.	False Statements.....	20
3.	Permit Enforcement	20
4.	Relief from Liability	20
B.	OIL AND HAZARDOUS SUBSTANCE LIABILITY	20
C.	PROPERTY AND OTHER RIGHTS.....	20
D.	AVAILABILITY OF REPORTS	20
E.	EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES.....	21
F.	COMPLIANCE WITH WATER QUALITY STANDARDS.....	21
G.	GROUNDWATER	21
H.	DEFINITIONS.....	21
I.	SEVERABILITY	24
PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS.....		25
A.	SLUDGE MANAGEMENT PRACTICES	25
1.	Applicability	25
2.	Submitting Information.....	25
3.	Reopener or Modification	25
B.	EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS ACUTE – NO DIFFUSER.....	25
1.	Test Requirements.....	25
2.	General Test Requirements:	25
3.	Reporting Requirements:	26
4.	Additional Testing Requirements:	26
5.	Test Methods:.....	26
6.	Effluent Toxicity Testing Reports.....	26
C.	TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS.....	28
D.	PLANT CLASSIFICATION.....	28
E.	POLLUTANT SCANS.....	28
F.	STORM WATER REQUIREMENTS.....	28
G.	SANITARY SEWER OVERFLOW RESPONSE PLAN.....	29
1.	SSO Response Plan	29
2.	SSO Response Plan Implementation.....	31
3.	Department Review of the SSO Response Plan	31
4.	SSO Response Plan Administrative Procedures	31
H.	PERACETIC ACID (PAA) REQUIREMENTS.....	31

PART I**DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS****A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS****1. Outfall 0011 Discharge Limits**

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 Outfall 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) (7) Measurement Frequency</u>	<u>(4) Seasonal</u>
pH 00400 1 0 0	*****	*****	*****	*****	6.0 S.U.	9.0 S.U.	*****	E	GRAB	D	*****
Solids, Total Suspended 00530 1 0 0	750 lbs/day	1125 lbs/day	30.0 mg/l	45.0 mg/l	*****	*****	*****	E	COMP24	D	*****
Solids, Total Suspended 00530 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP24	D	*****
Nitrogen, Ammonia Total (As N) 00610 1 0 0	500 lbs/day	750 lbs/day	20.0 mg/l	30.0 mg/l	*****	*****	*****	E	COMP24	D	*****
Nitrogen, Kjeldahl Total (As N) 00625 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Nitrite Plus Nitrate Total I Det. (As N) 00630 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Phosphorus, Total (As P) 00665 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Lead, Total Recoverable 01114 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	GRAB	G	*****
Flow, In Conduit or Thru Treatment Plant 50050 1 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	CONTIN	A	*****
Chlorine, Total Residual 50060 1 0 0	*****	*****	*****	*****	*****	1.0 mg/l	*****	E	GRAB	D See Note 5 & 6	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

K – Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS – Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May – October)

ECW = E. coli Winter (November – April)

(5) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter “*9” on the monthly DMR.

(6) 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.

(7) If only one sampling event occurs during a month, the sample result shall be reported on the DMR as both the monthly average, weekly average, and/or the daily maximum.

Limits for Outfall 0011 continued on the next page.

2. Outfall 0011 Discharge Limits (continued)

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 Outfall 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*							Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
E. Coli 51040 I 0 0	*****	*****	126 col/100mL	*****	*****	298 col/100mL	*****	E	GRAB	D	ECS
E. Coli 51040 I 0 0	*****	*****	548 col/100mL	*****	*****	2507 col/100mL	*****	E	GRAB	D	ECW
BOD, Carbonaceous 05 Day, 20C 80082 I 0 0	625 lbs/day	938 lbs/day	25.0 mg/l	37.5 mg/l	*****	*****	*****	E	COMP24	D	*****
BOD, Carbonaceous 05 Day, 20C 80082 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP24	D	*****
BOD, Carb-5 Day, 20 Deg C, Percent Remvl 80091 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****
Solids, Suspended Percent Removal 81011 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****
Peracetic Acid 51674 I 0 0	*****	*****	*****	*****	*****	1.0 mg/l	*****	E	GRAB	B See Note 5	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration
from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week F - 2 days per month

B - 5 days per week G - 1 day per month

C - 3 days per week H - 1 day per quarter

D - 2 days per week J - Annual

E - 1 day per week Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May – October)

ECW = E. coli Winter (November – April)

(5) See Part IV.H for Peracetic Acid (PAA). Monitoring for PAA is applicable if Peracetic Acid is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter “*9” on the monthly DMR.

3. Outfall 001T Discharge Limits - Toxicity

Outfall 001T represents the same physical outfall as Outfall 0011. The Department uses the 001T designation for all samples and analyzed for Toxicity testing, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
Toxicity, Ceriodaphnia Acute 61425 1 0 0	*****	Pass = 0 Fail = 1	*****	*****	*****	*****	*****	E	COMP24	Q See Note 5	*****
Toxicity, Pimephales Acute 61427 1 0 0	*****	Pass = 0 Fail = 1	*****	*****	*****	*****	*****	E	COMP24	Q See Note 5	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May – October)

ECW = E. coli Winter (November – April)

(5) See Parts IV.B.2.d and e (Toxicity testing without PAA utilization and with PAA utilization). Toxicity testing shall be required quarterly after initial utilization of PAA as stated in Part IV.B.2.e. Prior to initial utilization of PAA, toxicity testing shall be required annually as stated in Part IV.B.2.d of the Permit. If monitoring is not applicable during a quarterly period, enter “*9” on the DMRs when toxicity testing is not required. Please indicate on the toxicity test reports the method of disinfection utilized during the test.

4. Outfall 002S Discharge Limits - Storm Water Monitoring

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 Outfall 002S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*							Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) (6) Sample Type	(3) Measurement Frequency	(4) Seasonal
pH 00400 SW 0 0	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	SW	FFGS	J	*****
Solids, Total Suspended 00530 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Oil & Grease 00556 SW 0 0	*****	*****	*****	*****	*****	15.0 mg/l	*****	SW	FFGS	J	*****
Nitrogen, Ammonia Total (As N) 00610 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Nitrogen, Kjeldahl Total (As N) 00625 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Nitrite Plus Nitrate Total 1 Det. (As N) 00630 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Phosphorus, Total (As P) 00665 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Flow, In Conduit or Thru Treatment Plant 50050 SW 0 0	*****	*****	*****	*****	*****	REPORT MGD	*****	SW	CALCTD See Note 5	J	*****
E. Coli 51040 SW 0 0	*****	*****	*****	*****	*****	REPORT col/100mL	*****	SW	FFGS	J	*****
BOD, Carbonaceous 05 Day, 20C 80082 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

K – Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS – Receiving Stream

SW – Storm Water

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May – October)

ECW = E. coli Winter (November – April)

(5) See Note Part IV.H.3.

(6) For all storm water parameters, samples shall be first flushed grab samples (FFGS) collected during the first 30 minutes of discharge.

5. Outfall 003S Discharge Limits - Storm water monitoring

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 Outfall 003S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) (6) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
pH 00400 SW 0 0	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	SW	FFGS	J	*****
Solids, Total Suspended 00530 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Oil & Grease 00556 SW 0 0	*****	*****	*****	*****	*****	15.0 mg/l	*****	SW	FFGS	J	*****
Nitrogen, Ammonia Total (As N) 00610 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Nitrogen, Kjeldahl Total (As N) 00625 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Nitrite Plus Nitrate Total 1 Det. (As N) 00630 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Phosphorus, Total (As P) 00665 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****
Flow, In Conduit or Thru Treatment Plant 50050 SW 0 0	*****	*****	*****	*****	*****	REPORT MGD	*****	SW	CALCTD See Note 5	J	*****
E. Coli 51040 SW 0 0	*****	*****	*****	*****	*****	REPORT col/100mL	*****	SW	FFGS	J	*****
BOD, Carbonaceous 05 Day, 20C 80082 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	FFGS	J	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

SW – Storm Water

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May – October)

ECW = E. coli Winter (November – April)

(5) See Note Part IV.H.3.

(6) For all storm water parameters, samples shall be first flushed grab samples (FFGS) collected during the first 30 minutes of discharge.

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

Sample collection and measurement actions shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit. The effluent sampling point shall be at the nearest accessible location just prior to discharge and after final treatment, unless otherwise specified in the permit.

2. Measurement Frequency

Measurement frequency requirements found in Provision I.A. shall mean:

- a. Seven days per week shall mean daily.
- b. Five days per week shall mean any five days of discharge during a calendar weekly period of Sunday through Saturday.
- c. Three days per week shall mean any three days of discharge during a calendar week.
- d. Two days per week shall mean any two days of discharge during a calendar week.
- e. One day per week shall mean any day of discharge during a calendar week.
- f. Two days per month shall mean any two days of discharge during the month that are no less than seven days apart. However, if discharges occur only during one seven-day period in a month, then two days per month shall mean any two days of discharge during that seven day period.
- g. One day per month shall mean any day of discharge during the calendar month.
- h. Quarterly shall mean any day of discharge during each calendar quarter.
- i. The Permittee may increase the frequency of sampling, listed in Provisions I.B.2.a through I.B.2.h; however, all sampling results are to be reported to the Department.

3. 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. 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.

4. 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.
5. Records Retention and Production
- a. 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 should not be submitted unless requested.
 - b. 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.
6. Reduction, Suspension or Termination of Monitoring and/or Reporting
- a. The Director may, with respect to any point source identified in Provision I.A. of this permit, authorize the Permittee to reduce, suspend or terminate the monitoring and/or reporting required by this permit upon the submission of a written request for such reduction, suspension or termination by the Permittee, supported by sufficient data which demonstrates to the satisfaction of the Director that the discharge from such point source will continuously meet the discharge limitations specified in Provision I.A. of this permit.
 - b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this permit until written authorization to reduce, suspend or terminate such monitoring and/or reporting is received by the Permittee from the Director.
7. 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. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements
- a. The Permittee shall conduct the required monitoring in accordance with the following schedule:
 - (1) **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.
 - (2) **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 should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).
 - (3) **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 reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).
 - (4) **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 reported on the December DMR.

- b. The Permittee shall submit discharge monitoring reports (DMRs) on the forms approved by the Department and in accordance with the following schedule:
- (1) **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 the month following the month the permit becomes effective. 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, unless otherwise directed by the Department.
 - (2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the first complete calendar quarter the permit becomes effective. 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, unless otherwise directed by the Department.
 - (3) **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, unless otherwise directed by the Department.
 - (4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, 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, unless otherwise directed by the Department.
- 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. by utilizing the Department's web-based Electronic Environmental (E2) Reporting System.
- (1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's E2 Reporting 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 E2 Reporting 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 five calendar days of the E2 Reporting System resuming operation, the permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of 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.

