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

MARCH 8,2024

Bill Gillespie, Jr.
Mayor
City of Prattville
101 West Main Street
Prattville, AL 36067

RE: Draft Permit
NPDES Permit No. AL0027723
Prattville Pine Creek Clean Water Facility
Elmore County, Alabama

Dear Mayor Gillespie, Jr.:

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 Parts I.C.1.c and I.C.2.e of your permit require participation in the Department's Alabama Environmental Permitting and Compliance System (AEPACS) for submittal of DMRs and SSOs upon issuance of this permit 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. AEPACS allows ADEM to electronically validate and acknowledge receipt of the data. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. Please note that all AEPACS users can create the electronic DMRs and SSOs; however, only AEPACS users with certifier permissions will be able to submit the electronic DMRs and SSOs to ADEM.

Our records indicate that you have utilized the Department's web-based electronic environmental (E2) reporting system for submittal of discharge monitoring reports (DMRs) and sanitary sewer overflow (SSO) notifications/reports. The Department transitioned from the E2 Reporting System to the Alabama Environmental Permitting and Compliance System (AEPACS) for the submittal of DMRs and SSOs on November 15, 2021. AEPACS is an electronic system that allows facilities to apply for and maintain permits as well as submit other required applications, registrations, and certifications. In addition, the system allows facilities to submit required compliance reports or other information to the Department. The

Department has used the E2 User account information to set up a similar User Profile in AEPACS based on the following criteria:

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

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

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.

If you have questions regarding this permit or monitoring requirements, please contact Sandra Lee at slee@adem.alabama.gov or (334) 274-4223.

Sincerely,

Sandra Lee
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 Resources

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: CITY OF PRATTVILLE
101 WEST MAIN STREET
PRATTVILLE, AL 36067

FACILITY LOCATION: PRATTVILLE PINE CREEK CLEAN WATER FACILITY (4 MGD)
100 PINE CREEK DRIVE
PRATTVILLE, ALABAMA
ELMORE COUNTY

PERMIT NUMBER: AL0027723

RECEIVING WATERS: ALABAMA RIVER (WOODRUFF LAKE)
FAY BRANCH (STORMWATER ONLY)

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

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

Draft

Alabama Department of Environmental Management

TABLE OF CONTENTS

PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS 1
A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS 1
1. DSN 0013: Wastewater Discharge 1
2. DSN 001T: Toxicity 3
3. DSN 002S: Stormwater Runoff 4
B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS 5
1. Representative Sampling 5
2. Measurement Frequency 5
3. Test Procedures 5
4. Recording of Results 6
5. Records Retention and Production 6
6. Reduction, Suspension or Termination of Monitoring and/or Reporting 6
7. Monitoring Equipment and Instrumentation 6
C. DISCHARGE REPORTING REQUIREMENTS 6
1. Reporting of Monitoring Requirements 6
2. Noncompliance Notifications and Reports 8
D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS 10
1. Anticipated Noncompliance 10
2. Termination of Discharge 10
3. Updating Information 10
4. Duty to Provide Information 10
E. SCHEDULE OF COMPLIANCE 11
1. Compliance with discharge limits 11
2. Schedule 11
PART II: OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES 12
A. OPERATIONAL AND MANAGEMENT REQUIREMENTS 12
1. Facilities Operation and Maintenance 12
2. Best Management Practices 12
3. Certified Operator 12
B. OTHER RESPONSIBILITIES 12
1. Duty to Mitigate Adverse Impacts 12
2. Right of Entry and Inspection 12
C. BYPASS AND UPSET 12
1. Bypass 12
2. Upset 13
D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES 13
1. Duty to Comply 13
2. Removed Substances 14
3. Loss or Failure of Treatment Facilities 14
4. Compliance with Statutes and Rules 14
E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE 14
1. Duty to Reapply or Notify of Intent to Cease Discharge 14
2. Change in Discharge 14
3. Transfer of Permit 14
4. Permit Modification and Revocation 15
5. Termination 15
6. Suspension 16

7. Stay 16
F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION 16
G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS 16
H. PROHIBITIONS 16
PART III: ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS 18
A. CIVIL AND CRIMINAL LIABILITY 18
1. Tampering 18
2. False Statements 18
3. Permit Enforcement 18
4. Relief from Liability 18
B. OIL AND HAZARDOUS SUBSTANCE LIABILITY 18
C. PROPERTY AND OTHER RIGHTS 18
D. AVAILABILITY OF REPORTS 19
E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES 19
F. COMPLIANCE WITH WATER QUALITY STANDARDS 19
G. GROUNDWATER 19
H. DEFINITIONS 20
I. SEVERABILITY 22
PART IV: SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS 23
A. SLUDGE MANAGEMENT PRACTICES 23
1. Applicability 23
2. Submitting Information 23
3. Reopener or Modification 23
B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS – ACUTE DIFFUSER 23
C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS 26
D. PLANT CLASSIFICATION 26
E. SANITARY SEWER OVERFLOW RESPONSE PLAN 26
F. POLLUTANT SCANS 29
G. MAJOR SOURCE STORMWATER REQUIREMENTS 29

PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

1. DSN 0013: Municipal Wastewater

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Oxygen, Dissolved (DO) (00300) Effluent Gross Value	*****	*****	*****	5.0 Minimum Daily	*****	*****	mg/l	3X Weekly test	Grab	Not Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	3X Weekly test	Grab	Not Seasonal
Solids, Total Suspended (00530) Effluent Gross Value	1000 Monthly Average	1501 Weekly Average	lbs/day	*****	30.0 Monthly Average	45.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	Not Seasonal
Solids, Total Suspended (00530) Raw Sew/Influent	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	3X Weekly test	24-Hr Composite	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	667 Monthly Average	1000 Weekly Average	lbs/day	*****	20.0 Monthly Average	30.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	W
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	333 Monthly Average	500 Weekly Average	lbs/day	*****	10.0 Monthly Average	15.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	S
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	1334 Monthly Average	2001 Weekly Average	lbs/day	*****	40.0 Monthly Average	60.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	W
Nitrogen, Kjeldahl Total (As N) (00625) Effluent Gross Value	667 Monthly Average	1000 Weekly Average	lbs/day	*****	20.0 Monthly Average	30.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	S
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	24-Hr Composite	Not Seasonal

See Part II.C.1. for Bypass and Part II.C.2. for Upset conditions.

(1) Sample Frequency – See also Part I.B.2

See Permit Requirements for Effluent Toxicity Testing in Part IV.B.

See Permit Requirements for Stormwater in Part IV.F

(2) S = Summer (May – October)
W = Winter (November - April)
ECS = E. coli Summer (May - October)
ECW = E. coli Winter (November - April)

(3) 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.

DSN 0013 (Continued): Municipal Wastewater

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Phosphorus, Total (As P) (00665) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	24-Hr Composite	Not Seasonal
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Daily	Continuous	Not Seasonal
Chlorine, Total Residual (50060) See notes (3) Effluent Gross Value	*****	*****	*****	*****	*****	1.0 Maximum Daily	mg/l	3X Weekly test	Grab	Not Seasonal
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	548 Monthly Average	2507 Maximum Daily	col/100mL	3X Weekly test	Grab	ECW
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	298 Maximum Daily	col/100mL	3X Weekly test	Grab	ECS
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	834 Monthly Average	1251 Weekly Average	lbs/day	*****	25.0 Monthly Average	37.5 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	W
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	733 Monthly Average	1100 Weekly Average	lbs/day	*****	22.0 Monthly Average	33.0 Weekly Average	mg/l	3X Weekly test	24-Hr Composite	S
BOD, Carbonaceous 05 Day, 20C (80082) Raw Sew/Influent	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	3X Weekly test	24-Hr Composite	Not Seasonal
BOD, Carb-5 Day, 20 Deg C, Percent Remvl (80091) Percent Removal	*****	*****	*****	85.0 Monthly Average Minimum	*****	*****	%	Monthly	Calculated	Not Seasonal
Solids, Suspended Percent Removal (81011) Percent Removal	*****	*****	*****	85.0 Monthly Average Minimum	*****	*****	%	Monthly	Calculated	Not Seasonal

See Part II.C.1. for Bypass and Part II.C.2. for Upset conditions.

(1) Sample Frequency – See also Part I.B.2

See Permit Requirements for Effluent Toxicity Testing in Part IV.B.

See Permit Requirements for Stormwater in Part IV.F

(2) S = Summer (May – October)
W = Winter (November - April)
ECS = E. coli Summer (May - October)
ECW = E. coli Winter (November - April)

(3) 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.

2. DSN 001T: Toxicity

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Toxicity, Ceriodaphnia Acute (61425) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	24-Hr Composite	Sep
Toxicity, Pimephales Acute (61427) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	24-Hr Composite	Sep

See Part II.C.1. for Bypass and Part II.C.2. for Upset conditions.

(1) Sample Frequency – See also Part I.B.2

See Permit Requirements for Effluent Toxicity Testing in Part IV.B.

See Permit Requirements for Stormwater in Part IV.F

(2) S = Summer (May – October)
W = Winter (November - April)
ECS = E. coli Summer (May - October)
ECW = E. coli Winter (November - April)

(3) 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.

3. DSN 002S: Stormwater Runoff

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

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
pH (00400) Storm Water	*****	*****	*****	(Report) Minimum Daily	*****	(Report) Maximum Daily	S.U.	Annually	Grab	Not Seasonal
Solids, Total Suspended (00530) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Oil & Grease (00556) Storm Water	*****	*****	*****	*****	*****	15 Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Nitrogen, Kjeldahl Total (As N) (00625) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Phosphorus, Total (As P) (00665) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal
Flow, In Conduit or Thru Treatment Plant (50050) Storm Water	*****	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Annually	Calculated	Not Seasonal
E. Coli (51040) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	col/100mL	Annually	Grab	Not Seasonal
BOD, Carbonaceous 05 Day, 20C (80082) Storm Water	*****	*****	*****	*****	*****	(Report) Maximum Daily	mg/l	Annually	Grab	Not Seasonal

See Part II.C.1. for Bypass and Part II.C.2. for Upset conditions.

(1) Sample Frequency – See also Part I.B.2

See Permit Requirements for Effluent Toxicity Testing in Part IV.B.

See Permit Requirements for Stormwater in Part IV.F

(2) S = Summer (May – October)
W = Winter (November - April)
ECS = E. coli Summer (May - October)
ECW = E. coli Winter (November - April)

(3) 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.

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" or "*B" 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" or "*B" 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) 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. electronically.

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

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

(3) 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.

(4) 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.

(5) 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.

(6) 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
Office of Water Services, Water 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
Office of Water Services, Water 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 an electronic system for notification and submittal of SSO reports. Except as noted below, the Permittee must submit all SSO reports electronically in the Department's electronic system. If requested, waivers from utilization of the electronic system shall be submitted in accordance with ADEM Admin. Code 335-6-1-.04(6). The Department's electronic reporting system shall be utilized unless a written waiver has been granted. A waiver is not effective until receipt of written approval from the Department. Utilization of verbal notifications and hard copy SSO report submittals is allowed only if approved in writing by the Department. 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 electronic system for SSO reports, an account may be created at https://aepacs.adem.alabama.gov/nviro/ncore/external/home. If the electronic 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 electronic system resuming operation, the Permittee shall enter the data into the electronic 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); 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

a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.

b. The permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.

c. The permittee shall prepare, submit for approval and implement a Best Management Practices (BMP) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. 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

a. 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, 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, 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 30l(c), 30l(g), 30l(h), 30l(k), or 3l6(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; or

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.

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;

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) That did not commence the discharge of pollutants prior to August 13, 1979, and which is not a new source; and

    c) Which has never received a final effective NPDES permit for dischargers at that site.

29. **NH3-N** – means the pollutant parameter ammonia, measured as nitrogen.

30. **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 335-6-6-.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 (POTW)** – 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;

    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 DIFFUSER

1. Acute Toxicity Test

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

b. The samples shall be diluted using an appropriate control water, to the Instream Waste Concentration (IWC) which is 5 percent effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 1-day, 10-year flow period.

c. 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. Toxicity tests shall be conducted for the duration of this permit in the month of SEPTEMBER. Should results from the Annual Toxicity test indicate that Outfall 0011 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 MARCH, JUNE, SEPTEMBER, and DECEMBER.

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. 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. 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)

(i) Name of firm

(ii) Telephone number

(iii) Address

(6) Objective of test

b. Plant Operations

(1) Discharge operating schedule (if other than continuous)

(2) Volume of discharge during sample collection to include Mean daily discharge on sample collection date (MGD, CFS, GPM)

(3) Design flow of treatment facility at time of sampling

c. Source of Effluent and Dilution Water

(1) Effluent samples

(i) Sampling point

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

(iii) Sample collection method

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

(v) Sample temperature when received at the laboratory

(vi) Lapsed time from sample collection to delivery

(vii) Lapsed time from sample collection to test intiation

(2) Dilution Water Samples

(i) Source

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

(iii) Pretreatment

(iv) Physical and chemical characteristics (pH, hardness, water temperature, alkalinity, specific conductance, etc.)

d. Test Conditions

(1) Toxicity test method utilized

(2) End point(s) of test

(3) Deviations from referenced method, if any, and reason(s)

(4) Date and time test started

(5) Date and time test terminated

(6) Type and volume of test chambers

(7) Volume of solution per chamber

(8) Number of organisms per test chamber

(9) Number of replicate test chambers per treatment

(10) Test temperature, pH and dissolved oxygen as recommended by the method (to include ranges)

(11) Feeding frequency, and amount and type of food

(12) Light intensity (mean)

e. Test Organisms

(1) Scientific name

(2) Life stage and age

(3) Source

(4) Disease treatment (if applicable)

f. Quality Assurance

(1) Reference toxicant utilized and source

(2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)

(3) Dilution water utilized in reference toxicant test

(4) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.

(5) Physical and chemical methods utilized

g. Results

(1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate

(2) Provide table of endpoints: LC50, 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

Adapted from "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine

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" 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" 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. 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 the following: http://adem.alabama.gov/alEnviroRegLaws/files/Division6Vol1.pdf and http://adem.alabama.gov/wqmap.

(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)

(i) 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.

F. 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.

G. MAJOR SOURCE STORMWATER 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. <u>Administrative Procedures</u>

(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.G.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.