A permittee 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 and Regulations, 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
Environmental Data Section, Permits & Services Division
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
Environmental Data Section, Permits & Services Division
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
Municipal Section, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463**

Certified and Registered Mail shall be addressed to:

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

- g. If this permit is a reissuance, 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 Notifications and Reports

- a. The Permittee shall notify the Department if, for any reason, the Permittee's discharge:
- (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) Potentially threatens human health or welfare;
 - (3) Threatens fish or aquatic life;
 - (4) Causes an in-stream water quality criterion to be exceeded;
 - (5) 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);
 - (6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
 - (7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A. as a result of an unanticipated bypass or upset; or
 - (8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state. (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision.)

The Permittee shall orally or electronically provide notification of any of the above occurrences, describing the circumstances and potential effects, to the Director or Designee within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic notification, the Permittee shall submit a report to the Director or Designee, as provided in Provision I.C.2.c. or I.C.2.e., no later than five days after becoming aware of the occurrence of such discharge or occurrence.

- b. If, for any reason, the Permittee's discharge does not comply with any limitation of this permit, then the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c below. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Provision I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.
- c. Except for notifications and reports of notifiable SSOs which shall be submitted in accordance with the applicable Provisions of this permit, the Permittee shall submit the reports required under Provisions I.C.2.a. and b. to the Director or Designee on ADEM Form 421, available on the Department's website (<http://www.adem.state.al.us/DeptForms/Form421.pdf>). The completed Form must document the following information:
 - (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If the noncompliance is not corrected by the due date of the written report, then the Permittee shall provide an estimated date by which the noncompliance will be corrected; and
 - (3) A description of the steps taken by the Permittee and the steps planned to be taken by the Permittee to reduce or eliminate the noncompliant discharge and to prevent its recurrence.
- d. Immediate notification

The Permittee shall provide notification to the Director, the public, the county health department, and any other affected entity such as public water systems, as soon as possible upon becoming aware of any notifiable sanitary sewer overflow. Notification to the Director shall be completed utilizing the Department's web-based electronic environmental SSO reporting system in accordance with Provision I.C.2.e.
- e. The Department is utilizing a web-based electronic environmental (E2) reporting system for notification and submittal of SSO reports. **If the Permittee is not already participating in the E2 Reporting System for SSO reports, the Permittee must apply for participation in the system within 30 days of coverage under this permit unless the Permittee submits in writing valid justification as to why it cannot participate and the Department approves in writing utilization of verbal notifications and hard copy SSO report submittals.** Once the Permittee is enrolled in the E2 Reporting System for SSO reports, the Permittee must utilize the system for notification and submittal of all SSO reports unless otherwise allowed by this permit. The Permittee shall include in the SSO reports the information requested by ADEM Form 415. In addition, the Permittee shall include the latitude and longitude of the SSO in the report except when the SSO is a result of an extreme weather event (e.g., hurricane). To participate in the E2 Reporting System for SSO reports, the Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes>. If the E2 Reporting System is down (i.e., electronic submittal of SSO data cannot be completed due to technical problems originating with the Department's system), the Permittee is not relieved of its obligation to notify the Department or submit SSO reports to the Department by the required submittal date, and the Permittee shall submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include verbal reports, reports submitted via the SSO hotline, or reports submitted via fax, e-mail, mail, or hand-delivery such that they are received by the required reporting date. Within five calendar days of the E2 Reporting System resuming operation, the Permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. For any alternate notification, records of the date, time, notification method, and person submitting the notification should be maintained by the Permittee. If a Permittee is allowed to submit SSO reports via an alternate method, the SSO report must be in a format approved by the Department and must be legible.
- f. The Permittee shall maintain a record of all known wastewater discharge points that are not authorized as permitted outfalls, including but not limited to SSOs. The Permittee shall include this record in its Municipal Water Pollution Prevention (MWPP) Annual Reports, which shall be submitted to the Department each year by May 31st for the prior calendar year period beginning January 1st and ending December 31st. The MWPP Annual Reports shall contain a list of all known wastewater discharge points that are not authorized as permitted outfalls and any discharges that occur prior to the headworks of the wastewater treatment plant covered by this permit. The Permittee shall also provide in the MWPP Annual Reports a list of any discharges reported during the applicable time period in accordance with Provision I.C.2.a. The Permittee shall include in its MWPP Annual Reports the following information for each known unpermitted discharge that occurred:
 - (1) The cause of the discharge;

- (2) Date, duration and volume of discharge (estimate if unknown);
- (3) Description of the source (e.g., manhole, lift station);
- (4) Location of the discharge, by latitude and longitude (or other appropriate method as approved by the Department);
- (5) The ultimate destination of the flow (e.g., surface waterbody, municipal separate storm sewer to surface waterbody). Location should be shown on a USGS quad sheet or copy thereof; and
- (6) Corrective actions taken and/or planned to eliminate future discharges.

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 or 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.

E. SCHEDULE OF COMPLIANCE**1. Compliance with discharge limits**

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. Schedule

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 (BMP)

- 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 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. Certified Operator

The Permittee shall not operate any wastewater treatment plant unless the competency of the operator to operate such plant has been duly certified by the Director pursuant to AWPCA, and meets the requirements specified in ADEM Administrative Code, Rule 335-10-1.

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:

- (1) 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;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;
- (3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
- (4) 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 or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications, or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.
- 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 Boulevard Montgomery, Alabama 36110-2059.
- 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

Prior to any facility expansion, process modification or any significant change in the method of operation of the Permittee's treatment works, the Permittee shall provide the Director with information concerning the planned expansion, modification or change. The Permittee shall apply for a permit modification at least 180 days prior to any facility expansion, process modification, any significant change in the method of operation of the Permittee's treatment works or other actions that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant or could result in an additional discharge point. This condition 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.

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. 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. Suspension

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

7. Stay

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. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

1. The Permittee shall not allow the introduction of wastewater, other than domestic wastewater, from a new direct discharger prior to approval and permitting, if applicable, of the discharge by the Department.
2. The Permittee shall not allow an existing indirect discharger to increase the quantity or change the character of its wastewater, other than domestic wastewater, prior to approval and permitting, if applicable, of the increased discharge by the Department.
3. The Permittee shall report to the Department any adverse impact caused or believed to be caused by an indirect discharger on the treatment process, quality of discharged water, or quality of sludge. Such report shall be submitted within seven days of the Permittee becoming aware of the adverse impacts.

H. PROHIBITIONS

The Permittee shall not allow, and shall take effective enforcement action to prevent and terminate, the introduction of any of the following into its treatment works by industrial users:

1. Pollutants which create a fire or explosion hazard in the treatment works;
2. Pollutants which will cause corrosive structural damage to the treatment works, or dischargers with a pH lower than 5.0 s.u., unless the works are specifically designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts which will cause obstruction of flow in sewers, or other interference with the treatment works;
4. Pollutants, including oxygen demanding pollutants, released in a discharge of such volume or strength as to cause interference in the treatment works;
5. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference or in such quantities that the temperature of the treatment plant influent exceeds 40°C (104° F) unless the treatment plant is designed to accommodate such heat; and
6. Pollutants in amounts which exceed any applicable pretreatment standard under Section 307 of FWPCA or any approved revisions thereof.

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

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, 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 are 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 this paragraph.
4. Final plans and specifications for a waste treatment facility at a new source or new discharger, or a modification to an existing waste treatment facility must be submitted to and examined by the Department prior to initiating construction of such treatment facility by the Permittee.
5. Upon completion of construction of waste treatment facilities and prior to operation of such facilities, the Permittee shall submit to the Department a certification from a registered professional engineer, licensed to practice in the State of Alabama, that the treatment facilities have been built according to plans and specifications submitted to and examined by the Department.

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 waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).
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 8 equal volume samples collected at constant time intervals of not more than 1 hour 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 the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in 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. From which the discharge of pollutants did not commence 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. Notifiable sanitary sewer overflow – means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
 - a. Reaches a surface water of the State; or
 - b. May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
- 31. Permit application – means forms and additional information that is required by ADEM Administrative Code Rule 335-6-08 and applicable permit fees.
- 32. 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).
- 33. 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.
- 34. 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".
- 35. 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.
- 36. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".
- 37. 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.
- 38. 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.
- 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 8 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 SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. SLUDGE MANAGEMENT PRACTICES

1. Applicability
 - a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.
 - b. Provisions of Provision IV.A. do not apply to:
 - (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.
 - (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.
2. Submitting Information
 - a. If applicable, the Permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:
 - (1) Type of sludge stabilization/digestion method;
 - (2) Daily or annual sludge production (dry weight basis);
 - (3) Ultimate sludge disposal practice(s).
 - b. The Permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.
 - c. The Permittee shall give prior notice to the Director of at least 30 days of any change planned in the Permittee's sludge disposal practices.
3. Reopener or Modification
 - a. Upon review of information provided by the Permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.
 - b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit. This permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The Permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS ACUTE – NO DIFFUSER

The permittee shall perform 48-hour acute toxicity screening tests on the wastewater discharges required to be tested for acute toxicity by Part I of this permit.

1. Test Requirements
 - a. The tests shall be performed using undiluted effluent.
 - b. 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.
2. General Test Requirements:
 - a. A 24-hour composite 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.
 - b. 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.
 - c. 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.

- d. Prior to initial use of Peracetic Acid (PAA), toxicity tests shall be conducted in the month of **November**. Should results from the Annual Toxicity test indicate that Outfall 001T exhibits acute toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of February, May, August, and November.
 - e. **Within 30 days from initial utilization of PAA the Permittee must perform a toxicity test and submit the report to the Department, as required by Provision IV.B. The Permittee also must perform a toxicity test and submit the report to the Department, as required by Provision IV.B when PAA is used intermittently.** Toxicity tests shall be conducted quarterly in the months of **FEBRUARY, MAY, AUGUST, and NOVEMBER**. Should results from the quarterly toxicity tests indicate that Outfall 001T exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Parts IV.B.a and b. Should results from four consecutive testing periods indicate that Outfall 001T does not exhibit chronic toxicity while utilizing PAA, the Permittee may provide a written request to reduce the testing frequency. **The Permittee may also request reduced toxicity testing frequency if PAA usage is not utilized for an extended period of time. Any reduction in test frequency must be approved by the Department in writing and shall be no less frequent than annually.**
3. Reporting Requirements:
 - a. The permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
 - b. 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 and 7 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.
 4. Additional Testing Requirements:
 - a. 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.
 - b. If the additional acute toxicity tests are performed when PAA is being utilized, then the Permittee must analyze the effluent test solution each day immediately prior to test initiation or daily test of hydrogen peroxide when the appropriately diluted composite samples are added. **The concentration of hydrogen peroxide shall be reported in the toxicity test report.**
 - c. After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols/guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.).
 5. 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*).
 6. Effluent Toxicity Testing Reports

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

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

- (c) Address
- (6) Objective of test
- b. Plant Operations
 - (1) Discharge operating schedule (if other than continuous)
 - (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection date (MGD, CFS, GPM)
 - (3) Design flow of treatment facility at time of sampling
- c. Source of Effluent and Dilution Water
 - (1) Effluent samples
 - (a) Sampling point
 - (b) Sample collection dates and times (to include composite sample start and finish times)
 - (c) Sample collection method
 - (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
 - (e) Sample temperature when received at the laboratory
 - (f) Lapsed time from sample collection to delivery
 - (g) Lapsed time from sample collection to test initiation
 - (2) Dilution Water Samples
 - (a) Source
 - (b) Collection date(s) and time(s) (where applicable)
 - (c) Pretreatment
 - (d) Physical and chemical characteristics (pH, hardness, water temperature, alkalinity, specific conductance, etc.)
- d. Test Conditions
 - (1) Toxicity test method utilized
 - (2) End point(s) of test
 - (3) Deviations from referenced method, if any, and reason(s)
 - (4) Date and time test started
 - (5) Date and time test terminated
 - (6) Type and volume of test chambers
 - (7) Volume of solution per chamber
 - (8) Number of organisms per test chamber
 - (9) Number of replicate test chambers per treatment
 - (10) Test temperature, pH and dissolved oxygen as recommended by the method (to include ranges)
 - (11) Feeding frequency, and amount and type of food
 - (12) Light intensity (mean)
- e. Test Organisms
 - (1) Scientific name
 - (2) Life stage and age
 - (3) Source
 - (4) Disease treatment (if applicable)
- f. Quality Assurance
 - (1) Reference toxicant utilized and source
 - (2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)
 - (3) Dilution water utilized in reference toxicant test
 - (4) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.
 - (5) Physical and chemical methods utilized
- g. Results
 - (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
 - (2) Provide table of endpoints: LC50, NOEC, 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, NOEC, Pass/Fail, etc.), report concentration-response relationship (**definitive test only**), report percent minimum significant difference (PMSD)

h. Conclusions and Recommendations

- (1) Relationship between test endpoints and permit limits
- (2) Action to be taken

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

C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS

1. If chlorine is not utilized for disinfection purposes, TRC monitoring under Part I of this Permit is not required. If TRC monitoring is not required (conditional monitoring), "*9" or "NODI = 9" (if hard copy) should be reported on the DMR forms.
2. Testing for TRC shall be conducted according to either the amperometric titration method or the DPD colorimetric method as specified in Section 408(C) or (E), Standards Methods for the Examination of Water and Wastewater, 18th edition. If chlorine is not detected prior to actual discharge to the receiving stream using one of these methods (i.e., the analytical result is less than the detection level), the Permittee shall report on the DMR form "*B", "NODI = B" (if hard copy), or "0". The Permittee shall then be considered to be in compliance with the daily maximum concentration limit for TRC.
3. This permit contains a maximum allowable TRC level in the effluent. The Permittee is responsible for determining the minimum TRC level needed in the chlorine contact chamber to comply with E.coli limits. The effluent shall be dechlorinated if necessary to meet the maximum allowable effluent TRC level.
4. The sample collection point for effluent TRC shall be at a point downstream of the chlorine contact chamber (downstream of dechlorination if applicable). The exact location is to be approved by the Director.

D. PLANT CLASSIFICATION

The Permittee shall report to the Director within 30 days of the effective date of this permit, the name, address and operator number of the certified wastewater operator in responsible charge of the facility. Unless specified elsewhere in this permit, this facility shall be classified in accordance with ADEM Admin. Code R. 335-10-1-.03.

E. POLLUTANT SCANS

The Permittee shall sample and analyze for the pollutants listed in 40 CFR 122 Appendix J Table 2. The Permittee shall provide data from a minimum of three samples collected within the four and one half years prior to submitting a permit application. Samples must be representative of the seasonal variation in the discharge from each outfall.

F. STORM WATER REQUIREMENTS

1. Prohibitions

- a. The Permittee shall not allow the discharge of non-storm water into permitted storm water outfall(s) unless said discharge is already subject to an NPDES permit.
- b. Pollutants removed in the course of treatment or control shall be disposed in a manner that complies with all applicable Department rules and regulations.

2. Operational and Management Practices

The permittee shall prepare and implement a Storm Water Pollution Prevention (SWPP) Plan within one year of the effective date of this permit.

a. In the SWPP Plan, the Permittee shall:

- (1) Assess the treatment plant site by developing and presenting site drainage maps, materials inventory, and best management operational practices. The plan shall also include a description of all spill or leak sources;
- (2) Describe mechanisms and procedures to prevent the contact of sewage sludge, screenings, raw or partially treated wastewater, or any other waste product or pollutant with storm water discharged from the facility;
- (3) Provide for daily inspection on workdays of any structures that function to prevent storm water pollution or that remove pollutants from storm water;
- (4) Provide for daily inspection of the facility in general to ensure that the SWPP Plan is continually implemented and effective;

- (5) Include a Best Management Practices (BMP) Plan that, as a minimum, addresses housekeeping, preventative maintenance, spill prevention and response, and non-storm water discharges;
 - (6) Describe mechanisms and procedures to provide sediment control sufficient to prevent or control storm water pollution storm water by particles resulting from soil or sediment migration from the site due to significant clearing, grading, or excavation activities;
 - (7) Designate by position or name the person or persons responsible for the day to day implementation of the SWPP Plan; and
 - (8) Bear the signature of an individual meeting signatory requirements as defined in ADEM Administrative Code, Rule 335-6-6-.09.
- b. The Director or his designee may notify the permittee at any time that the SWPP Plan is deficient and will require correction of the deficiency. The permittee shall correct any SWPP Plan 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.
 - c. Administrative Procedures
 - (1) A copy of the SWPP Plan shall be maintained at the facility and shall be available for inspection by the Department.
 - (2) A log of daily inspections required by Provision IV.F.2.a.(3.) of the permit shall be maintained at the facility and shall be made available for inspection by the Department upon request. The log shall contain records of all inspections performed and each daily entry shall be signed by the person performing the inspection.
 - (3) The Permittee shall provide training for any personnel required to implement the SWPP Plan and shall retain documentation of such training at the facility. Training records for all personnel shall be available for inspection by the Department. Training shall be performed prior to the date implementation is required.
3. Monitoring Requirements
- a. Storm water discharged through each storm water outfall shall be sampled once per calendar year, using first flush grab samples (FFGS) collected during the first 30 minutes of discharge.
 - b. The total volume of storm water discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for the 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 in accordance with Provision I.B.5. of this permit. The volume may be measured using flow measurement devices or may be estimated using any method approved in writing by the Department.

G. SANITARY SEWER OVERFLOW RESPONSE PLAN

1. SSO Response Plan

Within 120 days of the effective date of this Permit, the Permittee shall develop a Sanitary Sewer Overflow (SSO) Response Plan to establish timely and effective methods for responding to notifiable sanitary sewer overflows. The SSO Response Plan shall address each of the following:

- a. General Information:
 - (1) Approximate population of City/Town, if applicable
 - (2) Approximate number of customers served by the Permittee
 - (3) Identification of any subbasins designated by the Permittee, if applicable
 - (4) Identification of estimated linear feet of sanitary sewers
 - (5) Number of Pump/Lift Stations in the collection system
- b. Responsibility Information:
 - (1) The title(s) and contact information of key position(s) who will coordinate the SSO response, including information for a backup coordinator in the event that the primary SSO coordinator is unavailable. The SSO coordinator is the person responsible for assessing the SSO and initiating a series of response actions based on

the type, severity, and destination of the SSO, except for routine SSOs for which the coordinator may pre-approve written procedures. Routine SSOs are those for which the corrective action procedures are generally consistent.

- (2) The title(s), and contact information of key position(s) who will respond to SSOs, including information for backup responder(s) in the event the primary responder(s) are unavailable (i.e., position(s) who provide notification to the Department, the public, the county health department, and other affected entities such as public water systems; position(s) responsible for organizing crews for response; position(s) responsible for addressing public inquiries)

c. SSO and Surface Water Assessment

- (1) Identification of locations within the collection system at which an SSO is likely to occur (e.g., based upon historical SSOs, lift stations where electricity may be lost, etc.)
- (2) A map of the general collection system area, including identification of surface waterbodies and the location(s) of public drinking water source(s). Mapping of all collection system piping, pump stations, etc. is not required; however, if this information is already available, it should be included.
- (3) Identification of surface waterbodies within the collection system area which are classified as Swimming according to ADEM Admin. Code chap. 335-6-11. References available to assist in this requirement include: <http://www.adem.alabama.gov/alEnviroRegLaws/files/Division6Voll.pdf> and http://gis.adem.alabama.gov/ADEM_Dash/use_class/index.html
- (4) Identification of surface waterbodies within the collection system area which are not classified as Swimming as indicated in paragraph c above, but are known locally as areas where swimming occurs or as areas that are heavily recreated

d. Public Reporting of SSOs

- (1) Contact information for the public to report an SSO to the Permittee, during both normal and outside of normal business hours (e.g., telephone number, website, email address, etc.)
- (2) Information requested from the person reporting an SSO to assist the Permittee in identifying the SSO (e.g., date, time, location, contact information)
- (3) Procedures for communication of the SSO report to the appropriate positions for follow-up investigation and response, if necessary

e. Procedures to immediately notify the Department, the county health department, and other affected entities (such as public water systems) upon becoming aware of notifiable SSOs

f. Public Notification Methods for SSOs

- (1) A listing of methods that are feasible, as determined by the Permittee, for public notifications (e.g., flyers distributed to nearby residents; signs posted at the location of the SSO, where the SSO enters a water of the state, and/or at a central public location; signs posted at fishing piers, boat launches, parks, swimming waterbodies, etc.; website and/or social media notifications; local print or radio and broadcast media notifications; "opt in" email, text message, or automated phone message notifications)
 - (a) If signage is a feasible method for public notification, procedures for use and removal of signage (e.g., availability and maintenance of signs, appropriate duration of postings)
- (2) Minimum information to be included in public notifications (e.g., identification that an SSO has occurred, date, duration if known, estimated volume if known, location of the SSO by street address or other appropriate method, initial destination of the SSO)
- (3) Procedures developed by the Permittee for determining the appropriate public notification method(s) based upon the potential for public exposure to health risks associated with the SSO

g. Standard Procedures shall be developed by the Permittee and shall include, at a minimum:

- (1) General SSO Response Procedures (e.g., procedures for dispatching staff to assess/correct an SSO; procedures for routine SSO corrective actions such as those for sewer blockages, overflowing manholes, line breakages, pump station power failure, etc.; procedures for disinfection of affected area, if applicable);
 - (2) Procedures for collection and proper disposal of the SSO, if feasible.
 - (3) General procedures for coordinating instream water quality monitoring, including, but not limited to, procedures for mobilizing staff, collecting samples, and typical test methods should the Department or the Permittee determine monitoring is appropriate following an SSO. Identification of a contractor who will collect and analyze the sample(s) may be listed in lieu of the procedures.
 - (4) References to other documents (such as Standard Operating Procedures for SSO Responses) may be acceptable for this section; however, the referenced document shall be identified and shall be reviewed at a frequency of at least that required by the Administrative Procedures Section.
- h. Date of the SSO Response Plan, dates of all modifications and/or reviews, the title and signature of the reviewer(s) for each date and the signature of the responsible official or the appropriate designee.
2. SSO Response Plan Implementation

Except as otherwise required by this Permit, the Permittee shall fully implement the SSO Response Plan as soon as practicable, but no later than 180 days after the effective date of this Permit.
3. Department Review of the SSO Response Plan
 - a. When requested by the Director or his designee, the Permittee shall make the SSO Response Plan available for review by the Department.
 - b. Upon review, the Director or his designee may notify the Permittee that the SSO Response Plan is deficient and require modification of the Plan.
 - c. Within thirty days of receipt of notification, or an alternate timeframe as approved by the Department, the Permittee shall modify any SSO Response Plan deficiency identified by the Director or his designee and shall certify to the Department that the modification has been made.
4. SSO Response Plan Administrative Procedures
 - a. The Permittee shall maintain a copy of the SSO Response Plan at the permitted facility or an alternate location approved by the Department in writing and shall make it available for inspection by the Department.
 - b. The Permittee shall make a copy of the SSO Response Plan available to the public upon written request within 30 days of such request. The Permittee may redact information which may present security issues, such as location of public water supplies, identification of specific details of vulnerabilities, employee information, etc.
 - c. The Permittee shall provide training for any personnel required to implement the SSO Response Plan and shall retain at the facility documentation of such training. This documentation shall be available for inspection by the Department. Training shall be provided for existing personnel prior to the date by which implementation of the SSO Response Plan is required and for new personnel as soon as possible. Should significant revisions be made to the SSO Response Plan, training regarding the revisions shall be conducted as soon as possible.
 - d. The Permittee shall complete a review and evaluation of the SSO Response Plan at least once every three years. Documentation of the SSO Response Plan review and evaluation shall be signed and dated by the responsible official or the appropriate designee as part of the SSO Response Plan.

H. PERACETIC ACID (PAA) REQUIREMENTS

1. The Permittee shall monitor PAA daily, but not required to exceed five days per week.
2. This permit contains a maximum allowable PAA level in the effluent. The Permittee is responsible for determining the minimum PAA level needed in the contact chamber to comply with E.coli limits.

3. The sample collection point for effluent PAA shall be at a point downstream of the contact chamber and shall be representative of the discharge.

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0048763** Date: July 16, 2021

Permit Applicant: Utilities Board of the City of Tuskegee
Post Office Box 831050
Tuskegee, Alabama 36083

Location: Tuskegee North WPCP
2485 Macon County Road 8
Franklin, Alabama 36444
Macon County

Draft Permit is: Initial Issuance:
Reissuance due to expiration:
Modification of existing permit: **X**
Revocation and Reissuance:

Basis for Limitations: Water Quality Model: CBOD₅ and NH₃N
Reissuance with no modification: CBOD₅, NH₃N, TSS, pH, TRC, E. coli,
and Percent Removals
Instream calculation at 7Q10: IWC \approx 4%
Toxicity based: TRC
Secondary Treatment Levels: TSS and Percent Removals
Other (described below): PAA

Design Flow in Million Gallons per Day: 3 MGD

Major: Yes

Description of Discharge: Outfall Number 0011; Effluent discharge to the
Tallapoosa River, which is classified as Public Water
Supply (PWS) and Fish and Wildlife (F&W).

Outfall Numbers 002S and 003S; Stormwater runoff to
the Tallapoosa River which is classified as Public Water
Supply (PWS) and Fish and Wildlife (F&W).

Discussion: This permit is being modified at the request of the Permittee to add Paracetic Acid (PAA) to the Permit for disinfection purposes. All other permit limitations and conditions will remain the same.

The Permittee has requested that PAA be included as a method of disinfection in the Permit. The PAA limit of 1.0 mg/L (daily maximum) is consistent with other Permit limits. Monitoring for PAA is only applicable if peracetic acid is utilized for disinfection purposes. Monitoring for PAA is required five days per week.

Acute toxicity testing is required. The Permittee will be required to test annually in the month of November. However, the Permittee will be required to conduct acute toxicity tests on a quarterly basis

when utilizing PAA. If monitoring is not applicable during a quarterly monitoring period enter “*9” on the DMRs when toxicity testing is not required.

Prepared by: Torbert

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
NPDES INDIVIDUAL PERMIT APPLICATION
SUPPLEMENTARY INFORMATION FOR PUBLICLY-OWNED TREATMENT WORKS (POTW), OTHER TREATMENT
WORKS TREATING DOMESTIC SEWAGE (TWTDS), AND PUBLIC WATER SUPPLY TREATMENT PLANTS

Instructions: This form should be used to submit the required supplementary information for an application for an NPDES individual permit for Publicly Owned Treatment Works (POTW) and other Treatment Works Treating Domestic Sewage (TWTDS). The completed application should be submitted to ADEM in duplicate. If insufficient space is available to address any item, please continue on an attached sheet of paper. Please mark "N/A" in the appropriate box when an item is not applicable to the applicant. Please type or print legibly in blue or black ink. Mail the completed application to:

ADEM-Water Division
Municipal Section
P O Box 301463
Montgomery, AL 36130-1463

RECEIVED

MAR 08 2021

MUNICIPAL SECTION

PURPOSE OF THIS APPLICATION

- ☐ Initial Permit Application for New Facility*
☒ Modification of Existing Permit
☐ Revocation & Reissuance of Existing Permit

- ☐ Initial Permit Application for Existing Facility*
☐ Reissuance of Existing Permit

* An application for participation in the ADEM's Electronic Environmental (E2) Reporting must be submitted to allow permittee to electronically submit reports as required.

SECTION A – GENERAL INFORMATION

1. Facility Name: Tuskegee North Water Pollution Control Plant (NWPCP) Facility County: Macon

a. Operator Name: Utilities Board of the City of Tuskegee

b. Is the operator identified in A.1.a, the owner of the facility? ☒ Yes ☐ No

If No, provide the following information:

Operator Name: N/A

Operator Address (Street or PO Box): _____

City: _____ Zip: _____

Phone Number: _____ Email Address: _____

Operator Status:

- ☐ Public-federal ☐ Public-state ☐ Public-other (please specify): _____
☐ Private ☐ Other (please specify): _____

Describe the operator's scope of responsibility for the facility:

c. Name of Permittee* if different than Operator: Utilities Board of the City of Tuskegee

*Permittee will be responsible for compliance with the conditions of the permit

2. NPDES Permit Number: AL 0048763 (Not applicable if initial permit application)

3. Facility Location (Front Gate): Latitude: 32.4719245 Longitude: -85.8517845

4. Responsible Official (as described on last page of this application):

Name and Title: Mr. Gerald Long

Address: P.O. Box 831050

City: Tuskegee State: AL Zip: 36083

Phone Number: 334-720-0700 Email Address: glong@yourubt.com

5. Designated Facility/DMR Contact:

Name: Marc Cooley Title: Waste Water Superintendent
 Phone Number: 334-724-2123 Email Address: katierob.robinson@gmail.com

6. Designated Emergency Contact:

Name: Marc Cooley Title: Waste Water Superintendent
 Phone Number: 334-421-8335 Email Address: Mcooley.northplant@gmail.com

7. Please complete this section if the Applicant's business entity is a Proprietorship or Limited Liability Company (LLC) with a responsible official not listed in A.4.

Name: N/A Title: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone Number: _____ Email Address: _____

8. Identify all Administrative Complaints, Notices of Violation, Directives, or Administrative Orders, Consent Decrees, or Litigation concerning water pollution or other permit violations, if any against the Applicant within the State of Alabama in the past five years (attach additional sheets if necessary):

<u>Facility Name</u>	<u>Permit Number</u>	<u>Type of Action</u>	<u>Date of Action</u>
<u>N/A</u>	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SECTION B – WASTEWATER DISCHARGE INFORMATION

✓ 1. Attach a process flow schematic of the treatment process, including the size of each unit operation and sample collection locations.

2. Do you share an outfall with another facility? ☐ Yes ☒ No (If no, continue to B.3)

For each shared outfall, provide the following:

<u>Applicant's Outfall No.</u>	<u>Name of Other Permittee/Facility</u>	<u>NPDES Permit No.</u>	<u>Where is sample collected by Applicant?</u>
<u>N/A</u>	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current: Flow Metering ☒ Yes ☐ No ☐ N/A
 Sampling Equipment ☒ Yes ☐ No ☐ N/A
 Planned: Flow Metering ☐ Yes ☒ No ☐ N/A
 Sampling Equipment ☐ Yes ☒ No ☐ N/A

If so, please attach a schematic diagram of the sewer system indicating the present or future location of this equipment and describe the equipment below:

4. Are any wastewater collection or treatment modifications or expansions planned during the next three years that could alter wastewater volumes or characteristics (Note: Permit Modification may be required)? ☐ Yes ☒ No

If Yes, briefly describe these changes and any potential or anticipated effects on the wastewater quality and quantity: (Attach additional sheets if needed.)

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

Describe the location of all sites used for the storage of solids or liquids that have any potential for accidental discharge to a water of the state, either directly or indirectly via storm sewer, municipal sewer, municipal wastewater treatment plants, or other collection or distribution systems that are located at or operated by the subject existing or proposed NPDES- permitted facility. Indicate the location of any potential release areas and provide a map or detailed narrative description of the areas of concern as an attachment to this application:

Description of Waste	Description of Storage Location
Dried Sludge	Contained within Drying Beds on site (See attachment B1)

*Indicate any wastes disposed at an off-site treatment facility and any wastes that are disposed on-site

SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS

1. List the existing and proposed industrial source wastewater contributions to the municipal wastewater treatment system (Attach other sheets if necessary)

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit?	
N/A				<input 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
				<input 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

2. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance? ☐ Yes ☐ No

If yes, please attach a copy of the ordinance.