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0027723** Date: January 5, 2024

Permit Applicant: City of Prattville
101 West Main Street
Prattville, AL 36067

Location: **Prattville Pine Creek Clean Water Facility**
100 Pine Creek Drive
Prattville, AL 36066

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

Basis for Limitations: Water Quality Model: NH_3N, DO, $CBOD_5$, TKN
Reissuance with no modification: pH, NH_3N, DO, $CBOD_5$, TSS, E. Coli, TRC, TSS Percent Removal, CBOD5 Percent Removal, TKN
Instream calculation at 7Q10: ~5% (CORMIX)
Toxicity based: TRC, Toxicity
Secondary Treatment Levels: TSS, TSS Percent Removal, $CBOD_5$ Percent Removal
Other (described below): E. Coli, pH

Design Flow in Million Gallons per Day: 4 MGD

Major: Yes

Description of Discharge:

Feature ID	Description	Receiving Water	WBC	303(d)	TMDL
001	Municipal Wastewater	Alabama River (Woodruff Lake)	Fish and Wildlife (F&W)	No	No
002	Stormwater Runoff	Fay Branch	Fish and Wildlife (F&W)	No	No

Discussion:

This permit is a reissuance due to expiration.

The pH limits for Outfall 0013 were developed consistent with the Water-Use designation of the receiving stream and the Municipal Section's Permit Development Rationale. The daily maximum pH limit is 9.0 s.u. and the daily minimum is 6.0 s.u. The monitoring frequency is three times per week. Flow will be monitored continuously, seven days per week.

The discharge limits for 5 Day Carbonaceous Biochemical Oxygen Demand (CBOD5), Dissolved Oxygen (DO), Total Kjeldahl Nitrogen (TKN), and Total Ammonia as Nitrogen (NH3N), for Outfall 0013 were developed by the Municipal Permitting Section based on a Waste Load Allocation (WLA) model performed by the Department's Water Quality Branch on September 29, 2016. The summer (May – October) monthly average limits for $CBOD_5$, TKN, and NH_3N, are 22.0 mg/l, 20 mg/l and 10.0 mg/l, respectively. The winter (November – April) monthly average limits for $CBOD_5$, TKN, and NH_3N are 25.0 mg/l, 40 mg/l, and 20.0 mg/l, respectively. The daily minimum for DO is 5.0 mg/l.

The monitoring frequency will be three times per week. A minimum percent removal of 85 percent is imposed for $CBOD_5$ based on 40 CFR 133.102. The percent removal will be calculated once per month.

The monthly average TSS limit is established at 30.0 mg/l in accordance with 40 CFR 133.102. The monitoring frequency will be three times per week. A minimum percent removal 85 percent is imposed for TSS based on 40 CFR 133.102. The percent removal will be calculated once per month.

The imposed E. coli limits were determined based on the water-use classification of the receiving stream. The section of the Alabama River (Woodruff Lake) containing the discharge is classified as Fish & Wildlife. The imposed E. coli limits for May – October are 126 col/100ml (monthly average) and 298 col/100ml (daily maximum), while the limits for November – April are 548 col/100ml (monthly average) and 2507 col/100ml (daily maximum). The monitoring frequency will be three times per week.

The Municipal Section, in consultation with the Department's Water Quality Branch, has conducted a narrative nutrient reasonable potential analysis. Based on a review of the facility's current levels of nutrients in the discharge and current assessments of the available information, the Permittee is required to monitor and report effluent test results for Total Kjeldahl Nitrogen (TKN), Nitrite plus Nitrate (NO2+NO3), and Total Phosphorus (TP). Monitoring for these nutrient-related parameters is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose additional nutrient limits on this discharge. The monitoring frequency will be once per month.

The Total Residual Chlorine (TRC) limit is based on calculations to ensure that acute and chronic toxic concentrations of TRC in the receiving stream are not exceeded. A daily maximum TRC limitation of 1.0 mg/l is being imposed at Outfall 0013. The monitoring frequency will be three times per week. 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.

Because this facility is a major municipal discharger, with low actual IWC after complete mixing, acute toxicity testing applies. The IWC is 5% based on a CORMIX model run by ADEM's Water Quality Branch on October 15, 2018. Toxicity testing is required with two species (Ceriodaphnia and Pimephales) and the permit requires less than 10% mortality, 90% survival. The monitoring frequency will be once per year in September.

ADEM completed a Reasonable Potential Analysis (RPA) of the data submitted in Table C of EPA Form 2A, of the Permittee's application (Per 40 CFR Part 122 Appendix J – Table 2). The RPA indicates that the discharge has no reasonable potential to contribute to excursions of Alabama's in-stream water quality standards. There was no available background data for the receiving stream.

The receiving stream is the Alabama River (Woodruff Lake), a Tier I waterbody. The creek is not on the current 303(d) list for impaired waterbodies. There are no approved TMDLs for this waterbody.

ADEM Administrative Rule 335-6-10-.12 requires applicants to new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is not for a new or expanded discharge to a Tier II waterbody, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

The Permittee has reported one stormwater outfall to Fay Branch. Fay Branch is a Tier II waterbody. The creek is not on the current 303(d) list for impaired waterbodies. There are no approved TMDLs for this waterbody. Annual stormwater monitoring will be required for Flow, pH, TSS, NH3-N, CBOD5, TKN, NO3-NO2-N, TP, Oil and Grease, and E. Coli.

Prepared by: Sandra Lee

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	**Prattville Pine Creek Clean Water Facility**	
NPDES Permit Number:	**AL0027723**	
Receiving Stream:	**Alabama River (Woodruff Lake)**	
Facility Design Flow (Q_w):	**4.000 MGD**	
Receiving Stream $7Q_{10}$:	**3925.000 cfs**	
Receiving Stream $1Q_{10}$:	**2943.000 cfs**	
Winter Headwater Flow (WHF):	**6094.00 cfs**	
Summer Temperature for CCC:	**30 deg. Celsius**	
Winter Temperature for CCC:	**20 deg. Celsius**	
Headwater Background NH_3-N Level:	**0.13 mg/l**	
Receiving Stream pH:	**7.0 s.u.**	
Headwater Background FC Level (summer):	**N./A.**	**(Only applicable for facilities with diffusers.)**
(winter):	**N./A.**	

The Stream Dilution Ration (SDR) is calculated using the 7Q10 for all stream classifications.

$$\text{Stream Dilution Ration (SDR)} = \frac{Qw}{7Q10 + Qw} = \textbf{0.16\%}$$

AMMONIA TOXICITY LIMITATIONS

Toxicity-based ammonia limits are calculated in accordance with the *Ammonia Toxicity Protocol* and the *General Guidance for Writing Water Quality Based Toxicity Permits.*

If the Limiting Dilution is less than 1%, the waterbody is considered stream-dominated and the CMC applies.
If the Limiting Dilution is greater than 1%, the waterbody is considered effluent-dominated and the CCC applies.

$$\text{Limiting Dilution} = \frac{Q_w}{7Q_{10} + Q_w}$$

= **0.16%** **Stream-Dominated, CMC Applies**

Criterion Maximum Concentration (CMC): $CMC=0.411/(1+10^{(7.204-pH)}) + 58.4/(1+10^{(pH-7.204)})$

Criterion Continuous Concentration (CCC): $CCC=[0.0577/(1+10^{(7.688-pH)}) + 2.487/(1+10^{(pH-7.688)})] * Min[2.85,1.45*10^{(0.028*(25-T))}]$

	CMC	CCC
Allowable Summer Instream NH_3-N:	**36.09 mg/l**	**2.18 mg/l**
Allowable Winter Instream NH_3-N:	**36.09 mg/l**	**4:15 mg/l**

$$\text{Summer } NH_3\text{-N Toxicity Limit} = \frac{[(\text{Allowable Instream } NH_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater } NH_3\text{-N}) * (7Q_{10})]}{Q_w}$$

= **22843.6 mg/l NH3-N at 7Q10**

$$\text{Winter } NH_3\text{-N Toxicity Limit} = \frac{[(\text{Allowable Instream } NH_3\text{-N}) * (WHF + Q_w)] - [(\text{Headwater } NH_3\text{-N}) * (WHF)]}{Q_w}$$

= **35447.3 mg/l NH3-N at Winter Flow**

The ammonia limits established in the permit will be the lesser of the DO-based ammonia limit (from the wasteload allocation model) or the toxicity limits calculated above.

	DO-based NH3-N limit	Toxicity-based NH3-N limit
Summer	**10.00 mg/l NH3-N**	**22843.60 mg/l NH3-N**
Winter	**20.00 mg/l NH3-N**	**35447.30 mg/l NH3-N**

Summer: The DO based limit of 10.00 mg/l NH3-N applies.
Winter: The DO based limit of 20.00 mg/l NH3-N applies.

TOXICITY TESTING REQUIREMENTS (REFERENCE: MUNICIPAL BRANCH TOXICITY PERMITTING STRATEGY)

The following factors trigger toxicity testing requirements:

1. Facility design flow is equal to or greater than 1.0 MGD (major facility).
2. There are significant industrial contributors (SID permits).

Acute toxicity testing is specified for A&I receiving streams, or for stream dilution ratios of 1% or less.
Chronic toxicity testing is specified for all other situations requiring toxicity testing.

Acute toxicity testing is required

Instream Waste Concentration (IWC) = Based on Cormix Model = **5.00%** Note: This number will be rounded up for toxicity testing purposes.

DISINFECTION REQUIREMENTS

Bacteria limits are required, and will be the water quality limit for the receiving stream, except where diffusers are used the limit may be adjusted for the dilution provided by the diffuser.

See the attached Disinfection Guidance for applicable stream standards.

(Non-coastal limits apply)
Applicable Stream Classification: **Fish & Wildlife**
Disinfection Type: **Chlorination**
Limit calculation method: **Limits based on meeting stream standards at the point of discharge.**

	Stream Standard (colonies/100ml)	Effluent Limit (colonies/100ml)
E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)		
Monthly limit as monthly average (November through April):	548	**548**
Monthly limit as monthly aveage (May through October):	126	**126**
Daily Max (November through April):	2507	**2507**
Daily Max (May through October):	298	**298**
Enterococci (applies to Coastal)		
Monthly limit as geometric mean (October through May):	Not applicable	**Not applicable**
Monthly limit as geometric mean (June through September):	Not applicable	**Not applicable**
Daily Max (October through May):	Not applicable	**Not applicable**
Daily Max (June through September):	Not applicable	**Not applicable**

MAXIMUM ALLOWABLE CHLORINATION LIMITS

Toxicity-based chlorine limits are calculated in accordance with the General Guidance for Writing Water Quality Based Toxicity Permits.

Chlorine has been shown to be acutely toxic at 0.019 mg/l and chronically toxic at 0.011 mg/l.

Maximum allowable TRC in effluent:	6.987 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	12.069 mg/l (acute)	(0.019)/(SDR)

NOTE: A maximum chlorine limit will be imposed such that the instream concentration will not exceed acutely toxic concentrations in A & I streams and chronically toxic concentrations in all other streams, but may not exceed 1.0 mg/l.

Prepared By: Sandra Lee Date: 2/21/2024

Waste Load Allocation Summary

REQUEST INFORMATION

Request Number: 3282

From:	Sandy Lee	**In Branch/Section**	Municipal		
Date Submitted	12/4/2015	**Date Required**	1/3/2016	**FUND Code**	605
Date Permit application received by NPDES program					
Receiving Waterbody	Alabama River				
Previous Stream Name					
Facility Name	Prattville Pine Creek WWTP	(Name of Discharger-WQ will use to file)			
		Previous Discharger Name			
River Basin	Alabama	**Outfall Latitude**	32.425522	(decimal degrees)	
***County**	Elmore	**Outfall Longitude**	-86.400871	(decimal degrees)	
Permit Number	AL0027723	**Permit Type**	Expansion and Permit Reissuance		
		Permit Status	Active		
		Type of Discharger	MUNICIPAL		

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

If yes, impacting dischargers names.	Wetumpka WWTP, Econchate WWTP, Towassa WWTP, Autauga Creek WWTP, Catoma Creek WWTP, IP Prattville, Sabic, Millbrook WWTP	**Impacting dischargers permit numbers.**	

Existing Discharge Design Flow	3	MGD	**Note: The flow rates given should be those requested for modeling.**
Proposed Discharge Design Flow	5.7	MGD	

Comments Included ☐ Yes ☑ No

Information Verified By BCH

Year File Was Created 1995

Response ID Number 1561

Lat/Long Method GPS

12 Digit HUC Code	031502010107		
Use Classification	F&W		
Site Visit Completed?	☑ Yes ☐ No	**Date of Site Visit**	5/12/2016
Waterbody Impaired?	☐ Yes ☑ No	**Date of WLA Response**	9/29/2016
Antidegradation	☐ Yes ☑ No	**Approved TMDL?**	☐ Yes ☑ No
Waterbody Tier Level	Tier I		
Use Support Category	1	**Approval Date of TMDL**	

Waste Load Allocation Information

Modeled Reach Length	63.5	**Miles**	**Date of Allocation**	9/29/2016	
Name of Model Used	QUAL2E		**Allocation Type**	2 Seasons	
Model Completed by	Brian Haigler		**Type of Model Used**	Calibrated	
Allocation Developed by	Water Quality Branch				

Waste Load Allocation Summary

Annual Effluent Limits

Qw		MGD
CBOD5		
NH3-N		
TKN		
D.O.		