SECTION E – COASTAL ZONE INFORMATION

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County? ☐ Yes ☒ No
If yes, complete items E.1 – E.12 below:

- | | <u>Yes</u> | <u>No</u> |
|---|--------------------------|--------------------------|
| 1. Does the project require new construction? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Will the project be a source of new air emissions? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Does the project involve dredging and/or filling of a wetland area or water way? | <input type="checkbox"/> | <input type="checkbox"/> |
| If Yes, has the Corps of Engineers (COE) permit been received? | <input type="checkbox"/> | <input type="checkbox"/> |
| COE Project No. | | |
| 4. Does the project involve wetlands and/or submersed grassbeds? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Are oyster reefs located near the project site? | <input type="checkbox"/> | <input type="checkbox"/> |
| If Yes, include a map showing project and discharge location with respect to oyster reefs | | |
| 6. Does the project involve the site development, construction and operation of an energy facility as defined in ADEM Admin. Code r. 335-8-1-.02(bb)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Does the project involve mitigation of shoreline or coastal area erosion? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Does the project involve construction on beaches or dune areas? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Will the project interfere with public access to coastal waters? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Does the project lie within the 100-year floodplain? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Does the project involve the registration, sale, use, or application of pesticides? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Does the project propose or require construction of a new well or to alter an existing groundwater well to pump more than 50 gallons per day (GPD)? | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes, has the applicable permit for groundwater recovery or for groundwater well installation been obtained? | <input type="checkbox"/> | <input type="checkbox"/> |

SECTION F – ANTI-DEGRADATION EVALUATION

In accordance with 40 CFR §131.12 and the ADEM Admin. Code r. 335-6-10-.04 for anti-degradation, the following information must be provided, if applicable. It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity. If further information is required to make this demonstration, attach additional sheets to the application.

1. Is this a new or increased discharge that began after April 3, 1991? ☐ Yes ☒ No
If yes, complete F.2 below. If no, go to Section G.
2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in F.1? ☐ Yes ☐ No

If yes, do not complete this section.

If no and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete F.2.A – F.2.F below, ADEM Form 311-Alternatives Analysis, and either ADEM Form 312 or ADEM Form 313- Calculation of Total Annualized Project Costs (Public-Sector or Private-Sector Projects, whichever is applicable). ADEM Form 312 or ADEM Form 313, whichever is applicable, must be provided for each treatment discharge alternative considered technically viable. ADEM forms can be found on the Department's website at <http://adem.alabama.gov/DeptForms/>.

Information required for new or increased discharges to high quality waters:

- A. What environmental or public health problem will the discharger be correcting?

B. How much will the discharger be increasing employment (at its existing facility or as the result of locating a new facility)?

C. How much reduction in employment will the discharger be avoiding?

D. How much additional state or local taxes will the discharger be paying?

E. What public service to the community will the discharger be providing?

F. What economic or social benefit will the discharger be providing to the community?

SECTION G – EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a POTW or other TWTDS depending on the number and types of discharges or outfalls. The EPA application forms are found on the Department's website at <http://adem.alabama.gov/programs/water/waterforms.cnt>. The EPA application forms must be submitted in duplicate as follows:

1. Applicants for new or existing discharges of sanitary wastewater from Publicly-Owned Treatment Works (POTW) and Other Treatment Works Treating Domestic Sewage (TWTDS) must submit Form 2A. If the facility design capacity is equal to or greater than 1 MGD, Form 2F is also required.
2. Applicants for new or existing land application of sanitary wastewater must submit Form 2A and Form 2F.
3. Applicants for new and existing discharges of process wastewater from water treatment facilities (i.e. public water supply treatment plants) must submit Form 1 and Form 2C.
4. Applicants that generate sewage sludge, derive a material from sewage sludge, or dispose of sewage sludge must submit Part 2 of Form 2S.

SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS

See ADEM 335-6-6-.08(i) & (j).

SECTION I – RECEIVING WATERS

Outfall No.	Receiving Water(s)	303(d) Segment?		Included in TMDL?*	
001	Tallapoosa River	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<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	<input type="checkbox"/> Yes	<input type="checkbox"/> No

*If a TMDL Compliance Schedule is requested, the following should be attached as supporting documentation:

- (1) Justification for the requested Compliance Schedule (e.g. time for design and installation of control equipment, etc.);
- (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be submitted as available);
- (3) Requested interim limitations, if applicable;
- (4) Date of final compliance with the TMDL limitations; and,
- (5) Any other additional information available to support requested compliance schedule.

SECTION J – APPLICATION CERTIFICATION

The information contained in this form must be certified by a responsible official as defined in ADEM Administrative Code r. 335-6-6-.09 "signatories to permit applications and reports" (see below).

"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."

Signature of Responsible Official: Gerald Long Date Signed: 3/2/2021

Name: Gerald Long Title: General Manager

If the Responsible Official signing this application is not identified in Section A.4 or A.7, provide the following information:

Mailing Address: PO Box 831050

City: Tuskegee State: AL Zip: 36083

Phone Number: 334-720-0700 Email Address: Glong@yourubt.com

335-6-6-.09 SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS.

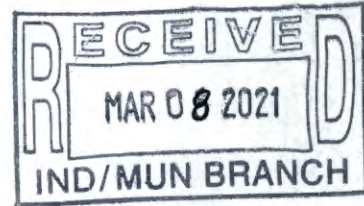
- (1) The application for an NPDES permit shall be signed by a responsible official, as indicated below:
 - (a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;
 - (b) In the case of a partnership, by a general partner;
 - (c) In the case of a sole proprietorship, by the proprietor; or
 - (d) In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official.

EPA Identification Number	NPDES Permit Number AL0048763	Facility Name UBT NWPCP	Form Approved 03/05/19 OMB No. 2040-0004
---------------------------	----------------------------------	----------------------------	---

Treatment Description Continued	3.9	<p>Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe below.</p> <p>Current disinfection is achieved with UV light. UBT would like to transition to dosing with Paracetic Acid (PAA) year round. PAA will be dosed at rate of approximately 0.8mg/L and will ensure that the effluent concentration does not exceed 1.0mg/l.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:35%;"></th> <th style="width:20%;">Outfall Number <u>001</u></th> <th style="width:20%;">Outfall Number <u>001</u></th> <th style="width:25%;">Outfall Number _____</th> </tr> <tr> <td>Disinfection type</td> <td style="text-align: center;">UV Light</td> <td style="text-align: center;">PAA</td> <td></td> </tr> <tr> <td>Seasons used</td> <td style="text-align: center;">All</td> <td style="text-align: center;">All</td> <td></td> </tr> <tr> <td>Dechlorination used?</td> <td> <input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No </td> <td> <input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> <td> <input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> </table>		Outfall Number <u>001</u>	Outfall Number <u>001</u>	Outfall Number _____	Disinfection type	UV Light	PAA		Seasons used	All	All		Dechlorination used?	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No											
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	Seasons used	All	All																										
	Dechlorination used?	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No																									
Effluent Testing Data	3.10	<p>Have you completed monitoring for all Table A parameters and attached the results to the application package?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>																											
	3.11	<p>Have you conducted any WET tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.13.</p>																											
	3.12	<p>Indicate the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges by outfall number or of the receiving water near the discharge points.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2"></th> <th colspan="2">Outfall Number _____</th> <th colspan="2">Outfall Number _____</th> <th colspan="2">Outfall Number _____</th> </tr> <tr> <th>Acute</th> <th>Chronic</th> <th>Acute</th> <th>Chronic</th> <th>Acute</th> <th>Chronic</th> </tr> <tr> <td>Number of tests of discharge water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Number of tests of receiving water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Outfall Number _____		Outfall Number _____		Outfall Number _____		Acute	Chronic	Acute	Chronic	Acute	Chronic	Number of tests of discharge water							Number of tests of receiving water						
		Outfall Number _____		Outfall Number _____		Outfall Number _____																							
		Acute	Chronic	Acute	Chronic	Acute	Chronic																						
	Number of tests of discharge water																												
	Number of tests of receiving water																												
	3.13	<p>Does the treatment works have a design flow greater than or equal to 0.1 mgd?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.16.</p>																											
3.14	<p>Does the POTW use chlorine for disinfection, use chlorine elsewhere in the treatment process, or otherwise have reasonable potential to discharge chlorine in its effluent?</p> <p><input type="checkbox"/> Yes → Complete Table B, including chlorine. <input type="checkbox"/> No → Complete Table B, omitting chlorine.</p>																												
3.15	<p>Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>																												
3.16	<p>Does one or more of the following conditions apply?</p> <ul style="list-style-type: none"> The facility has a design flow greater than or equal to 1 mgd. The POTW has an approved pretreatment program or is required to develop such a program. The NPDES permitting authority has informed the POTW that it must sample for the parameters in Table C, must sample other additional parameters (Table D), or submit the results of WET tests for acute or chronic toxicity for each of its discharge outfalls (Table E). <p><input type="checkbox"/> Yes → Complete Tables C, D, and E as applicable. <input type="checkbox"/> No → SKIP to Section 4.</p>																												
3.17	<p>Have you completed monitoring for all applicable Table C pollutants and attached the results to this application package?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>																												
3.18	<p>Have you completed monitoring for all applicable Table D pollutants required by your NPDES permitting authority and attached the results to this application package?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No additional sampling required by NPDES permitting authority.</p>																												



February 3, 2021



Shanda R. Torbert
Municipal Section
Water Division
Alabama Dept. of Environmental Mgmt.
P.O. Box 301463
Montgomery, Alabama 36130-1463

Re: UBT NWWTP Permit (AL0048763) Modification for Paracetic Acid Disinfection
Krebs Job No. 20701

Dear Ms. Torbert:

This letter and the accompanying attachments are intended to serve as an official request to modify the above referenced permit and allow the permanent use of Paracetic Acid (PAA) for the purpose of plant effluent disinfection. Per the results of the previously submitted Pilot Study (Letter dated 1-4-2021), Paracetic Acid has significantly improved UBT's ability to meet the Fecal Coliform Limits of the current permit. The existing Ultraviolet Disinfection system has become too expensive to maintain as the original unit was installed over 30 years ago and parts have become increasingly difficult to obtain. For UBT, Ultraviolet light has proven to be a high labor and cost intensive system to maintain.

It is UBT's intend to construct a new PAA basin dedicated appropriate contact time for the addition of PAA. UBT would like to modify the permit in advance of the project to

Contained in this packet are the items requested in your email dated 2/1/21:

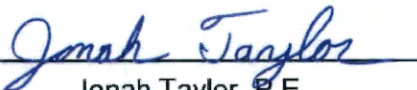
1. ADEM Form 188
2. EPA form 2A, Section 3.9 only
3. Check for Permit Modification Fee in the amount of \$7,060.00

February 3, 2021
Page 2

Both UBT and Krebs Engineering appreciate ADEM's assistance and cooperation in expediting the permit modification.

Sincerely yours,

Krebs Engineering, Inc.

By 
Jonah Taylor, P.E.
Associate

cc: Gerald Long, General Manager, UBT
Ken Sinclair, Chief Operations Officer

Krebs File No. 20701



January 4, 2021

Shanda R. Torbert
Municipal Section
Water Division
Alabama Dept. of Environmental Mgmt.
P.O. Box 301463
Montgomery, Alabama 36130-1463

Re: UBT NWWTP Paracetic Acid Disinfection 30 Day Pilot Test
Krebs Job No. 20701

Dear Ms. Torbert:

This letter is intended to provide the requested results of the PAA disinfection pilot test performed at the North Waste Water Treatment Plant (NWWTP) in Tuskegee, AL. Both Krebs and UBT were very pleased with the results of the pilot test and anticipate a possible future project modification to install a permanent PAA contact chamber and chemical feed system, with plans to eventually abandon the existing Ultraviolet disinfection system. The existing UV system is in need of significant improvements to consistently meet the E. coli summer permit limit of 126CFU/100ml monthly average and 298CFU/100ml daily maximum.

Contained in this packet is a Technical Memo Prepared by Krebs Engineering, which contains a summary report of the pilot test (written by PeroxyChem).

Per the letter from your office, UBT was required to comply with the following items associated with the PAA pilot test:

1. Test for all NPDES Permit parameters and PAA Residual in the effluent twice per week. **All NPDES Permit parameters and the PAA residual were tested twice per week.**
2. Verbally inform Department if any PAA Residual is greater than 1.0mg/L within 24hrs. **Only the first day (during set-up) saw a residual PAA concentration over 1.0mg/L (actual measurement was 1.4mg/L), however the issue was immediately corrected. It should also be noted the sample location is approximately 1 mile from the discharge to the Tallapoosa River with a 30 minute residence time in the pipe.**
3. Within 45 days of completion of Pilot Test, submit a report describing any issues that might have occurred during the test. **This letter and packet are intended to meet this requirement.**
4. Maintain the existing disinfection (UV) in the event it is needed. **The existing Ultraviolet Disinfection equipment was maintained and utilized during the pilot test. Daily samples were taken both upstream and down stream of the UV system.**
5. Investigate the PAA disinfection results in regards to neutralizing infectious agents, particularly viruses. **UBT utilized the services of Biological Consulting Services of**

January 4, 2021
Page 2

North Florida to perform a single test for Culturable Cytopathic Enteric Virus. The virus concentration was below the detectable limit of the test.

Both UBT and Krebs Engineering appreciate ADEM's assistance and cooperation in allowing this pilot test.

Sincerely yours,

Krebs Engineering, Inc.

By 
Jonah Taylor, P.E.
Associate

cc: Gerald Long, General Manager, UBT
Ken Sinclair, Chief Operations Officer

Krebs File No. 20701



PARACETIC ACID DISINFECTION PILOT TEST FOR UBT NWWTP TECHNICAL MEMORANDUM

January 4th, 2020

The intent of this Memorandum is to provide background information regarding the Utility Board of Tuskegee (UBT) obtaining the necessary disinfection at the North Waste Water Treatment Plant (NWWTP) to meet the requirements of their National Pollutant Discharge Elimination System (NPDES) Permit during the "summer" months, which are May through November per the permit. In lieu of immediately obligating considerable capital to replace the existing Ultra Violet (UV) disinfection system, Krebs and UBT requested permission from the Alabama Department of Environmental Management (ADEM) to perform a pilot test during the "summer" months to evaluate the use of Paracetic Acid (PAA) for disinfection in lieu of UV disinfection, which requires significant and expensive maintenance. The Pilot Test was also intended to assist UBT in meeting the lower permit limits of the summer months.

Upon permission from ADEM to proceed with the (PAA) Pilot test, which is included as Attachment A to this memorandum, Carter VerPlank provided chemical totes and pumps to dose immediately downstream of Clarifier #2 in order to provide the maximum contact time for the PAA prior to reaching the UV system. Samples were taken every other day upstream and downstream of the UV system to test the concentrations of E.coli after PAA disinfection only as well as disinfection downstream of PAA and the UV system. The estimated Contact time for the PAA was only 8 minutes.

After 30 days of dosing the results of the Pilot Test indicated that the PAA was extremely effective, resulting in E.coli concentrations of less than 10 CFU (Colony Forming Units) upstream of the UV system for all eight samples taken in October. A more detailed report from PeroxyChem (supplier of the PAA) is included with this Memorandum as Attachment B. Additionally a single test for cytopathic Enteric Viruses was performed on a sample taken upstream of the UV system and was found to contain no culturable viruses. The virus testing results are included as Attachment C to this Memorandum. Per ADEM requirements the concentrations of the PAA were delivered such

that the residual concentration leaving the plant did not exceed 1.0mg/l. It is worth noting that PAA has a rapid rate of decay in water and would likely continue to a final concentration of approximately 0mg/l before reaching the outfall into the Tallapoosa River, which is 30 minutes (typical) away from the plant.

The trial did not result in any significant issues and demonstrated the potential application for utilizing PAA in lieu of Ultra Violet Light.

Based on a cost analysis performed by Krebs Engineering, included as Attachment D to this Memorandum, PAA has a lower anticipated monthly cost than does a UV system. This is only true when the cost of replacement UV system is prorated over 30 years (typical design life). There is no significant anticipated replacement cost associated with the PAA as it is simply a concrete basin, chemical pumps, and the PAA chemical is delivered in totes. The Monthly Cost of PAA is anticipated to be \$2,000 per month while the total cost of UV is anticipated to be \$2,550 per month. This comparison does not include the cost of the owner's labor associated with maintenance and repair which is significantly more intensive for the UV system.

Recommendation

Based on the results of the PAA Pilot Study and the anticipated monthly savings associated with the utilizing PAA in lieu of a UV system, Krebs Engineering recommends to UBT that the NWWTP be transitioned to PAA disinfection. The transition would require a new serpentine concrete contact basin for the PAA designed to provide 10 minutes of contact time at a peak plant flow rate of 6MGD, which equates to a basin with a storage volume of 5,500cu.ft. with approximate footprint of 30'x30'. The cost of the new PAA contact basin and system is attached as Attachment E.

LANCE R. LEFLEUR
DIRECTOR



KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

JUL 06 2020

Attachment A: ADEM Letter

Mr. Gerald Long, General Manager
The Utilities Board of the City of Tuskegee
Post Office Box 831050
Tuskegee, AL 36083

RE: **Pilot Testing of Peracetic Acid for Disinfection**
NPDES Permit No. AL0048763
Tuskegee North WPCP
Macon County, Alabama

Dear Mr. Long:

The Alabama Department of Environmental Management has received a June 25, 2020 email describing a Pilot Test of Peracetic Acid (PAA) for Disinfection at the Tuskegee North WPCP. During the Pilot Test, the Permittee shall:

- Test for all NPDES Permit parameters and PAA Residual in the effluent twice per week.
- **Immediately verbally inform the Department if any PAA Residual is greater than 1.0 mg/L. The Permittee shall make notification within 24 hours of becoming aware of the PAA levels greater than 1.0 mg/L.**
- Within 45 days of completion of the Pilot Test, submit to the Department a report describing any issues that might have occurred during the test.
- Maintain the existing disinfection facility in the event it is needed.
- Investigate the PAA disinfection results in regards to neutralizing infectious agents, particularly viruses, as the discharge is to a waterbody that carries Fish & Wildlife and Public Water Supply classifications.

If you have questions regarding this matter, please contact Ms. Shanda Torbert either by email at storbert@adem.alabama.gov or by phone at (334) 271-7800.

Sincerely,

Emily D. Anderson, Chief
Municipal Section
Industrial/Municipal Branch
Water Division

Cc: Mr. Danny Holmberg, P.E./Krebs Engineering
Mr. Jonah Taylor, P.E./Krebs Engineering

Pc: Ms. Shanda Torbert/ADEM

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

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



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

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

Attachment B: PeroxyChem PAA Pilot Summary Report

Summary Report



VigorOx[®] WWT II Peracetic Acid Field Application Report

**Tuskegee North WPCP
Franklin, AL**

November 24, 2020

Executive Summary

VigorOx WWT II peracetic acid was tested for the month of October, 2020 and was shown to be able to significantly reduce *E. coli* concentrations under plant-operating conditions. The PAA was dosed via flow-pacing. *E. coli* concentrations were reduced to below the permitted daily maximums and monthly average using PAA dose concentrations between 1.5 and 0.8 mg PAA / L.

This report and the conclusions herein are accurate based on the data generated from the field demonstration.



Philip Block, PhD
Technical Director – Water Treatment

I. Introduction

1.1 Field Demonstration

A full-scale field demonstration of VigorOx WWT II peracetic acid (PAA) disinfection performance was performed at the Tuskegee North WPCP in Franklin, AL. The objectives of the demonstration were to evaluate the disinfection efficiency of VigorOx® WWT II against *E. coli* and its ability to meet state regulatory requirements in effluent bacterial concentrations.

The state NPDES permitted allowable discharge limits for *E. coli* bacteria are:

Summer	298 CFU / 100 mL daily maximum	126 CFU / 100 mL monthly average
Winter	2507 CFU / 100 mL daily maximum	548 CFU / 100 mL monthly average

1.2 VigorOx® WWT II Peracetic Acid

VigorOx WWT II is a strong disinfectant that results from the equilibrium reaction between acetic acid (vinegar) and hydrogen peroxide (H_2O_2). The resulting solution contains 15% peracetic acid (PAA) and 23% hydrogen peroxide (see Figure 1 for the chemical structure). The PAA molecule attacks and kills microbial organisms of concern in wastewater treatment, such as fecal coliforms and *E. coli* by disruption of cell membranes.