Conventional Parameters

Qw	5.7	MGD	Qw	5.7	MGD
Season	Summer		Season	Winter	
From	May		From	Nov	
Through	Oct		Through	Apr	
CBOD5	22	mg/L	CBOD5	25	mg/L
NH3-N	10	mg/L	NH3-N	20	mg/L
TKN	20		TKN	40	
D.O.	5	mg/L	D.O.	5	mg/L

Other Parameters

Qw		MGD	Qw		MGD
Season			Season		
From			From		
Through			Through		
TP			TP		
TN			TN		
TSS			TSS		

"Monitor Only" Parameters for Effluent:

Parameter	Frequency	Parameter	Frequency
TP	Monthly		
NO2+NO3-N	Monthly		

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	1.41	mg/l	1.49	mg/l
NH3-N	0.09	mg/l	0.13	mg/l
Temperature	30	°C	20	°C
pH	7	su	7	su

Hydrology at Discharge Location

			Method Used to Calculate
Drainage Area	15087	sq mi	
Stream 7Q10	3655.41	cfs	ADEM Estimate w/USGS Gage Data
Stream 1Q10	2741.56	cfs	ADEM Estimate w/USGS Gage Data
Stream 7Q2	5523.75	cfs	ADEM Estimate w/USGS Gage Data
Annual Average	23221	cfs	ADEM Estimate w/USGS Gage Data

Drainage Area Qualifier: Exact

Comments and/or Notations

Mixing Zone Analysis Summary

REQUEST INFORMATION

request number: 3491

From: (Responsible Engineer) Sandy Lee | In Branch/Section: Municipal

Date Submitted: 8/10/2018 | **Date Required:** 9/9/2018 | **FUND Code:** 605

Date Permit application received by NPDES program: 7/5/2018

Receiving Waterbody: Alabama River(Woodruff Lake)

Previous Stream Name:

Facility Name: Prattville Pine Creek WWTP (Name of Discharger-WQ will use to file)

Pine Creek WWTP **Previous Discharger Name**

River Basin: Alabama | **Outfall Latitude:** 32.425740 (decimal degrees)

***County:** Elmore | **Outfall Longitude:** -86.401028 (decimal degrees)

Permit Number: AL0027723 | **Permit Type:** Expansion and Permit Reissuance

Permit Status: Active

Type of Discharger: MUNICIPAL

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

If yes, impacting dischargers names.	Impacting dischargers permit numbers.

Existing Discharge Design Flow: 3 MGD

Proposed Discharge Design Flow: 4 MGD

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

Seasonal limits requested? ☐ Yes ☑ No

If not seasonal, only the summer sections will be used

Comments included ☑ Yes ☐ No

Information Verified By:

Year File Was Started:

12 Digit HUC Code: 031502010107

Date of MZ Response: 10/15/2018

Use Classification: F&W

Site Visit Completed? ☑ Yes ☐ No

Date of Site Visit: 9/7/2018

Hydrology			Method Used to Calculate
Drainage Area	15068.77	sq mi	
Stream 7Q10	3925	cfs	ADEM Estimate w/USGS Gage Data
Stream 1Q10	2943	cfs	ADEM Estimate w/USGS Gage Data
Stream 7Q2	6094	cfs	ADEM Estimate w/USGS Gage Data
Annual Average	25535	cfs	ADEM Estimate w/USGS Gage Data

Date of MZ Analysis: 10/11/2018

Model Completed by: KDP

Pollutant Category

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

Mixing Zone Analysis Summary

WET Parameters

Summer

Acute

Ambient Streamflow	2943	cfs
ZID Length	9.15	Meters
ZID IWC	4.56	%

Chronic

Ambient Streamflow		cfs
Mixing Zone Length		Meters
Mixing Zone IWC		%

Winter

Acute

Ambient Streamflow		cfs
ZID Length	9.15	Meters
ZID IWC		%

Chronic

Ambient Streamflow		cfs
Mixing Zone Length		Meters
Mixing Zone IWC		%

Thermal Parameters

Summer

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

Winter

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

Pathogen Parameters

Summer

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

Winter

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

Comments and/or Notations

It should be noted that the facility has requested a name change from Prattville Pine Creek WWTP to Prattville Pine Creek Clean Water Facility.

Facility Name: **Pine Creek Clean Water Facility**

NPDES No.: **AL0027723**

$Q_d*C_d + Q_{d2}*C_{d2} + Q_s*C_s = Q_r*C_r$

ID	Pollutant	Carcinogen "yes"	Type	Background from upstream source (C_{d2}) Daily Max	Background from upstream source (C_{d2}) Monthly Avg	Background Instream (C_s) Daily Max	Background Instream (C_s) Monthly Ave	Enter Max Daily Discharge as reported by Applicant (C_d) Max	Enter Avg Daily Discharge as reported by Applicant (C_d) Ave	Partition Coefficient (Stream / Lake)
				ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
1	Antimony		Metals	0	0	0	0	0	0	-
2	**Arsenic*,****	YES	Metals	0	0	0	0	0	0	0.574
3	Beryllium		Metals	0	0	0	0	0	0	-
4	Cadmium**		Metals	0	0	0	0	0	0	0.236
5	Chromium / Chromium III**		Metals	0	0	0	0	0	0	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	
7	Copper**		Metals	0	0	0	0	8.2	6.933	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.206
9	Mercury**		Metals	0	0	0	0	0.0008	0.00053	0.302
10	Nickel**		Metals	0	0	0	0	1.1	0.7	0.505
11	Selenium		Metals	0	0	0	0	0	0	-
12	Silver		Metals	0	0	0	0	0	0	-
13	Thallium		Metals	0	0	0	0	0	0	-
14	Zinc**		Metals	0	0	0	0	64	45.667	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	33	18.3	-
17	Hardness (As CaCO3)		Metals	0	0	0	0	76300	74970	-
18	Acrolein		VOC	0	0	0	0	0	0	-
19	**Acrylonitrile***	YES	VOC	0	0	0	0	0	0	-
20	**Aldrin**	YES	VOC	0	0	0	0	0	0	-
21	**Benzene***	YES	VOC	0	0	0	0	0	0	-
22	**Bromoform***	YES	VOC	0	0	0	0	0	0	-
23	**Carbon Tetrachloride***	YES	VOC	0	0	0	0	0	0	-
24	**Chlordane**	YES	VOC	0	0	0	0	0	0	-
25	Clorobenzene		VOC	0	0	0	0	0	0	-
26	**Chlorodibromo-Methane***	YES	VOC	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	-
29	**ChloroForm***	YES	VOC	0	0	0	0	0	0	-
30	**4,4'-DDD**	YES	VOC	0	0	0	0	0	0	-
31	**4,4'-DDE**	YES	VOC	0	0	0	0	0	0	-
32	**4,4'-DDT**	YES	VOC	0	0	0	0	0	0	-
33	**Dichlorobromo-Methane***	YES	VOC	0	0	0	0	0	0	-
34	1, 1-Dichloroethane		VOC	0	0	0	0	0	0	-
35	**1, 2-Dichloroethane***	YES	VOC	0	0	0	0	0	0	-
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	-
37	**1, 1-Dichloroethylene***	YES	VOC	0	0	0	0	0	0	-
38	1, 2-Dichloropropane		VOC	0	0	0	0	0	0	-
39	1, 3-Dichloro-Propylene		VOC	0	0	0	0	0	0	-
40	**Dieldrin**	YES	VOC	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	0	-
44	**Methylene Chloride***	YES	VOC	0	0	0	0	0	0	-
45	**1, 1, 2, 2-Tetrachloro-Ethane***	YES	VOC	0	0	0	0	0	0	-
46	**Tetrachloro-Ethylene***	YES	VOC	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	-
48	**Toxaphene**	YES	VOC	0	0	0	0	0	0	-
49	**Tributyltine (TBT)**	YES	VOC	0	0	0	0	0	0	-
50	1, 1, 1-Trichloroethane		VOC	0	0	0	0	0	0	-
51	**1, 1, 2-Trichloroethane***	YES	VOC	0	0	0	0	0	0	-
52	**Trichlorethylene***	YES	VOC	0	0	0	0	0	0	-
53	**Vinyl Chloride***	YES	VOC	0	0	0	0	0	0	-
54	P-Chloro-M-Cresol		Acids	0	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	0	-
56	2, 4-Dichlorophenol		Acids	0	0	0	0	0	0	-
57	2, 4-Dimethylphenol		Acids	0	0	0	0	0	0	-
58	4, 6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0	-
59	2, 4-Dinitrophenol		Acids	0	0	0	0	0	0	-
60	**4,6-Dintro-2-methylophenol**	YES	Acids	0	0	0	0	0	0	-
61	**Dioxin (2,3,7,8-TCDD)**	YES	Acids	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-
64	**Pentachlorophenol***	YES	Acids	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	-
66	**2, 4, 6-Trichlorophenol***	YES	Acids	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	-
70	Benzidine		Bases	0	0	0	0	0	0	-
71	**Benzo(A)Anthracene***	YES	Bases	0	0	0	0	0	0	-
72	**Benzo(A)Pyrene***	YES	Bases	0	0	0	0	0	0	-
73	3, 4 Benzo-Fluoranthene		Bases	0	0	0	0	0	0	-
74	Benzo(GHI)Perylene		Bases	0	0	0	0	0	0	-
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	-
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	-
77	**Bis (2-Chloroethyl)-Ether***	YES	Bases	0	0	0	0	0	0	-
78	Bis (2-Chloroiso-Propyl) Ether		Bases	0	0	0	0	0	0	-
79	**Bis (2-Ethylhexyl) Phthalate***	YES	Bases	0	0	0	0	0	0	-
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	-
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0	-
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
84	**Chrysene***	YES	Bases	0	0	0	0	0	0	-
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0	-
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0	-
87	**Dibenzo(A,H)Anthracene***	YES	Bases	0	0	0	0	0	0	-
88	1, 2-Dichlorobenzene		Bases	0	0	0	0	0	0	-
89	1, 3-Dichlorobenzene		Bases	0	0	0	0	0	0	-
90	1, 4-Dichlorobenzene		Bases	0	0	0	0	0	0	-
91	**3, 3-Dichlorobenzidine***	YES	Bases	0	0	0	0	0	0	-
92	Diethyl Phthalate		Bases	0	0	0	0	0	0	-
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0	-
94	**2, 4-Dinitrotoluene***	YES	Bases	0	0	0	0	0	0	-
95	2, 6-Dinitrotoluene		Bases	0	0	0	0	0	0	-
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0	-
97	**Endosulfan (alpha)**	YES	Bases	0	0	0	0	0	0	-
98	**Endosulfan (beta)**	YES	Bases	0	0	0	0	0	0	-
99	**Endosulfan sulfate**	YES	Bases	0	0	0	0	0	0	-
100	**Endrin**	YES	Bases	0	0	0	0	0	0	-
101	**Endrin Aldeyhide**	YES	Bases	0	0	0	0	0	0	-
102	Fluoranthene		Bases	0	0	0	0	0	0	-
103	Fluorene		Bases	0	0	0	0	0	0	-
104	Heptochlor	YES	Bases	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-
106	**Hexachlorobenzene***	YES	Bases	0	0	0	0	0	0	-
107	**Hexachlorobutadiene***	YES	Bases	0	0	0	0	0	0	-
108	**Hexachlorocyclohexan (alpa)**	YES	Bases	0	0	0	0	0	0	-
109	**Hexachlorocyclohexan (beta)**	YES	Bases	0	0	0	0	0	0	-
110	**Hexachlorocyclohexan (gamma)**	YES	Bases	0	0	0	0	0	0	-
111	HexachlorocycloPentadiene		Bases	0	0	0	0	0	0	-
112	Hexachloroethane		Bases	0	0	0	0	0	0	-
113	**Indeno(1, 2, 3-CK)Pyrene***	YES	Bases	0	0	0	0	0	0	-
114	Isophorone		Bases	0	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	0	-
117	**N-Nitrosodi-N-Propylamine***	YES	Bases	0	0	0	0	0	0	-
118	**N-Nitrosodi-N-Methylamine***	YES	Bases	0	0	0	0	0	0	-
119	**N-Nitrosodi-N-Phenylamine***	YES	Bases	0	0	0	0	0	0	-
120	**PCB-1016**	YES	Bases	0	0	0	0	0	0	-
121	**PCB-1221**	YES	Bases	0	0	0	0	0	0	-
122	**PCB-1232**	YES	Bases	0	0	0	0	0	0	-
123	**PCB-1242**	YES	Bases	0	0	0	0	0	0	-
124	**PCB-1248**	YES	Bases	0	0	0	0	0	0	-
125	**PCB-1254**	YES	Bases	0	0	0	0	0	0	-
126	**PCB-1260**	YES	Bases	0	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	0	-
129	1, 2, 4-Trichlorobenzene		Bases	0	0	0	0	0	0	-

4	Enter Q_d = wastewater discharge flow from facility (MGD)
6.188916	Q_s = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Qd2 = background stream flow in MGD above point of discharge
0	Qd2 = background stream flow from upstream source (cfs)
3925	Enter 7Q10, Q_s = background stream flow in cfs above point of discharge
2943	Enter or estimated, 1Q10, Q_s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
25535	Enter Mean Annual Flow, Q_s = background stream flow in cfs above point of discharge
6094	Enter 7Q2, Q_s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C_s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q_d +Qd2+Q_s	Q_r = resultant in-stream flow, after discharge
Calculated on other	C_r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
50	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.00 s.u.	Enter, Background pH above point of discharge
YES	Enter, Is discharge to a stream? "YES" Other option would be to a Lake. (This changes the partition coefficients for the metals)

** Using Partition Coefficients

January 5, 2024

Facility Name: Pine Creek Clean Water Facility

NPDES No.: AL0027723

Freshwater F&W classification.

ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (Cd2) Daily Max	Max Daily Discharge as reported by Applicant (C_{dmax})	Freshwater Acute (µg/l) Q_s =1Q10: Water Quality Criteria (C_s)	Freshwater Acute: Draft Permit Limit (C_{dmax})	Freshwater Acute: 20% of Draft Permit Limit	Freshwater Acute: RP?	Background from upstream source (Cd2) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})	Freshwater Chronic (µg/l) Q_s = 7Q10: Water Quality Criteria (C_s)	Freshwater Chronic: Draft Permit Limit (C_{davg})	Freshwater Chronic: 20% of Draft Permit Limit	Freshwater Chronic: RP?	Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average, Non-Carcinogen Q_s = 7Q10: Water Quality Criteria (C_s)	Human Health: Draft Permit Limit (C_{davg})	Human Health: 20% of Draft Permit Limit	Human Health: RP?
1	Antimony			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.37E+05	4.74E+04	No
2	Arsenic		YES	0	0	[illegible]	282263.700	56452.740	No	0	0	[illegible]	165892.587	33198.517	No	3.03E-01	1.25E+03	2.50E+02	No
3	Berylium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	[illegible]	2071.527	414.305	No	0	0	[illegible]	408.820	81.764	No	-	-	-	-
5	Chromium/ Chromium III			0	0	[illegible]	732857.857	146571.571	No	0	0	[illegible]	127071.974	25414.395	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	7624.441	1524.888	No	0	0	[illegible]	6987.181	1397.436	No	-	-	-	-
7	Copper			0	8.2	[illegible]	8590.065	1718.013	No	0	6.933	[illegible]	8108.668	1621.734	No	-	-	-	-
8	Lead			0	0	[illegible]	69711.615	13942.323	No	0	0	[illegible]	3621.103	724.221	No	-	-	-	-
9	Mercury			0	0.0008	[illegible]	1143.666	228.733	No	0	0.00053	[illegible]	7.622	1.524	No	4.24E-02	2.69E+01	5.39E+00	No
10	Nickel			0	1.1	[illegible]	245804.511	49160.902	No	0	0.7	[illegible]	36391.883	7278.377	No	9.93E+02	6.31E+05	1.26E+05	No
11	Selenium			0	0	20.000	9530.551	1906.110	No	0	0	[illegible]	3175.991	635.198	No	[illegible]	1.54E+06	3.09E+05	No
12	Silver			0	0	0.976	465.302	93.060	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.74E+02	3.48E+01	No
14	Zinc			0	64	[illegible]	94051.673	18810.335	No	0	45.667	[illegible]	126393.840	25278.768	No	1.49E+04	9.46E+06	1.89E+06	No
15	Cyanide			0	0	[illegible]	10483.606	2096.721	No	0	0	[illegible]	3303.031	660.606	No	[illegible]	5.93E+06	1.19E+06	No
16	Total Phenolic Compounds			0	33	-	-	-	-	0	18.3	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	76300	-	-	-	-	0	74970	-	-	-	-	-	-	-	-
18	Acrolein			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.45E+03	6.89E+02	No
19	Acrylonitrile		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.94E+02	1.19E+02	No
20	Aldrin		YES	0	0	3.000	1429.583	285.917	No	0	0	-	-	-	-	[illegible]	1.21E-01	2.43E-02	No
21	Benzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.39E+04	1.28E+04	No
22	Bromoform		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.25E+05	6.50E+04	No
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.95E+03	7.90E+02	No
24	Chlordane		YES	0	0	[illegible]	1143.666	228.733	No	0	0	[illegible]	2.731	0.546	No	[illegible]	1.95E+00	3.90E-01	No
25	Clorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.76E+05	1.15E+05	No
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.06E+04	6.11E+03	No
27	Chloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
29	ChloroForm		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.21E+05	8.42E+04	No
30	4,4' - DDD		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.49E-01	1.50E-01	No
31	4,4' - DDE		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.28E-01	1.06E-01	No
32	4,4' - DDT		YES	0	0	1.100	524.180	104.836	No	0	0	0.001	0.635	0.127	No	[illegible]	5.28E-01	1.06E-01	No
33	Dichlorobromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.14E+04	8.28E+03	No
34	1, 1-Dichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
35	1, 2-Dichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.82E+04	1.76E+04	No
36	Trans-1, 2-Dichloro-Ethylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.75E+06	7.50E+05	No
37	1, 1-Dichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.72E+07	3.44E+06	No
38	1, 2-Dichloropropane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.40E+03	1.08E+03	No
39	1, 3-Dichloro-Propylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.80E+03	1.56E+03	No
40	Dieldrin		YES	0	0	[illegible]	114.367	22.873	No	0	0	[illegible]	35.571	7.114	No	[illegible]	1.29E-01	2.58E-02	No
41	Ethylbenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.90E+05	1.58E+05	No
42	Methyl Bromide			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.53E+05	1.11E+05	No
43	Methyl Chloride			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.43E+06	2.85E+05	No
45	1, 1, 2, 2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.63E+03	1.93E+03	No
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.91E+03	1.58E+03	No
47	Toluene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.54E+06	1.11E+06	No
48	Toxaphene		YES	0	0	[illegible]	347.865	69.573	No	0	0	[illegible]	0.127	0.025	No	[illegible]	6.68E-01	1.34E-01	No
49	Tributyltin (TBT)		YES	0	0	[illegible]	219.203	43.841	No	0	0	[illegible]	45.734	9.147	No	-	-	-	-
50	1, 1, 1-Trichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
51	1, 1, 2-Trichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.75E+04	7.51E+03	No
52	Trichlorethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.21E+04	1.44E+04	No
53	Vinyl Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.88E+03	1.18E+03	No
54	P-Chloro-M-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
55	2-Chlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.53E+04	1.11E+04	No
56	2, 4-Dichlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.09E+05	2.18E+04	No
57	2, 4-Dimethylphenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.16E+05	6.32E+04	No
58	4, 6-Dinitro-O-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
59	2, 4-Dinitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.98E+06	3.95E+05	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.83E+05	1.37E+05	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.10E-04	2.20E-05	No
62	2-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
63	4-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
64	Pentachlorophenol		YES	0	0	[illegible]	4156.903	831.381	No	0	0	[illegible]	4251.118	850.224	No	[illegible]	7.30E+03	1.46E+03	No
65	Phenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.18E+08	6.35E+07	No
66	2, 4, 6-Trichlorophenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.84E+03	1.17E+03	No
67	Acenaphthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.67E+05	7.35E+04	No
68	Acenaphthylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
69	Anthracene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.48E+07	2.96E+06	No
70	Benzidine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.36E-02	1.47E-02	No
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.40E+01	8.79E+00	No
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.40E+01	8.79E+00	No
73	Benzo(b)fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.77E+00	1.35E+00	No
74	Benzo(GHI)Perylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.77E+00	1.35E+00	No
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.27E+03	2.54E+02	No
78	Bis (2-Chloroiso-Propyl) Ether			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.40E+07	4.80E+06	No
79	Bis (2-Ethylhexyl) Phthalate		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.29E+03	1.06E+03	No
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
81	Butyl Benzyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.16E+05	1.43E+05	No
82	2-Chloronaphthalene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.87E+05	1.17E+05	No
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
84	Chrysene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.40E+01	8.79E+00	No
85	Di-N-Butyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.67E+06	3.33E+05	No
86	Di-N-Octyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
87	Dibenzo(A,H)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.40E+01	8.79E+00	No
88	1, 2-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.80E+05	9.60E+04	No
89	1, 3-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.57E+05	7.14E+04	No
90	1, 4-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.14E+04	1.43E+04	No
91	3, 3-Dichlorobenzidine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.86E+01	1.37E+01	No
92	Diethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.62E+07	3.25E+06	No
93	Dimethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.12E+08	8.23E+07	No
94	2, 4-Dinitrotoluene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.17E+03	1.63E+03	No
95	2, 6-Dinitrotoluene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
96	1,2-Diphenylhydrazine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.44E+01	1.49E+01	No
97	Endosulfan (alpha)		YES	0	0	[illegible]	104.836	20.967	No	0	0	[illegible]	35.571	7.114	No	[illegible]	2.14E+05	4.28E+04	No
98	Endosulfan (beta)		YES	0	0	[illegible]	104.836	20.967	No	0	0	[illegible]	35.571	7.114	No	[illegible]	2.14E+05	4.28E+04	No
99	Endosulfan sulfate		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.14E+05	4.28E+04	No
100	Endrin		YES	0	0	[illegible]	40.981	8.196	No	0	0	[illegible]	22.867	4.573	No	[illegible]	1.46E+02	2.91E+01	No
101	Endrin Aldeyhde		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.28E+02	1.46E+02	No
102	Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.16E+04	1.03E+04	No
103	Fluorene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.98E+06	3.95E+05	No
104	Heptachlor		YES	0	0	[illegible]	247.794	49.559	No	0	0	[illegible]	2.414	0.483	No	[illegible]	1.91E-01	3.82E-02	No
105	Heptachlor Epoxide		YES	0	0	[illegible]	247.794	49.559	No	0	0	[illegible]	2.414	0.483	No	[illegible]	9.45E-02	1.89E-02	No
106	Hexachlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.93E-01	1.39E-01	No
107	Hexachlorobutadiene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.44E+04	8.88E+03	No
108	Hexachlorocyclohexan (alpha)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.18E+01	2.35E+00	No
109	Hexachlorocyclohexan (beta)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.12E+01	8.23E+00	No
110	Hexachlorocyclohexan (gamma)		YES	0	0	[illegible]	452.701	90.540	No	0	0	-	-	-	-	[illegible]	4.44E+03	8.89E+02	No
111	HexachlorocycloPentadiene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.10E+05	8.20E+04	No
112	Hexachloroethane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.22E+03	2.44E+02	No
113	Indeno(1, 2, 3-CK)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.40E+01	8.79E+00	No
114	Isophorone			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.56E+05	7.12E+04	No
115	Naphthalene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
116	Nitrobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.56E+05	5.13E+04	No
117	N-Nitrosodi-N-Propylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.22E+03	2.43E+02	No
118	N-Nitrosodimethylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.26E+03	1.45E+03	No
119	N-Nitrosodiphenylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.45E+04	2.89E+03	No
120	PCB-1016		YES	0	0	-	-	-	-	0	0	0.014	8.893	1.779	No	[illegible]	1.54E-01	3.09E-02	No
121	PCB-1221		YES	0	0	-	-	-	-	0	0	0.014	8.893	1.779	No	[illegible]	1.54E-01	3.09E-02	No
122	PCB-1232		YES	0	0	-	-	-	-	0	0	0.014	8.893	1.779	No	[illegible]	1.54E-01	3.09E-02	No
123	PCB-1242		YES	0	0	-	-	-	-	0	0	0.014	8.893	1.779	No	[illegible]	1.54E-01	3.09E-02	No
124	PCB-1248		YES	0	0	-	-	-	-	0	0	0.014	8.893	1.779	No	[illegible]	1.54E-01	3.09E-02	No
125	PCB-1254		YES	0	0	-	-	-	-	0	0	0.014	8.893	1.779	No	[illegible]	1.54E-01	3.09E-02	No
126	PCB-1260		YES	0	0	-	-	-	-	0	0	0.014	8.893	1.779	No	[illegible]	1.54E-01	3.09E-02	No
127	Phenanthrene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
128	Pyrene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.48E+06	2.96E+05	No
129	1, 2, 4-Trichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.60E+04	5.20E+03	No

FACT SHEET

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

Date Prepared: 1/30/2024 **By:** Sandra Lee

NPDES Permit No. AL0027723

1. **Name and Address of Applicant:**

   City of Prattville
   101 West Main Street
   Prattville, AL 36067

2. **Name and Address of Facility:**

   Prattville Pine Creek Clean Water Facility
   100 Pine Creek Drive
   Prattville, AL 36066

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

   Discharge Type(s): Surface Water
   Treatment Method(s): Mechanical (WWTP)

4. **Applicant's Receiving Waters**

Feature ID	Receiving Water	Classification
001	Alabama River (Woodruff Lake)	Fish and Wildlife (F&W)
002	Fay Branch	Fish and Wildlife (F&W)

   For the Outfall latitude and longitude see the permit application.

5. **Permit Conditions:**

   See attached Rationale and Draft Permit.

6. **PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS**

   a. **Comment Period**

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

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

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

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

b. Public Hearing

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

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

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

c. Issuance of the Permit

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

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

d. Appeal Procedures

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

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

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

Lee, Sandra

From: greg@engineersofthesouth.com
Sent: Friday, February 16, 2024 7:51 AM
To: Lee, Sandra
Cc: Napoleon Wilks
Subject: RE: [EXTERNAL]RE: [EXTERNAL]RE: [EXTERNAL]RE: Pine Creek WWTP AL0027723 Permit Application
Attachments: OVERALL - proposed-OVERALL.pdf

Sandra,

As noted on the attached Overall Plan for the Pine Creek CWF, the Raw Sewage Pump Station (where all the collection system comes together at the Pine Creek CWF) has a total capacity of 12.0 mgd, using the design peaking factor of 3, this results in a design flow of 4 mgd. The pumps are each rated for 2,820 gpm @ 56' TDH. 2,820 gpm * 3 (one pump is for redundancy, in accordance with Ten State Standards) = 8,460 gpm = 12 mgd.

I hope that this addresses your question and please do not hesitate to contact me if you have any further questions.

Thanks, GT

Greg Thompson, P.E.
Engineers of the South

ENGINEERS OF THE SOUTH

PRELIMINARY, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION

REVISIONS

NO.	DATE	DESCRIPTION

FOR REVIEW AND COMMENT ☐ AS-BUILT ☐ CONSTRUCTION REVISIONS

CITY OF PRATTVILLE, AL
PUBLIC WORKS DEPT - WASTEWATER DIVISION

PINE CREEK CWF
NPDES PERMIT RENEWAL

BOX IS 2 IN WIDE AT FULL SCALE

JOB NO:	PV-2300
DATE:	SEPT 2023
DESIGNED BY:	
DRAWN BY:	
DWG:	OVERALL
SHEET NUMBER	

United States Environmental Protection Agency | Office of Water Washington, D.C. | EPA Form 3510-2A Revised March 2019

Water Permits Division

EPA

Application Form 2A

New and Existing Publicly Owned Treatment Works

NPDES Permitting Program

Note: Complete this form if your facility is a new or existing publicly owned treatment works.

Paperwork Reduction Act Notice

The U.S. Environmental Protection Agency estimates the average burden to collect information and complete Form 2A to average between 4.7 and 24.7 hours, depending on the number of sections the applicant must complete. The estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments about the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

Who Must Complete Form 2A?

All new and existing publicly owned treatment works (POTWs) and other dischargers designated by the National Pollutant Discharge Elimination System (NPDES) permitting authority must complete Form 2A. Note that you may wish to consult the "General Instructions" of NPDES Application Form 1 to determine if your treatment works is required to submit any additional NPDES application forms.

At the state level, either the U.S. Environmental Protection Agency (EPA) or an approved state agency administers the NPDES permit program. If you are located in a jurisdiction in which an EPA regional office administers the NPDES permit program, you should use Form 2A and all other applicable forms described in these instructions. If you are located in a jurisdiction where a state administers the NPDES permit program, contact the state to determine the forms you should complete. States often develop their own application forms rather than use the federal forms. See http://www.epa.gov/npdes/npdes-state-program-information for a list of states that have approved NPDES permit programs and those that do not.

Exhibit 2A–1 (see end of this section) provides contact information for each of EPA's 10 regional offices. Since the exhibit's content is subject to change, consult EPA's website for the latest information: http://www.epa.gov/aboutepa#regional.

Where to File Your Completed Form

- If you are in a jurisdiction with an approved state NPDES permit program, file according to the instructions on the state forms.
- If you are in a jurisdiction where EPA is the NPDES permitting authority (i.e., the state is *not* an NPDES-authorized state), mail the completed application forms to the EPA regional office that covers the state in which your facility is located (see Exhibit 2A–1).

When to File Your Completed Form

Form 2A must be submitted at least 180 days before your present NPDES permit expires or, if you are a new discharger, at least 180 days before the date on which the discharge is to commence, unless the NPDES permitting authority has granted permission for a later date.

Fees

EPA does not require applicants to pay a fee for applying for NPDES permits. However, states that administer the NPDES permit program may charge fees. Consult with state officials for further information.

Public Availability of Submitted Information

EPA will make information from NPDES permit application forms available to the public for inspection and copying upon request. You may not claim any information on Form 2A (or related attachments) as confidential.

You may make a claim of confidentiality for any information that you submit to EPA that goes beyond the information required by Form 2A. If you do not assert a claim of confidentiality at the time you submit your information to the NPDES permitting authority, EPA may make the information available to the public without further notice to you. EPA will handle claims of confidentiality in accordance with the Agency's business confidentiality regulations at Part 2 of Title 4 of the *Code of Federal Regulations* (CFR).

Completion of Forms

Form 2A is divided into six major sections. It also contains five effluent monitoring tables (Tables A through E) and an industrial discharge information table (Table F), all located at the end of the form. Note that not all applicants are required to complete each section of the form or all of the tables. The questions on the form will direct you to the items and tables you must complete.

Print or type in the specified areas only. If you do not have enough space on the form to answer a question, you may continue on additional sheets, as necessary, using a format consistent with the form.

Provide your EPA Identification Number from the Facility Registry Service, NPDES permit number, and facility name at the top of each page of Form 2A and any attachments. If your facility is new (i.e., not yet constructed), write or type "New Facility" in the space provided for the EPA Identification Number and NPDES permit number. If you do not know your EPA Identification Number, contact your NPDES permitting authority. See Exhibit 2A–1 for contact information. Additionally, for Tables A through E, provide the applicable outfall number at the top of each page.

Do not leave any response areas blank unless the form directs you to skip them. If the form directs you to respond to an item that does not apply to your facility or activity, enter "NA" for "not applicable" to show that you considered the item and determined a response was not necessary for your facility.

If you have previously submitted information that answers a specific question to EPA or an approved state NPDES agency, you may either repeat the information in the space provided or attach a copy of the previous submission.

Note for New Dischargers

Provide all information available to you at the time you complete Form 2A. If you do not have information to respond to an item because your facility has yet to discharge, write or type "data are not available" next to the item on the form. Note that you are required to submit *actual* data no later than 24 months after your facility commences to discharge.

The NPDES permitting authority will consider your application complete when it and any supplementary material are received and completed according to the authority's satisfaction. The NPDES permitting authority will judge the completeness of any application independently of the status of any other permit application or permit for the same facility or activity.

Definitions

The legal definitions of all key terms used in the various NPDES application forms are included in the "Glossary" at the end of these instructions.

Exhibit 2A–1. Addresses of EPA Regional Contacts and Covered States

REGION 1 U.S. Environmental Protection Agency, Region 1 5 Post Office Square, Suite 100, Boston, MA 02109-3912 Phone: (617) 918-1111; toll free: (888) 372-7341 Fax: (617) 918-0101 Website: http://www.epa.gov/aboutepa/epa-region-1-new-england Covered states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	**REGION 6** U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200, Dallas, TX 75202-2733 Phone: (214) 665-2200; toll free: (800) 887-6063 Fax: (214) 665-7113 Website: http://www.epa.gov/aboutepa/epa-region-6-south-central Covered states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
REGION 2 U.S. Environmental Protection Agency, Region 2 290 Broadway, New York, NY 10007-1866 Phone: (212) 637-3000; toll free: (877) 251-4575 Fax: (212) 637-3526 Website: http://www.epa.gov/aboutepa/epa-region-2 Covered states: New Jersey, New York, Virgin Islands, and Puerto Rico	**REGION 7** U.S. Environmental Protection Agency, Region 7 11201 Renner Boulevard, Lenexa, KS 66219 Phone: (913) 551-7003; toll free: (800) 223-0425 Website: http://www.epa.gov/aboutepa/epa-region-7-midwest Covered states: Iowa, Kansas, Missouri, and Nebraska
REGION 3 U.S. Environmental Protection Agency, Region 3 1650 Arch Street, Philadelphia, PA 19103-2029 Phone: (215) 814-5000; toll free: (800) 438-2474 Fax: (215) 814-5103 Website: http://www.epa.gov/aboutepa/epa-region-3-mid-atlantic Covered states: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	**REGION 8** U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street, Denver, CO 80202-1129 Phone: (303) 312-6312; toll free: (800) 227-8917 Fax: (303) 312-6339 Website: http://www.epa.gov/aboutepa/epa-region-8-mountains-and-plains Covered states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming
REGION 4 U.S. Environmental Protection Agency, Region 4 Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW, Atlanta, GA 30303-8960 Phone: (404) 562-9900; toll free: (800) 241-1754 Fax: (404) 562-8174 Website: http://www.epa.gov/aboutepa/about-epa-region-4-southeast Covered states: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee	**REGION 9** U.S. Environmental Protection Agency, Region 9 75 Hawthorne Street, San Francisco, CA 94105 Phone: (415) 947-8000; toll free: (866) EPA-WEST Fax: (415) 947-3553 Website: http://www.epa.gov/aboutepa/epa-region-9-pacific-southwest Covered states: Arizona, California, Hawaii, Nevada, Guam, American Samoa, and Trust Territories
REGION 5 U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, Chicago, IL 60604-3507 Phone: (312) 353-2000; toll free: (800) 621-8431 Fax: (312) 353-4135 Website: http://www.epa.gov/aboutepa/epa-region-5 Covered states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	**REGION 10** U.S. Environmental Protection Agency, Region 10 1200 Sixth Avenue, Suite 900, Seattle, WA 98101 Phone: (206) 553-1200; toll free: (800) 424-4372 Fax: (206) 553-2955 Website: http://www.epa.gov/aboutepa/epa-region-10-pacific-northwest Covered states: Alaska, Idaho, Oregon, and Washington

Section 1. Basic Application Information for All Applicants

Facility Information

Item 1.1. Enter the facility's official or legal name. Do not use a colloquial name. Provide the *mailing address* of the facility. Next, give the name (first and last), title, work telephone number, and email address of the person who is thoroughly familiar with the operation of the facility and with the facts reported in this application.

Include a complete *location address* for the facility if different from the mailing address. If the facility lacks a street name or route number, give the most accurate, alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 1.2. Indicate whether the application is for a facility that has not yet commenced discharge. If yes, be advised that you are required to submit *actual* data no later than 24 months after your facility commences to discharge.

Applicant Information

Item 1.3. Indicate if the applicant is different from the entity listed under Item 1.1. If so, specify the applicant name and address. Provide the name (first and last) of a contact, including his/her title, telephone number, and email address.

Item 1.4. Indicate if the applicant is the facility's owner, operator, or both.

Item 1.5. Specify whether the NPDES permitting authority should send correspondence to the facility or the applicant.

Existing Environmental Permits

Item 1.6. Indicate all environmental permits or construction approvals received or applied for (including dates) under the noted programs. Print or type the corresponding permit number for each.

Collection System and Population Served

Item 1.7. Specify the municipalities served by the treatment works, including unincorporated connector districts. For each municipality, indicate the population served, the percentage of each collection system type if known (e.g., separate sanitary or combined storm and sanitary), and collection system ownership status. Finally, indicate the total percentage of sewer line each type comprises.

Do not report privately owned collection systems discharging industrial waste to the treatment works in Item 1.7. Those facilities must be reported on Table F.

Indian Country

Item 1.8. Indicate if the POTW is located in Indian Country.

Item 1.9. Note whether the treatment works discharges to a receiving stream that flows through Indian Country.

Design and Actual Flow Rates

Item 1.10. Provide the facility's *design* flow rate in million gallons per day (mgd). Next, specify the facility's *actual* annual average daily flow rate and maximum daily flow rate for each of the previous three years (in mgd).

Discharge Points by Type

Item 1.11. Provide the facility's total number of effluent discharge points to waters of the United States by type (e.g., treated effluent, untreated effluent, combined sewer overflows, bypasses, and constructed emergency overflows).

Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

Item 1.12. Indicate whether the POTW discharges wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States. If yes, continue to Item 1.13. If no, skip to Item 1.14.

Item 1.13. Specify the location of each surface impoundment, the average daily volume discharged to each surface impoundment in gallons per day (gpd), and whether the discharge is continuous or intermittent.

Item 1.14. Indicate if the facility applies wastewater to land. If yes, continue to Item 1.15. If no, skip to Item 1.16.

Item 1.15. Provide the location of each land application site; the size of each land application site (in acres); the average daily volume applied to each land application site (in gpd), and whether the land application is continuous or intermittent.

Item 1.16. Note whether the facility's effluent is transported to another facility for treatment prior to discharge. If yes, continue to Item 1.17. If no, skip to Item 1.21.

Item 1.17. Describe the means by which the effluent is transported, such as by tank truck or pipe.

Item 1.18. Specify whether the facility's effluent is transported by a party other than the applicant. If yes, continue to Item 1.19. If no, skip to Item 1.20.

Item 1.19. Provide the name, mailing address, contact person, phone number, and email address of the entity that transports the discharge.

Item 1.20. Provide the name, mailing address, contact person, phone number, email address, and NPDES permit number (if any) of the receiving facility. Also specify the average daily flow rate from the facility into the receiving facility in mgd.

Item 1.21. Indicate if wastewater is disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States, such as underground percolation and underground injections. If yes, continue to Item 1.22. If no, skip to Item 1.23.

Item 1.22. Provide a description of the disposal method, including the location and size of each disposal site; the annual average daily discharge volume (in gpd), and whether disposal through this method is continuous or intermittent.

Variance Requests

Item 1.23. If known at the time of application, check all of the authorized variances that you plan to request or renew. Note that you are not being asked to submit any other information at this time. Contact your NPDES permitting authority to determine the

specifics of what you should provide and when. The ability to request a variance is not limited to the time of application, and an applicant may request a variance consistent with statutory and regulatory requirements.

Contractor Information

Item 1.24. Indicate if any of the operational or maintenance activities associated with wastewater treatment and effluent quality of the POTW are the responsibility of a contractor. If yes, continue to Item 1.25. If no, skip to Section 2.

Item 1.25. Provide a listing of all contractors (by company name). For each, specify the mailing address, a contact name, telephone number, and email address. Also summarize the operational and maintenance responsibilities of each contractor.

Section 2. Additional Information

Outfalls to Waters of the United States

Design Flow

Item 2.1. Indicate whether the treatment works has a design flow greater than or equal to 0.1 mgd. If yes, continue to Item 2.2. If no, skip to Section 3.

Inflow and Infiltration

Item 2.2. Specify the POTW's current average daily volume of inflow and infiltration (in gpd) and steps the facility is taking to minimize inflow and infiltration.

Topographic Map

Item 2.3. Prepare a topographic map (or other map if a topographic map is unavailable) extending at least one mile beyond property boundaries of the treatment plant, including all unit processes and showing the following: (1) treatment plant area and unit processes; (2) major pipes or other structures through which wastewater enters the treatment plant and the pipes or other structures through which treated wastewater is discharged from the treatment plant (include outfalls from bypass piping, if applicable); (3) each well where fluids from the treatment plant are injected underground; (4) wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within ¼ mile of the treatment works' property boundaries; (5) sewage sludge management facilities (including onsite treatment, storage, and disposal sites); and (6) location at which waste classified as hazardous under the Resource Conservation and Recovery Act (RCRA) enters the treatment plant by truck, rail, or dedicated pipe.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude to the nearest second. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or USGS).

On all maps of rivers, show the direction of the current. In tidal waters, show the directions of ebb and flow tides.

You may develop your map by going to USGS's National Map website at http://nationalmap.gov/. (For a map from this site, use the traditional 7.5-minute quadrangle format. If none is available, use a USGS 15-minute series map.) You may also use a plat or other appropriate map. Briefly describe land uses in the map area (e.g., residential, commercial). An example of an acceptable location map is shown as Exhibit 2A–2 at the end of these instructions. **Note:** Exhibit 2A–2 is provided for illustration only; it does not show an actual facility. Note that you have completed your topographic map and attached it to the application.

Flow Diagram

Item 2.4. Provide a process flow diagram or schematic showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. This includes a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination), and showing daily average flow rates at influent and discharge points, and approximate daily flow rates between treatment units. Also provide a narrative description of the diagram/schematic. Answer "Yes" to Item 2.4 once you have completed and attached your diagram to the application.

Scheduled Improvements and Schedules of Implementation

Item 2.5. Indicate whether any improvements to the facility are scheduled. If yes, list and briefly describe each scheduled improvement and continue to Item 2.6. If no, skip to Section 3.

Item 2.6. For each scheduled improvement, indicate the outfall number of each outfall affected and the scheduled or actual dates of completion for the following: (1) commencement of construction, (2) completion of construction, (3) commencement of discharge, and (4) attainment of operational level.

Item 2.7. Note whether the appropriate permits/clearances concerning other federal/state requirements have been obtained and briefly explain your response.

Section 3. Information on Effluent Discharges

Description of Outfalls

Item 3.1. Provide a description of each of the POTW's wastewater discharge outfalls. The application form provides reporting space for three outfalls. If your facility has more than this number, attach additional sheets as necessary.

For each outfall, provide the outfall number. Indicate the state, county, and city or town where each outfall is located. Note the distance from shore in feet and the depth below the surface in feet. Specify the average daily flow rate through the outfall in mgd. Also specify the latitude and longitude of each outfall to the nearest second. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS). The location of each outfall (i.e., where the coordinates are collected) shall be the point where the discharge is released into a water of the United States. For further guidance, refer to http://www.epa.gov/geospatial/latitudelongitude-data-standard.

Seasonal or Periodic Discharge Data

Item 3.2. Indicate whether any of the outfalls described under Item 3.1 have seasonal or periodic discharges. If yes, continue to Item 3.3. If no, skip to Item 3.4.

Item 3.3. Specify the following for each applicable outfall: (1) number of times per year discharge occurs, (2) average duration of each discharge, (3) average flow of each discharge in mgd, and (4) months in which discharge occurs.