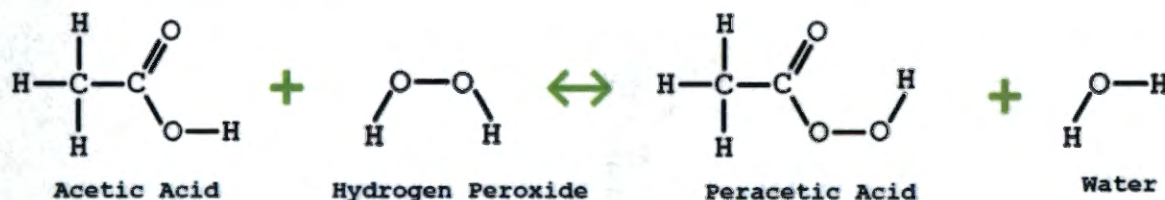


Figure 1 Chemical Structure of VigorOx WWT II

The oxidation potential of PAA is greater than that of hypochlorous acid and hypochlorite ion, resulting in typically lower dosages and contact times as compared to chlorine disinfection. In addition, PAA has a much lower aquatic toxicity profile than chlorine and decays rapidly in the environment. PAA is not a chlorine-based chemistry and does not result in the formation of chlorinated disinfection by-products. As a result, PAA generally does not need a quenching step, such as de-chlorination, reducing process complexity and cost.

2. Field Trial Implementation

A VigorOx WWT II dosing system was installed at the facility, including a PAA tote and containment, dosing pump and associated piping to deliver PAA to the disinfection contact pipe. Figure 2 shows the system during operation. PAA was dosed at Clarifier #2 Launderer and was controlled via a flow-pacing scheme, in which the PAA dose rate was adjusted to maintain a constant PAA dose concentration, accounting for changes in the wastewater flowrate at the facility. This was achieved via an input signal from the facilities flowmeters to the PAA variable-drive pumps.

Wastewater was sampled before and after the UV system for E. coli concentration and post the UV system for PAA residual concentrations. Figure 3 displays an overview of the plant site with the location of the PAA system and the sampling points.

The field implementation was run in October, 2020.



Figure 2 PAA Tote, Pump and Containment



Figure 3 Tuskegee North WPCP with PAA System

3. Results and Discussion

3.1 Influent Water Parameters

The estimate contact times between the PAA and the wastewater from point of application to the post-UV measurement point are 8 minutes for a wastewater flowrate of 2.5 MGD and 6 minutes for a flowrate of 3.5 MGD.

Figure 4 shows the effluent wastewater flowrate during the time of the field demonstration. Flowrates varied between 2.1 and 4.2 MGD.

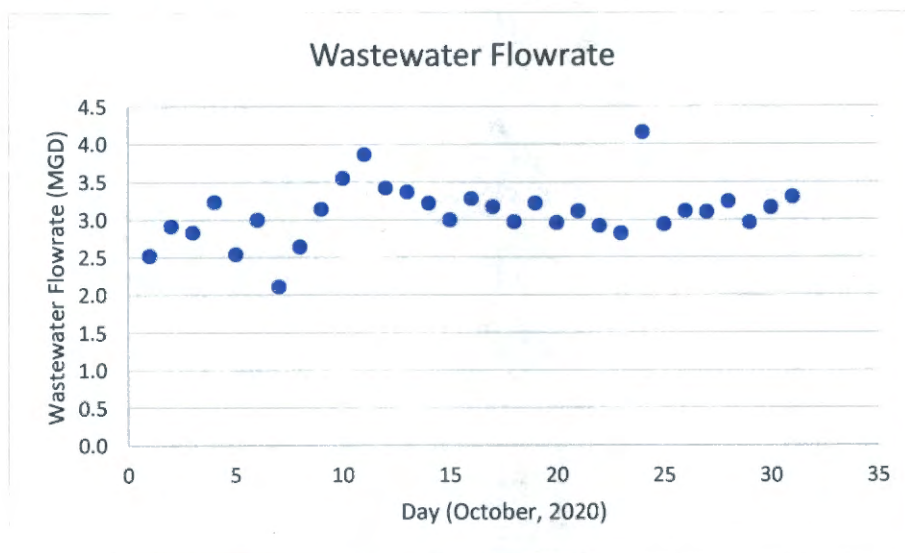


Figure 4 Wastewater Flowrate

Typical *E. coli* concentrations at the clarifier, prior to PAA addition, range from 750 – 800 CFU / 100 mL.

3.2 PAA Addition

Figure 5 shows the PAA dose concentrations that were applied during the demonstration with the corresponding PAA residual concentrations measured post the UV facility.

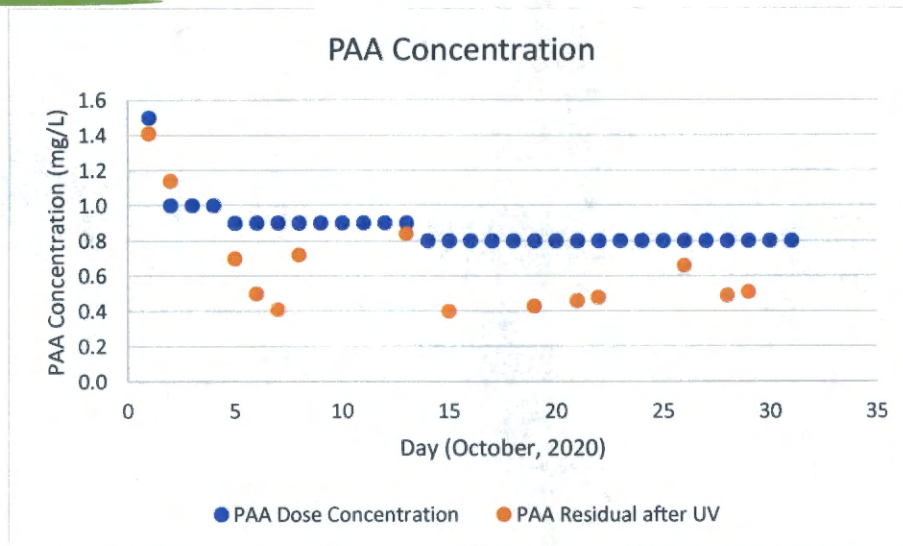


Figure 5 PAA Dose Concentration and PAA Residual Post the UV Facility

PAA dose concentration ranged from 1.5 to 0.8 mg PAA / L throughout the trial.

3.3 Reduction in *E. coli* Concentrations

Figure 6 shows the effluent *E. coli* concentrations post PAA addition. Also shown in the figure is the summer daily maximum value of 298 CFU / 100 mL.

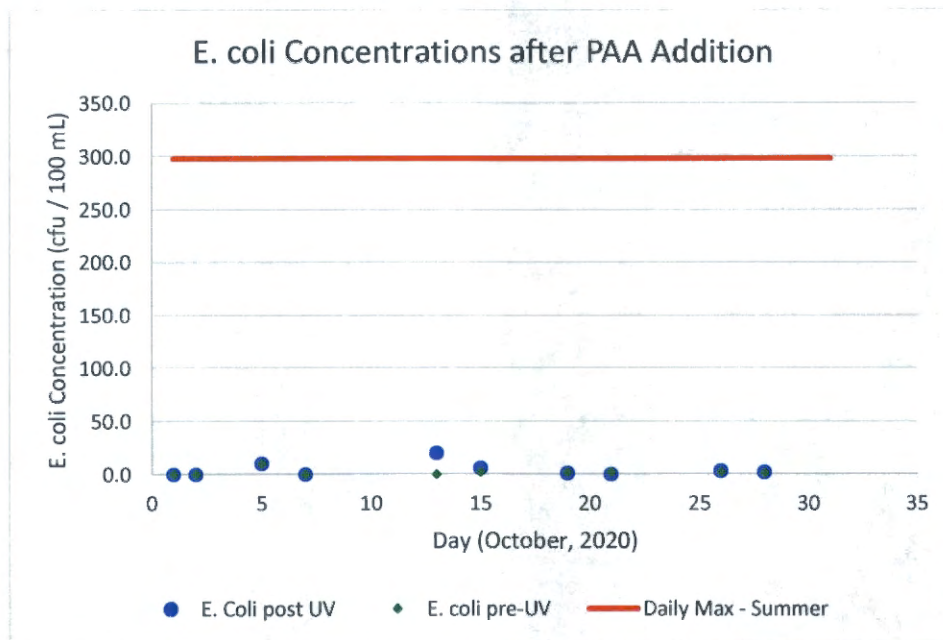


Figure 6 Effluent *E. coli* Concentrations

The average *E. coli* concentrations for the month of October during the PAA dosing trial were:

Before UV	2 CFU / 100 mL
Post UV	4 CFU/ 100 mL

These values are below the summer target monthly average of 126 CFU / 100 mL

3. Conclusions

VigorOx WWT II peracetic acid was tested for the month of October, 2020 and was shown to be able to significantly reduce *E. coli* concentrations under plant-operating conditions. The PAA was dosed via flow-pacing. *E. coli* concentrations were reduced to below the permitted daily maximums and monthly average using PAA dose concentrations between 1.5 and 0.8 mg PAA / L.

VigorOx® is a trademark of PeroxyChem, LLC. © 2020 PeroxyChem

The information contained herein is, to our knowledge, true and accurate. However, we make no warranty or representation, expressed or implied, and nothing contained herein should be construed as permission or recommendation to infringe any patent. All intellectual property rights to this material are retained by PeroxyChem

Attachment C: Virus Analysis



BIOLOGICAL CONSULTING SERVICES
OF NORTH FLORIDA, INC.

December 14, 2020

Katie Robinson
Tuskegee North WPCP
2485 Macon County Road #8
Tuskegee AL 36083
(334) 724-2122
katierob.robinson@gmail.com
Client ID: Effluent

BCS ID: 2011248

Dear Katie Robinson,

We have completed the analysis of the submitted samples as outlined below.