Diffuser Type

Item 3.4. Note whether any of the outfalls listed under Item 3.1 are equipped with a diffuser. If yes, continue to Item 3.5. If no, skip to Item 3.6.

Item 3.5. Briefly describe the diffuser type at each applicable outfall.

Waters of the United States

Item 3.6. Note whether the POTW discharges or plans to discharge wastewater to waters of the United States from one or more discharge points. If yes, continue to Item 3.7. If no, skip to Section 6.

Receiving Water Description

Item 3.7. Provide receiving water and related information in the table provided on the form (if known): (1) name of receiving water, (2) name of watershed/river/stream system and U.S. Soil Conservation Service 14-digit watershed code, (3) name of state management/river basin and U.S. Geological Survey (USGS) 8-digit hydrologic unit code, (4) acute and chronic critical low flow in cubic feet per second (cfs) and total hardness of receiving stream at critical low flow, in milligrams per liter (mg/L) of calcium carbonate, if applicable.

Treatment Description

Item 3.8. Specify the highest level of treatment provided for discharges from each outfall (e.g., primary, equivalent to secondary, secondary, or advanced). Also indicate the following design removals (in percent) for the following parameters for each outfall: (1) biochemical oxygen demand (BOD_5 or $CBOD_5$), (2) total suspended solids (TSS), (3) phosphorus (if applicable), (4) nitrogen (if applicable), and (5) any other removals that an advanced treatment system is designed to achieve.

Item 3.9. Provide a description of the type(s) of disinfection used for wastewater discharged through each outfall. Indicate the seasons the disinfection type is used. Note whether the POTW dechlorinates if disinfection is accomplished through chlorination. Otherwise, check "Not Applicable."

Effluent Testing Data and Tables A through E

Items 3.10 to 3.26. These items require you to collect and report data for the parameters and pollutants listed in Tables A through E, located at the end of Form 2A. The instructions for completing the tables are table-specific, as are the criteria for determining who should complete them.

Important note: Read the "General Instructions for Reporting, Sampling, and Analysis" later in these instructions before completing Items 3.10 to 3.26 and Tables A through E.

Item 3.10 and Table A. All applicants that discharge wastewater to waters of the United States must provide effluent data for Table A parameters. Respond "Yes" to Item 3.10 when you have completed Table A and attached it to your application.

Item 3.11. Answer whether the POTW has conducted any whole effluent toxicity (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. If yes, continue to Item 3.12. If no, skip to Item 3.13.

Item 3.12. For each applicable outfall, note the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges or of the receiving water near the discharge points.

Item 3.13. Note whether the POTW has a design flow greater than or equal to 0.1 mgd. If yes, continue to Item 3.14. If no, skip to Item 3.16.

Item 3.14 and Table B. Answer whether the treatment works uses chlorine for disinfection, uses it elsewhere in the treatment process, or otherwise has reasonable potential to discharge chlorine in its effluent. If yes, complete Table B including chlorine. If no, complete Table B, omitting chlorine.

Item 3.15. Answer "Yes" when you have completed monitoring for all applicable Table B parameters and attached the results to your application.

Item 3.16 and Screen for Tables C through E. Indicate whether one or more of the conditions apply to your POTW. If yes, continue to Item 3.17. If no, skip to Section 4.

Item 3.17 and Table C. Answer "Yes" to indicate you have completed monitoring for all applicable Table C pollutants and attached the results to your application package.

Item 3.18 and Table D. Answer "Yes" to indicate you have completed monitoring for applicable Table D pollutants required by your NPDES permitting authority and attached the results to your application package, or "No" if the NPDES permitting authority has not required additional sampling for the pollutants in Table D.

Item 3.19 and Additional Screen for Table E. Answer whether the POTW conducted either (1) a minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years. If yes, continue to Item 3.20. If no, complete tests and Table E and then skip to Item 3.26.

Item 3.20 and Additional Screen for Table E. Report whether you have previously submitted the results of the WET tests indicated in Item 3.19 to your NPDES permitting authority. If yes, continue to Item 3.21. If no, provide the results in Table E and skip to Item 3.26.

Item 3.21. Report the dates the testing data were submitted to your NPDES permitting authority and provide a summary of the results.

Item 3.22. Regardless of how you may have provided the results of previously conducted WET analyses to your NPDES permitting authority, indicate if any of the tests resulted in toxicity. If yes,

continue to Item 3.23. If no, skip to Item 3.26.

Item 3.23. Describe the cause(s) of toxicity.

Item 3.24. Indicate if the POTW has conducted a toxicity reduction evaluation. If yes, continue to Item 3.25. If no, skip to Item 3.26.

Item 3.25. Provide details of any toxicity reduction evaluations performed.

Item 3.26. Answer "Yes" when you have completed Table E for all applicable outfalls and attached the results to the application package, or answer "No" if the item is not applicable because you previously submitted WET data to your NPDES permitting authority.

Section 4. Industrial Discharges, Table F, and Hazardous Wastes

Item 4.1. Indicate if the POTW receives discharges from significant industrial users (SIUs) or non-significant categorical industrial users (NSCIUs), including SIUs and NSCIUs that truck or haul waste. If yes, continue to Item 4.2. If no, skip to Item 4.7.

1. SIUs are defined as:
    a. All industrial users subject to categorical pretreatment standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N (CIUs); and
    b. Any other industrial user per 40 CFR 403.3 that:
        i. Discharges an average of 25,000 gpd or more of process wastewater to the treatment works (with certain exclusions); or
        ii. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
        iii. Is designated as an SIU by the control authority.
2. The control authority may determine that an Industrial User subject to categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N is a NSCIU rather than a SIU on a finding that the Industrial User never discharges more than 100 gpd of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:
    a. The Industrial User, prior to the control authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;
    b. The Industrial User annually submits the certification statement required in 40 CFR 403.12(q) together with any additional information necessary to support the certification statement; and
    c. The Industrial User never discharges any untreated concentrated wastewater.

Item 4.2. Indicate the number of SIUs and NSCIUs that discharge to the POTW.

Item 4.3. Answer whether the POTW has an approved pretreatment program, which is defined at 40 CFR 403.3 as a program administered by a POTW that meets the criteria established in 40 CFR 403.8 and 403.9 and that has been approved by the NPDES permitting authority.

Item 4.4. Answer whether you have submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program. If yes, continue to Item 4.5. If no, skip to Item 4.6.

Item 4.5. Identify the title and date of the pretreatment program annual report or pretreatment program referenced in Item 4.4 and skip to Item 4.7.

Item 4.6 and Table F. Complete Table F by providing the following information for each SIU that discharges to the POTW: (1) name and mailing address; (2) description of all industrial processes that affect or contribute to each SIU's discharge; (3) a list of the principal products and raw materials that affect or contribute to the SIU's discharge; (4) average daily volume of wastewater discharged by each SIU, indicating the amount attributable to process flow and non-process flow; (5) whether the SIU is subject to local limits; (6) whether the SIU is subject to categorical standards and the categories/subcategories under which the SIU is subject; and (7) whether any problems (e.g., upsets, pass-through interference) have occurred at the POTW that can be attributed to the SIU in the past 4.5 years. Answer "Yes" to Item 4.6 when you have completed and attached Table F to the application package.

Note: SIUs include users that truck or haul industrial waste to the POTW. Information for these users must be provided in Table F.

Item 4.7. Indicate if the POTW receives or has been notified that it will receive by truck, rail, or dedicated pipe any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261. If yes, continue to Item 4.8. If no, skip to Item 4.9.

Item 4.8. For each hazardous waste received, provide the hazardous waste number, the method by which the waste is received (e.g., by truck, dedicated pipe, rail, etc.), and the amount of waste received annually (specify units).

Item 4.9. Answer whether the POTW receives, or has been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Sections 3004(u) or 3008(h) of RCRA. If yes, continue to Item 4.10. If no, skip to Section 5.

Item 4.10. Answer whether the POTW receives (or expects to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified at 40 CFR 261.30(d) and 261.33(e). If yes, skip to Section 5. If no, continue to Item 4.11.

Item 4.11. In an attachment to the application, provide an identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents, as listed in Appendix VII of 40 CFR 261, if known; and the extent of treatment, if any, the wastewater receives

General Instructions for Reporting, Sampling, and Analysis

Important note: Read these instructions before completing Tables A through E and Section 3 of Form 2A.

General Items

Complete the applicable tables for each outfall at your facility. Be sure to note the EPA Identification Number, NPDES permit number, facility name, and applicable outfall number at the top of each page of the tables and any associated attachments.

You may report some or all of the required data by attaching separate sheets of paper instead of completing Tables A through E for each of your outfalls, so long as the sheets contain all of the required information and are similar in format to Tables A through E. For example, you may be able to print a report in a compatible format from the data system used in your analysis of metals completed under Table C.

Note for new dischargers. Provide all information available to you at the time you complete Form 2A. If you do not have information to respond to an item because your facility has yet to discharge, write or type "data are not available" next to the item on the form. Note that you are required to submit *actual* data no later than 24 months after your facility commences discharge.

Reporting of Effluent Data

Where effluent data are requested, do not provide information on CSOs. The latter information is requested instead under Section 5 of Form 2A.

Provide data for each outfall through which effluent is discharged. When an applicant has two or more outfalls with substantially identical effluents, the NPDES permitting authority may allow the applicant to test only one outfall and report that quantitative data as applying to the substantially identical outfall. If the permitting authority grants your request, attach a separate sheet to the application form identifying the outfall tested and describing why the other outfall(s) are substantially identical.

At a minimum, effluent testing data must be based on at least three samples taken within 4.5 years prior to the date of the permit application. Samples must be representative of the seasonal variation in the discharge from each outfall. Existing data may be used, if available, in lieu of sampling done solely for the purpose of this application.

All existing data for pollutants specified in Tables A through D that is collected within 4.5 years of the application must be included in the pollutant data summary that you submit. If, however, you sampled for a specific pollutant on a monthly or more frequent basis, it is only necessary, for such pollutant, to summarize all data collected within 1 year of the application.

Except as specified below, all required quantitative data shall be collected in accordance with sufficiently sensitive analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O. A method is "sufficiently sensitive" when:

- The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter.
- The method ML is above the water quality criterion, but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge.
- The method has the lowest ML of the analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O, for the measured pollutant or pollutant parameter.

Consistent with 40 CFR 136, you may provide matrix- or sample-specific MLs rather than the published levels. Further, where you can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive," the analytical results are not consistent with the quality assurance (QA)/quality control (QC) specifications for that method, then the NPDES permitting authority may determine that the method is not performing adequately and the NPDES permitting authority should select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.21(e)(3)(i). Where no other EPA-approved methods exist, you must select a method consistent with 40 CFR 122.21(e)(3)(ii).

When there is no analytical method that has been approved under 40 CFR 136; required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the NPDES permitting authority, you may use any suitable method but shall provide a description of the method. When selecting a suitable method, other factors such as a method's precision, accuracy, or resolution, may be considered when assessing the performance of the method.

Effluent monitoring data must comply with the QA/QC requirements of 40 CFR 136 (and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR 136).

Clearly specify the units of measure on Tables A through E for each parameter/pollutant analyzed. Values should be reported as concentration or mass, except for flow, temperature, pH, color, and fecal coliform organisms, unless otherwise requested or required by the NPDES permitting authority. Flow, temperature, pH, color, and fecal coliform organisms must be reported as mgd, degrees Celsius (°C), standard units, color units, and most probable number per 100 milliliters (MPN/100 mL), respectively. Use the following abbreviations in the columns requiring "units" in Tables A through D.

Concentration	Mass
ppm = parts per million	lbs = pounds
mg/L = milligrams per liter	ton = tons (English tons)
ppb = parts per billion	mg = milligrams
µg/L = micrograms per liter	g = grams
MPN = most probable number per 100 milliliters	kg = kilograms
	T = tonnes (metric tons)

General Instructions for Reporting, Sampling, and Analysis Continued	
Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and volatile organic compounds. For all other pollutants, 24-hour composite samples must be used. For a composite sample, only one analysis of the composite of aliquots is required. The effluent monitoring data provided must include at least the following for each parameter: (1) the maximum daily discharge based upon actual sample values, (2) average daily discharge for all samples, expressed as concentration or mass, and the number of samples used to obtain this value, (3) the analytical method used, and (4) the threshold level (i.e., method detection limit, minimum level, or other designated method endpoints) for the analytical method used. Metals must be reported as "total recoverable metal," unless all approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium) or otherwise directed by the NPDES permitting authority. **Sampling** The collection of samples for the reported analyses should be supervised by a person experienced in performing sampling of domestic wastewater. You may contact your NPDES permitting authority for detailed guidance on sampling techniques and for answers to specific questions. See Exhibit 2A–1 for contact information. Any specific requirements in the analytical methods—for example, for sample containers, sample preservation, holding times, and the collection of duplicate samples—must be followed. The time when you sample should be representative of your normal operation, to the extent feasible, with your treatment system operating properly with no system upsets. Collect samples from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present NPDES permit, or at any site adequate for the collection of a representative sample. **Further Requirements for Table E, Whole Effluent Toxicity Testing** Each applicant required to perform WET testing must provide results of a minimum of four quarterly tests for a year, from the year preceding the permit application, *or* the results from four tests performed at least annually in the 4.5-year period prior to the application, provided the results show no appreciable toxicity using a safety factor determined by the NPDES permitting authority. Applicants must conduct tests with multiple species (no less than two species; e.g., fish, invertebrate, plant) and test for acute or chronic toxicity, depending on the range of receiving water dilution. See 40 CFR 122.21(j)(5)(v) for further details. WET testing must be conducted using methods approved under 40 CFR 136. West coast facilities in Washington, Oregon, California, Alaska, Hawaii, and the Pacific Territories are exempted from 40 CFR 136 chronic methods and must use alternative guidance as directed by the NPDES permitting authority.	

or will receive before entering the POTW. Answer "Yes" to Item 4.11 when you have completed and attached the information to the application package.

Section 5. Combined Sewer Overflows

CSO Map and Diagram

Item 5.1. Indicate if the treatment works has a combined sewer system. If yes, continue to Item 5.2. If no, skip to Section 6.

Item 5.2. Attach a CSO system map to the application. The map should indicate: (1) all CSO discharge points, (2) sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding national resource waters), and (3) waters supporting threatened and endangered species potentially affected by CSOs. Answer "Yes" to Item 5.2 when you have completed the map and attached it to the application package.

Item 5.3. Prepare a diagram of the CSO collection system. The diagram should show the following: (1) the location of major sewer trunk lines, both combined and separate sanitary; (2) the locations of points where separate sanitary sewers feed into the combined sewer system; (3) in-line and off-line storage structures; (4) the locations of flow-regulating devices; and (5) the locations of pump stations. Answer "Yes" to Item 5.3 when you have completed the diagram and attached it to the application package.

CSO Outfall Description

Item 5.4. Provide the following information for each CSO outfall: (1) outfall number; (2) state, county, city or town and ZIP code in which the outfall is located; (3) latitude and longitude of the outfall, to the nearest second, (4) distance of the outfall from shore and depth of the outfall below water surface. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS). The location of each CSO outfall (i.e., where the coordinates are collected) shall be the point where the discharge is released into a water of the United States.

CSO Monitoring

Item 5.5. Indicate whether the POTW has monitored any of the following items in the past year for each of its CSO outfalls: (1) rainfall, (2) CSO flow volume, (3) CSO pollutant concentrations; (4) receiving water quality, (5) CSO frequency, and (6) number of storm events.

CSO Events in Past Year

Item 5.6. For each CSO outfall, record (1) the number of CSO events in the past year, (2) the average duration in hours per event, (3) the average volume per CSO event in million gallons, and (4) the minimum rainfall that caused a CSO event in inches of rainfall in the past year. Note whether your responses for sub-items (2) through (4) above are based on actual or estimated data.

CSO Receiving Waters

Item 5.7. For each CSO outfall, record the following receiving water information: (1) name of receiving water; (2) name of watershed/stream system and the U.S. Soil Conservation Service watershed (14-digit) code, if known; (3) name of the state management/river basin and the USGS 8-digit hydrologic cataloging unit code, if known; and (4) a description of any known water quality impacts on the receiving water caused by the CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shellfish bed closings, fish kills, fish advisories, other recreational loss, or exceedance of any applicable state water quality standard).

Section 6. Checklist and Certification Statement

Item 6.1. Review the checklist provided. In Column 1, mark the sections of Form 2A that you have completed and are submitting with your application. In Column 2, indicate for each section whether you are submitting attachments.

Item 6.2. The Clean Water Act provides for severe penalties for submitting false information on this application form. CWA Section 309(c)(2) provides that "Any person who knowingly makes any false statement, representation, or certification in any application, ...shall upon conviction, be punished by a fine of no more than $10,000 or by imprisonment for not more than six months, or both."

FEDERAL REGULATIONS AT 40 CFR 122.22 REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

A. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

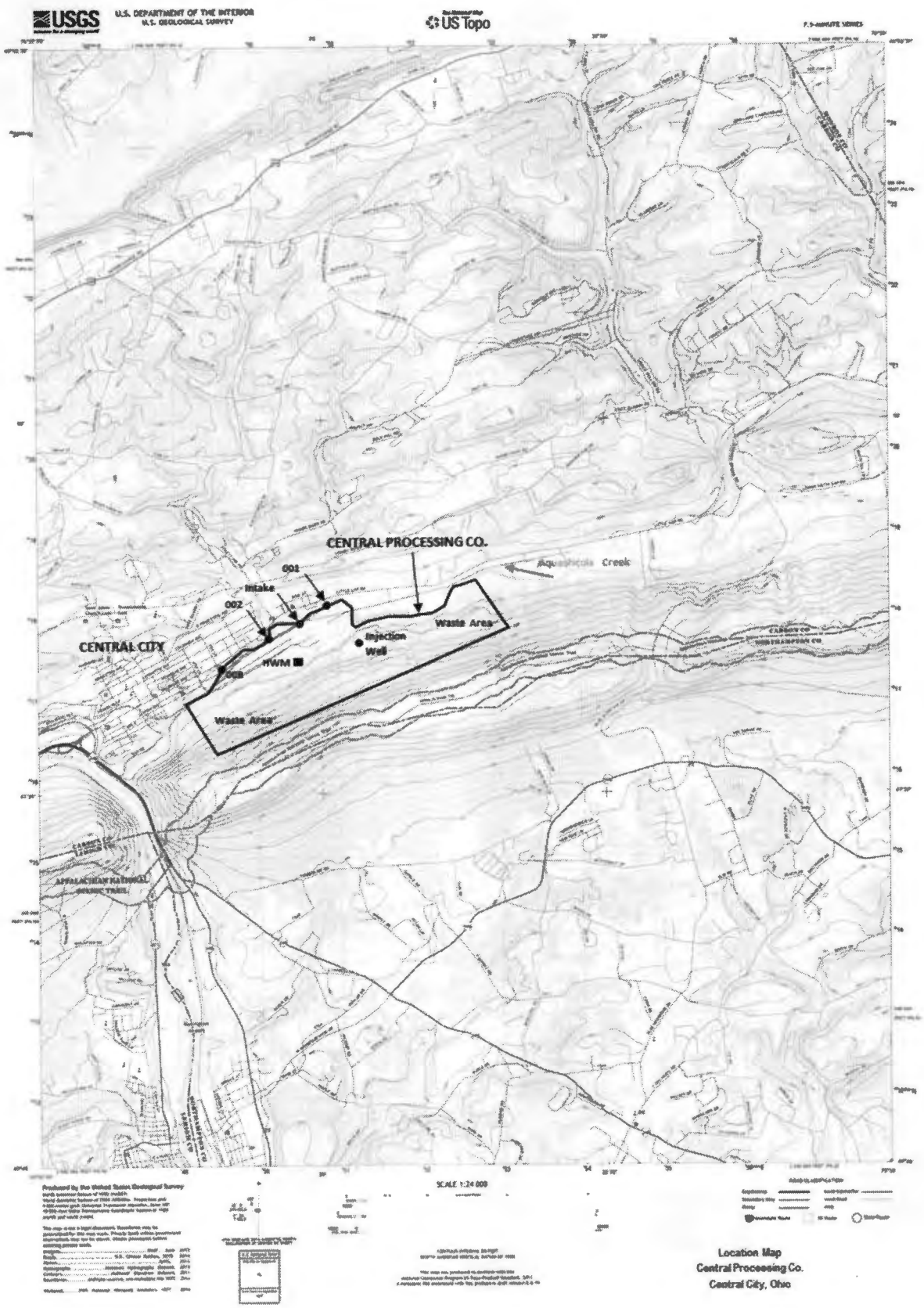
B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.

C. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

END

Submit your completed Form 2A and all associated attachments (and any other required NPDES application forms) to your NPDES permitting authority.

Exhibit 2A–2. Example Topographic Map



Note: This glossary includes terms used in the various NPDES application forms, including Form 2A. The definitions are from the NPDES regulations at 40 CFR 122.2 unless otherwise specified. If you have any questions concerning the meaning of any of these terms, contact your NPDES permitting authority.

ANIMAL FEEDING OPERATION (defined at § 122.23) means a lot or facility (other than an aquatic animal production facility) where the following conditions are met;

- Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and
- Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

APPLICATION means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in approved states, including any approved modifications or revisions.

APPROVED PROGRAM or **APPROVED STATE** means a State or interstate program which has been approved or authorized by EPA under part 123.

AQUACULTURE PROJECT (defined at § 122.25) means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals. **DESIGNATED PROJECT AREA** means the portions of the waters of the United States within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan or operation (including, but not limited to, physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants, and be harvested within a defined geographic area.

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 that month divided by the number of daily discharges measured during that month.

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.

BEST MANAGEMENT PRACTICES (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BIOSOLIDS (*see sewage sludge*).

BYPASS (defined at § 122.41(m)) means the intentional diversion of waste streams from any portion of a treatment facility.

COMBINED SEWER OVERFLOW (CSO) means a discharge from a combined sewer system (CSS) at a point prior to the Publicly Owned Treatment Works (POTW) Treatment Plant (defined at § 403.3(r)).

COMBINED SEWER SYSTEM (CSS) means a wastewater collection system owned by a State or municipality (as defined by section 502(4) of the CWA) which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and storm water through a single-pipe system to a Publicly Owned Treatment Works (POTW) Treatment Plant (as defined at § 403.3(r)).

CONCENTRATED ANIMAL FEEDING OPERATION (defined at § 122.23) means an animal feeding operation that is defined as a Large CAFO or as a Medium CAFO by the terms of (A) or (B) below, or that is designated as a CAFO in accordance with 40 CFR 122.23(c). Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.

A. **LARGE CONCENTRATED ANIMAL FEEDING OPERATION (LARGE CAFO)** means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories:

1. 700 mature dairy cows, whether milked or dry;
2. 1,000 veal calves;
3. 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
4. 2,500 swine each weighing 55 pounds or more;
5. 10,000 swine each weighing less than 55 pounds;
6. 500 horses;
7. 10,000 sheep or lambs;

8. 55,000 turkeys;
9. 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
10. 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
11. 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
12. 30,000 ducks (if the AFO uses other than a liquid manure handling system); or
13. 5,000 ducks (if the AFO uses a liquid manure handling system).

B. **MEDIUM CONCENTRATED ANIMAL FEEDING OPERATION (MEDIUM CAFO)** means any AFO with the type and number of animals that fall within any of the ranges listed below and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

1. The type and number of animals that it stables and confines falls within any of the following ranges:
   a. 200 to 699 mature dairy cows, whether milked or dry;
   b. 300 to 999 veal calves;
   c. 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
   d. 750 to 2,499 swine each weighing 55 pounds or more;
   e. 3,000 to 9,999 swine each weighing less than 55 pounds;
   f. 150 to 499 horses;
   g. 3,000 to 9,999 sheep or lambs;
   h. 16,500 to 54,999 turkeys;
   i. 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
   j. 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
   k. 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
   l. 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system); ore
   m. 1,500 to 4,999 ducks (if the AFO uses a liquid manure handling system); and
2. Either one of the following conditions are met:
   a. Pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or
   b. Pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with animals confined in the operation.

CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY (defined at § 122.24) means a hatchery, fish farm, or other facility which contains, grows, or holds aquatic animals in either of the following categories, or which the Director designates as such on a case-by-case basis:

A. Cold water fish species or other cold water aquatic animals including, but not limited to, the *Salmonidae* family of fish (e.g., trout and salmon) in ponds, raceways, or other similar structures which discharge at least 30 days per year but does not include:

1. Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
2. Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.

B. Warm water fish species or other warm water aquatic animals including, but not limited to, the *Ameiuridae, Cetrarchiclae*, and *Cyprinidae* families of fish (e.g., respectively, catfish, sunfish, and minnows) in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include;

1. Closed ponds which discharge only during periods of excess runoff; or
2. Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92–500, as amended by Public Law 95–217, Public Law 95–576, Public Law 96–483 and Public Law 97–117, 33 U.S.C. 1251 *et seq.*

CWA AND REGULATIONS means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program, it includes State program requirements.

DAILY DISCHARGE means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

DIRECT DISCHARGE means the "discharge of a pollutant."

DIRECTOR means the Regional Administrator or the State Director, as the context requires, or an authorized representative. When there is no "approved State program," and there is an EPA administered program, "Director" means the Regional Administrator. When there is an approved State program, "Director" normally means the State Director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved State program. (For example, when EPA has issued an NPDES permit prior to the approval of a State program, EPA may retain jurisdiction over that permit after program approval, see § 123.1.) In such cases, the term "Director" means the Regional Administrator and not the State Director.

DISCHARGE (OF A POLLUTANT) means:

- Any addition of any pollutant or combination of pollutants to waters of the United States from any point source; or
- Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes discharges into waters of the United States from: surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger".

DISCHARGE MONITORING REPORT means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by "approved States" as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the state agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

DRAFT PERMIT means a document prepared under § 124.6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a "permit." A notice of intent to terminate a permit, and a notice of intent to deny a permit, as discussed in § 124.5, are types of "draft permits." A denial of a request for modification, revocation and reissuance, or termination, as discussed in § 124.5, is not a "draft permit." A "proposed permit" is not a "draft permit."

EFFLUENT LIMITATION means any restriction imposed by the Director on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

EFFLUENT LIMITATIONS GUIDELINES means a regulation published by the Administrator under section 304(b) of the CWA to adopt or revise "effluent limitations."

ENVIRONMENTAL PROTECTION AGENCY (EPA) means the United States Environmental Protection Agency.

FACILITY or **ACTIVITY** means any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

GENERAL PERMIT means an NPDES "permit" issued under § 122.28 authorizing a category of discharges under the CWA within a geographical area.

HAZARDOUS SUBSTANCE means any substance designated under 40 CFR part 116 pursuant to section 311 of the CWA.

INDIAN COUNTRY (or **INDAN LANDS**) means:

- All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
- All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
- All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

INDIAN TRIBE means any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian reservation.

INDIRECT DISCHARGE means a nondomestic discharger introducing "pollutants" to a "publicly owned treatment works."

LARGE MUNICIPAL SEPARATE STORM SEWER SYSTEM (defined at § 122.26(b)(4)) means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of the Census (Appendix F of 40 CFR 122); or

(ii) Located in the counties listed in appendix H of 40 CFR 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraphs (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraphs (i) or (ii). In making this determination the Director may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (i);

(C) The quantity and nature of pollutants discharged to waters of the United States;

(D) The nature of the receiving waters; and

(E) Other relevant factors; or

(iv) The Director may, upon petition, designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), (iii).

LOG SORTING AND LOG STORAGE FACILITIES (defined at § 122.27) means facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held in self-contained bodies of water (mill ponds or log ponds) or stored on land where water is applied intentionally on the logs (wet decking). (See 40 CFR 429, subpart I, including the effluent limitations guidelines.)

MAJOR FACILITY means any NPDES "facility or activity" classified as such by the Regional Administrator, or, in the case of "approved State programs," the Regional Administrator in conjunction with the State Director.

MAXIMUM DAILY DISCHARGE LIMITATION means the highest allowable "daily discharge."

MEDIUM MUNICIPAL SEPARATE STORM SEWER SYSTEM (defined at § 122.26(b)(7)) means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census (appendix G of 40 CFR 122); or

(ii) Located in the counties listed in appendix I of 40 CFR 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (i) or (ii). In making this determination the Director may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (i);

(C) The quantity and nature of pollutants discharged to waters of the United States;

(D) The nature of the receiving waters; or

(E) Other relevant factors; or

(iv) The Director may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), (iii) of this section.