Project Name: Tuskegee North Plant WPCP

Analysis	Method
Culturable Cytopathic Enteric Viruses	EPA600/R-95/178 s.VIII; SM9510G; SOP V-2(ISO17025/TNI Accredited)

Following, you will find our report on the results of the analysis conducted on the referenced samples. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Bonnie Mull, MPH
Laboratory Operations Manager

Page 1 of 5
Final Report BCS ID 2011248

BCS LABORATORIES, INC. — GAINESVILLE
4609 NW 6TH STREET, STE. A, GAINESVILLE, FLORIDA 32609
TEL. (352) 377-9272, FAX. (352) 377-5630
WWW.MICROBIOSERVICES.COM

FLDOH E82924, ISO17025:2017 L2422, PADEP: 68-03950, AZDHS:AZ0820, EPA FLO1147
THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF BCS LABORATORIES



Client: Tuskegee North WPCP
Analysis: *Culturable Cytopathic Enteric Viruses*
Project Name: Tuskegee North Plant WPCP
Client Sample ID: Effluent Sample Date/Time: November 12, 2020 16:44
BCS Sample ID: 2011248 Sample Description: Nanoceram Filter
Date Received: November 13, 2020 10:36 Amount Submitted: 386.8 L % Solids: N/A
Amount Analyzed: 386.8 L Receipt Temperature: 3.6 deg C Preserved: Yes
Analysis Start: November 13, 2020 11:14 Analysis Stop Date: December 14, 2020 09:45
Analyst: Chris Benedict, B.S. Qualifier: U
Primary Value: ≤ 1.1 Infectious Units MPN/sample analyzed
Secondary Value: ≤ 0.3 Infectious Units MPN/100 liters
Analysis Notes: Undetected: Analyte was not detected in the sample analyzed; Value represents the method's detection limit for the amount of sample analyzed as per the method's standard reporting units

BCS LABORATORIES, INC. — GAINESVILLE
4609 NW 6TH STREET, STE. A, GAINESVILLE, FLORIDA 32609
TEL (352) 377-9272, FAX. (352) 377-5630
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Client: Tuskegee North WPCP

Project: Tuskegee North Plant WPCP

Method Detection Limit: 1 microorganism/ unit weight or volume analyzed

Practical Quantitation Limit: 1 microorganism/ unit weight or volume analyzed

Report Notes:

Custody Seal Condition: Intact

Sample(s) were received well preserved and in excellent condition. Sample(s) were analyzed following receipt as per the described analytical methodology. End of report notes.

BCS LABORATORIES, INC. — GAINESVILLE
4609 NW 6TH STREET, STE. A, GAINESVILLE, FLORIDA 32609
TEL. (352) 377-9272, FAX. (352) 377-5630
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FLDOH E82924, ISO 17025:2017 L2422, PADEP: 68-03950, AZDHS:AZ0820, EPA FL01147
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I certify that I have examined and I am familiar with the information submitted herein. The results pertain only to sample(s) identified and their condition at time of receipt. Based on my inquiry of the individuals responsible for the analysis, I believe the data to be true, accurate, and complete. Sampling and field data was obtained from submitted documents. The analysis was authorized and commissioned by the client. The resulting data are representative of the analysis conducted on the material/samples/articles provided by the client (or client's representative) and it's/their condition at the time of analysis. The sample(s) were analyzed in accordance with the appropriate method, however due to the inherent limitations of the methods, microorganisms may avoid detection. BCS Laboratories offers no express or implied warranties concerning the quality, safety, and/or purity of any sample, batch, source, or the process they are derived from. Quality assurance controls were performed as outlined in the method and as per Good Laboratory Practices. The analysis and results presented in this report meet the requirements of the standards of The NELAC Institute (TNI), ISO 17025, and the FL DOH Environmental Laboratory Certification Program, as applicable unless otherwise noted.

Signature of Laboratory Director/Authorized Rep. _____

Bonnie Mull

Date: December 14, 2020

BCS LABORATORIES, INC. — GAINESVILLE
4609 NW 6TH STREET, STE. A, GAINESVILLE, FLORIDA 32609
TEL. (352) 377-9272, FAX. (352) 377-5630
WWW.MICROBIOSERVICES.COM

FLDOH E82924, ISO 17025:2017 L2422, PADEP: 68-03950, AZDHS:AZ0820, EPA FL01147
THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF BCS LABORATORIES



DATA QUALIFIER CODES

SYMBOL MEANING

B	Results based on counts outside the acceptable range.
X	Sample received without prior notification or delayed delivery. Analysis performed outside of associated method required QC data set (1 QC data set per 20 samples per 168 hours).
I	Value is between the laboratory method detection limit & the practical quantitation limit.
J1	The sample matrix interfered with the ability to make any accurate determination.
J2	No Quality Control criteria exist for the component.
J3	The data are questionable because of improper laboratory or field protocols.
L	Off scale high. Actual value is known to be greater than value given.
N	Presumptive evidence for the presence of material. There is an indication that the analyte is present, but the confirmation requirement was not met.
O	Sampled, but analysis not performed.
Q	Sample held beyond the accepted holding time.
U	Indicates that the compound was analyzed for but not detected. The specified component was not detected. The reported value is the method detection limit.
V	Analyte was detected in both sample and the method blank. Data may not be accurate.
Y	Laboratory analysis was from an improperly preserved sample; the data may not be accurate.
Z	Too many colonies present (TNTC); the numeric value given represents the upper end of the value that can be determined based on the volume.
?	Data are rejected and should not be used. QC data for analyte did not meet acceptance criteria. Presence or absence of analyte could not be confirmed.
**	Not reported due to interference.
^	Sampling container supplied by client. Sterility can not be confirmed by BCS.
#	BCS Lab specific qualifier. See laboratory analysis notes.

BCS LABORATORIES, INC. — GAINESVILLE
4609 NW 6TH STREET, STE. A, GAINESVILLE, FLORIDA 32609
TEL. (352) 377-9272, FAX. (352) 377-5630
WWW.MICROBIOSERVICES.COM

FLDOH E82924, ISO17025:2017 L2422, PADEP: 68-03950, AZDHS:AZ0820, EPA FL01147
THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF BCS LABORATORIES



FWM-60 VFB-04 FWP-0



Inc. **BIOLOGICAL CONSULTING SERVICES**
OF NORTH FLORIDA, INC.

Tuskegee North WPCP
Effluent
2011248
11/13/2020 10:36

Client: Utilities Board of the City
of Tuskegee
Project or Site: North Plant WPCP

Sample ID:
Sample Collection Date: 11-12-20
Collected By: Katie Robinson

Circle appropriate for each of the below:

Filter Type: Nanoceram (virus), Envirochek HV (Parasite), Rexeed-25S (N. fowleri)
Other: _____

Matrix: Reclaimed Wastewater, Ground Water, Surface Water, Drinking Water,
Other: _____

Analysis Requested: Enteric viruses EPA 600/r-95/178 or EPA 1615,
Cryptosporidium & Giardia EPA1623.1, Helminth Ova EPA 600/1-87-014, N. fowleri
Other: _____

Purge Time (for wells): _____ **Turbidity (for LT-2):** _____

Water pH (for viruses; take 3 readings 10-15 minutes apart): _____

Chlorine Residual : N/A **Test ID** _____

Sample Dechlorinated: Yes/No (circle)

Dechlorination Method: _____

Post Dechlorination Chlorine Residual: _____ **Test ID** _____

Volume Collected (gallons/liters):

Meter Start Reading: 5284.8

Meter End Reading: 5387.0

Sampling Time (minutes):

Start: 1:30 p.m.

End: 4:44 p.m.

Complete if no COC is submitted along with sample

Received By BCS Labs: _____ **Date:** _____ **Time:** _____

Temp: _____ °C **IR-** _____ **Ice/Ice Packs/Custody Seal (circle)**

In Method Time Hold? Yes/No (circle) **Filter ID:** _____

FILE:FIELD DATA SHEET VERSION C 07 09 20

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TEL. (352) 377-9272

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FL DOH LABORATORY #E82924, EPA# FLO1147



Attachment D: Monthly Operating Cost Estimate

NWWTP Paracetic Acid Disinfection VS Ultraviolet Disinfection
UBT

LATEST REVISION January 4, 2021

ITEM NO.	PAA ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST (INSTALLED)	TOTAL COST
1	Power Consumption for sample pumps/scada	kwh	346	\$0.110	\$38
2	Chemical Costs (delivered in Tote)	lb	2,500	\$0.75	\$1,875
3	Future System replacement prorated over 360 months	LS	1	\$80.00	\$80
Subtotal					\$1,993

ITEM NO.	UV ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST (INSTALLED)	TOTAL COST
1	Power Consumption for UV System (Both banks continuous)	kwh	11,520	\$0.110	\$1,267
2	Replacement bulbs, ballasts, misc	LS	1	\$300.000	\$300
3	Future System replacement prorated over 360 months	LS	1	\$1,000.000	\$1,000
Subtotal					\$2,567



**ATTACHMENT E:
CONSTRUCTION COST ESTIMATE**

NWWTP Paracetic Acid Disinfection
UBT

LATEST REVISION January 4, 2021

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST (INSTALLED)	TOTAL COST
1	Mobilization/Demobilization	LS	1	\$40,000.00	\$40,000
2	Sediment and Erosion Control	LS	1	\$2,500.00	\$2,500
3	Excavation	CuYds	1,000	\$10.00	\$10,000
4	Concrete Basin, Slab (30'x30')	CuYds	75	\$500.00	\$37,500
5	Concrete Basin, Walls	CuYds	130	\$550.00	\$71,500
6	8" DI Pipe, CI 250, Furnished and Installed	LF	250	\$55.00	\$13,750
7	8" Drain valve	EA	1	\$2,500.00	\$2,500
8	24" DI Pipe	LF	60	\$200.00	\$12,000
9	24" Plug Valve Pipe	EA	4	\$10,000.00	\$40,000
10	Ductile Iron Fittings, Furnished and Installed	LB	4,750	\$7.50	\$35,625
11	Relocate Existing water line	LS	1	\$2,000.00	\$2,000
12	Relocate Storm Piping	LS	1	\$10,000.00	\$10,000
13	Relocate Existing Light Pole	LS	1	\$3,000.00	\$3,000
14	Disinfection Equipment and Storage Area	LS	1	\$75,000.00	\$75,000
Subtotal					\$355,375
General Contractor OH & Profit (7%)					\$24,876
Subtotal					\$380,251
Contingency (15%)					\$57,038
Total Estimated Construction Cost					\$437,000

Caldwell, Mattie

Subject: FW: UBT PAA Pilot Test at the NWWTP
Attachments: 20701_ltr_ADEM_201230.pdf

From: Jonah Taylor <jonah.taylor@krebseng.com>
Sent: Monday, January 4, 2021 3:22 PM
To: Shanda Torbert (STorbert@adem.state.al.us) <STorbert@adem.state.al.us>
Cc: Glong@YourUBT.com; Danny Holmberg <danny.holmberg@krebseng.com>
Subject: UBT PAA Pilot Test at the NWWTP

Shanda,

Per your direction in the Pilot Test permission letter, Please find attached summary report of the Pilot Test. We were very pleased with the results of the test and have no doubt the PAA greatly contributed to UBT successfully meeting the permit limits for E.coli during the summer months.

Thank you

Jonah Taylor, P.E.
Associate
Krebs Engineering, Inc.
www.KrebsEng.com

Office No. 334.271.0986 ext 3003

Cell No. 334.714.6899