MUNICIPALITY means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA.

MUNICIPAL SEPARATE STORM SEWER (defined at § 122.26(b)(8)) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- Designed or used for collecting or conveying stormwater.
- Which is not a combined sewer; and
- Which is not part of a POTW as defined at 40 CFR 122.2.

MUNICIPAL SLUDGE (*see sewage sludge*)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the CWA. The term includes an "approved program."

NEW DISCHARGER means any building, structure, facility, or installation:

- From which there is or may be a "discharge of pollutants;"
- That did not commence the "discharge of pollutants" at a particular "site" prior to August 13, 1979;
- Which is not a "new source;" and
- Which has never received a finally effective NPDES permit for discharges at that "site."

This definition includes an "indirect discharger" which commences discharging into "waters of the United States" after August 13, 1979. It also means any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a "site" for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a "site" under EPA's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Regional Administrator in the issuance of a final permit to be an area of biological concern. In determining whether an area is an area of biological concern, the Regional Administrator shall consider the factors specified in 40 CFR 125.122(a)(1) through (10).

An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a "new discharger" only for the duration of its discharge in an area of biological concern.

NEW SOURCE means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

- After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- After proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

OWNER OR OPERATOR means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

PERMIT means an authorization, license, or equivalent control document issued by EPA or an "approved State" to implement the requirements of this part and parts 123 and 124. "Permit" includes an NPDES "general permit" (§ 122.28). Permit does not include any permit which has not yet been the subject of final agency action, such as a "draft permit" or a "proposed permit."

PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES FROM PESTICIDE APPLICATION means the application of biological pesticides, and the application of chemical pesticides that leave a residue, from point sources to waters of the United States. In the context of this definition of pesticide discharges to waters of the United States from pesticide application, this does not include agricultural storm water discharges and return flows from irrigated agriculture, which are excluded by law (33 U.S.C. 1342(l); 33 U.S.C. 1362(14)).

PESTICIDE RESIDUE for the purpose of determining whether a NPDES permit is needed for discharges to waters of the United States from pesticide application, means that portion of a pesticide application that is discharged from a point source to waters of the United States and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

POINT SOURCE means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. (See § 122.3).

POLLUTANT means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- Sewage from vessels; or
- Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources. Note: Radioactive materials covered by the Atomic Energy Act are those encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include radium and accelerator-produced isotopes. See *Train* v. *Colorado Public Interest Research Group, Inc.*, 426 U.S. 1 (1976).

PRIMARY INDUSTRY CATEGORY means any industry category listed in the NRDC settlement agreement (*Natural Resources Defense Council et al.* v. *Train,* 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in appendix A of part 122.

PRIVATELY OWNED TREATMENT WORKS means any device or system which is (1) used to treat wastes from any facility whose operator is not the operator of the treatment works and (2) not a "POTW."

PROCESS WASTEWATER means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

PROPOSED PERMIT means a state NPDES "permit" prepared after the close of the public comment period (and, when applicable, any public hearing and administrative appeals) which is sent to EPA for review before final issuance by the State. A "proposed permit" is not a "draft permit."

PUBLICLY OWNED TREATMENT WORKS or **POTW** (defined at § 403.3) means a treatment works as defined by CWA Section 212, which is owned by a state or municipality (as defined by CWA Section 502(4)). This definition includes any devices or systems used in the storage, treatment, recycling, and reclamation) of municipal sewage or industrial wastes of a liquid nature. This definition also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW. The term also means the municipality as defined in CWA Section 502(4), which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

REGIONAL ADMINISTRATOR means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

ROCK CRUSHING AND GRAVEL WASHING FACILITIES (defined at § 122.27) means facilities which process crushed and broken stone, gravel, and riprap (See 40 CFR 436, subpart B, including the effluent limitations guidelines).

SCHEDULE OF COMPLIANCE means a schedule of remedial measures included in a "permit", including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the CWA and regulations.

SECONDARY INDUSTRY CATEGORY means any industry category which is not a primary industry category.

SEWAGE FROM VESSELS means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under section 312 of the CWA, except that with respect to commercial vessels on the Great Lakes this term includes graywater. For the purposes of this definition, "graywater" means galley, bath, and shower water.

SEWAGE SLUDGE means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 CFR 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

SILVICULTURAL POINT SOURCE (defined at § 122.27) means any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States. This term does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. However, some of these activities (such as stream crossing for roads) may involve point source discharges of dredged or fill material which may require a CWA Section 404 permit (see 33 CFR 209.120 and part 233).

SITE means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

SLUDGE-ONLY FACILITY means any "treatment works treating domestic sewage" whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to section 405(d) of the CWA and is required to obtain a permit under § 122.1(b)(2).

STANDARDS FOR SEWAGE SLUDGE USE OR DISPOSAL means the regulations promulgated pursuant to section 405(d) of the CWA which govern minimum requirements for sludge quality, management practices, and monitoring and reporting applicable to sewage sludge or the use or disposal of sewage sludge by any person.

STATE means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in these regulations which meets the requirements of § 123.31 of this chapter.

STATE DIRECTOR means the chief administrative officer of any State or interstate agency operating an "approved program," or the delegated representative of the State Director. If responsibility is divided among two or more State or interstate agencies, "State Director" means the chief administrative officer of the State or interstate agency authorized to perform the particular procedure or function to which reference is made.

STORMWATER (or **STORM WATER**) (defined at § 122.26(b)(13)) means stormwater runoff, snow melt runoff, and surface runoff and drainage.

STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY (defined at § 122.26(b)(14)) means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities (including industrial facilities that are federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs 1 through 14 below) include those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of 40 CFR 122.26(b)(14):

1. Facilities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under paragraph 11 below);
2. Facilities classified as Standard Industrial Classification 24, Industry Group 241 that are rock crushing, gravel washing, log sorting, or log storage facilities operated in connection with silvicultural activities defined in 40 CFR 122.27(b)(2)–(3) and Industry Groups 242 through 249; 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373; (not included are all other types of silvicultural facilities);
3. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non–coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);
4. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;
5. Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA;
6. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

7. Steam electric power generating facilities, including coal handling sites;
8. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221–25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs 1–7 or 9–11 are associated with industrial activity;
9. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA;
10. Construction activity including clearing, grading and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more;
11. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221–25.

TOXIC POLLUTANT means any pollutant listed as toxic under section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA.

TREATMENT WORKS TREATING DOMESTIC SEWAGE (TWTDS) means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, "domestic sewage" includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR 503 as a "treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR 503.

UPSET (defined at § 122.41(n)) means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

VARIANCE means any mechanism or provision under section 301 or 316 of the CWA or under 40 CFR 125, or in the applicable "effluent limitations guidelines" which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of the CWA. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on sections 301(c), 301(g), 301(h), 301(i), or 316(a) of the CWA.

WATERS OF THE UNITED STATES as defined at § 122.2.

WHOLE EFFLUENT TOXICITY (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

Form 2A NPDES | EPA

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater
NEW AND EXISTING PUBLICLY OWNED TREATMENT WORKS

SECTION 1. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS (40 CFR 122.21(j)(1) and (9))

Facility Information

1.1 Facility name
Pine Creek CWF

Mailing address (street or P.O. box)
101 West Main Strett

City or town	State	ZIP code
Prattville	AL	36067

Contact name (first and last)	Title	Phone number	Email address
Dale Gandy	Director of Public Works	(334) 595-0481	dale.gandy@prattvilleal.gov

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
100 Pine Creek Drive

City or town	State	ZIP code
Prattville	AL	36067

1.2 Is this application for a facility that has yet to commence discharge?
☐ Yes → See instructions on data submission requirements for new dischargers. ☑ No

Applicant Information

1.3 Is applicant different from entity listed under Item 1.1 above?
☐ Yes ☑ No → SKIP to Item 1.4.

Applicant name

Applicant address (street or P.O. box)

City or town	State	ZIP code

Contact name (first and last)	Title	Phone number	Email address

1.4 Is the applicant the facility's owner, operator, or both? (Check only one response.)
☐ Owner ☐ Operator ☑ Both

1.5 To which entity should the NPDES permitting authority send correspondence? (Check only one response.)
☐ Facility ☑ Applicant ☐ Facility and applicant (they are one and the same)

Existing Environmental Permits

1.6 Indicate below any existing environmental permits. (Check all that apply and print or type the corresponding permit number for each.)

Existing Environmental Permits

☑ NPDES (discharges to surface water) AL0027723	☐ RCRA (hazardous waste)	☐ UIC (underground injection control)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☐ Other (specify)

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

Collection System and Population Served

1.7 Provide the collection system information requested below for the treatment works.

Municipality Served	Population Served	Collection System Type (indicate percentage)	Ownership Status
Prattville, AL	37,791	100 % separate sanitary sewer	☑ Own ☑ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
Total Population Served	37,791		

Total percentage of each type of sewer line (in miles)	Separate Sanitary Sewer System	Combined Storm and Sanitary Sewer
	100 %	%

Indian Country

1.8 Is the treatment works located in Indian Country?

☐ Yes ☑ No

1.9 Does the facility discharge to a receiving water that flows through Indian Country?

☐ Yes ☑ No

Design and Actual Flow Rates

1.10 Provide design *and* actual flow rates in the designated spaces.

Design Flow Rate
4.0 mgd

Annual Average Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
1.92 mgd	1.88 mgd	2.48 mgd

Maximum Daily Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
5.44 mgd	5.31 mgd	5.84 mgd

Discharge Points by Type

1.11 Provide the total number of effluent discharge points to waters of the United States by type.

Total Number of Effluent Discharge Points by Type				
Treated Effluent	Untreated Effluent	Combined Sewer Overflows	Bypasses	Constructed Emergency Overflows
1				

Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

1.12 Does the POTW discharge wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States?

☐ Yes ☑ No ➔ SKIP to Item 1.14.

1.13 Provide the location of each surface impoundment and associated discharge information in the table below.

Surface Impoundment Location and Discharge Data

Location	Average Daily Volume Discharged to Surface Impoundment	Continuous or Intermittent (check one)
	gpd	☐ Continuous ☐ Intermittent
	gpd	☐ Continuous ☐ Intermittent
	gpd	☐ Continuous ☐ Intermittent

1.14 Is wastewater applied to land?

☐ Yes ☑ No ➔ SKIP to Item 1.16.

1.15 Provide the land application site and discharge data requested below.

Land Application Site and Discharge Data

Location	Size	Average Daily Volume Applied	Continuous or Intermittent (check one)
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent

1.16 Is effluent transported to another facility for treatment prior to discharge?

☐ Yes ☑ No ➔ SKIP to Item 1.21.

1.17 Describe the means by which the effluent is transported (e.g., tank truck, pipe).

1.18 Is the effluent transported by a party other than the applicant?

☐ Yes ☐ No ➔ SKIP to Item 1.20.

1.19 Provide information on the transporter below.

Transporter Data

Entity name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	

Outfalls and Other Discharge or Disposal Methods Continued

1.20 In the table below, indicate the name, address, contact information, NPDES number, and average daily flow rate of the receiving facility.

Receiving Facility Data

Facility name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	
NPDES number of receiving facility (if any) ☐ None	Average daily flow rate	mgd

1.21 Is the wastewater disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States (e.g., underground percolation, underground injection)?

☐ Yes ☑ No ➔ SKIP to Item 1.23.

1.22 Provide information in the table below on these other disposal methods.

Information on Other Disposal Methods

Disposal Method Description	Location of Disposal Site	Size of Disposal Site	Annual Average Daily Discharge Volume	Continuous or Intermittent (check one)
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent

Variance Requests

1.23 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(n)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

☐ Discharges into marine waters (CWA Section 301(h))

☐ Water quality related effluent limitation (CWA Section 302(b)(2))

☑ Not applicable

Contractor Information

1.24 Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?

☐ Yes ☑ No ➔ SKIP to Section 2.

1.25 Provide location and contact information for each contractor in addition to a description of the contractor's operational and maintenance responsibilities.

Contractor Information

	Contractor 1	Contractor 2	Contractor 3
Contractor name (company name)			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Contact name (first and last)			
Phone number			
Email address			
Operational and maintenance responsibilities of contractor			

SECTION 2. ADDITIONAL INFORMATION (40 CFR 122.21(j)(1) and (2))

Design Flow

Outfalls to Waters of the United States

2.1 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☑ Yes ☐ No ➔ SKIP to Section 3.

Inflow and Infiltration

2.2 Provide the treatment works' current average daily volume of inflow and infiltration.

Average Daily Volume of Inflow and Infiltration
100,000 gpd

Indicate the steps the facility is taking to minimize inflow and infiltration.

City personnel actively video know problem areas and promptly schedule any required repairs.

Topographic Map

2.3 Have you attached a topographic map to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes ☐ No

Flow Diagram

2.4 Have you attached a process flow diagram or schematic to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes ☐ No

Scheduled Improvements and Schedules of Implementation

2.5 Are improvements to the facility scheduled?

☐ Yes ☑ No ➔ SKIP to Section 3.

Briefly list and describe the scheduled improvements.

1.

2.

3.

4.

2.6 Provide scheduled or actual dates of completion for improvements.

Scheduled or Actual Dates of Completion for Improvements

Scheduled Improvement (from above)	Affected Outfalls (list outfall number)	Begin Construction (MM/DD/YYYY)	End Construction (MM/DD/YYYY)	Begin Discharge (MM/DD/YYYY)	Attainment of Operational Level (MM/DD/YYYY)
1.					
2.					
3.					
4.					

2.7 Have appropriate permits/clearances concerning other federal/state requirements been obtained? Briefly explain your response.

☐ Yes ☐ No ☐ None required or applicable

Explanation:

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

SECTION 3. INFORMATION ON EFFLUENT DISCHARGES (40 CFR 122.21(j)(3) to (5))

Description of Outfalls

3.1 Provide the following information for each outfall. (Attach additional sheets if you have more than three outfalls.)

	Outfall Number 0013	Outfall Number ____	Outfall Number ____
State	Alabama		
County	Elmore		
City or town	Prattville		
Distance from shore	150 ft.	ft.	ft.
Depth below surface	35 ft.	ft.	ft.
Average daily flow rate	2.5 mgd	mgd	mgd
Latitude	32° 25′ 30″ N	° ′ ″	° ′ ″
Longitude	86° 24′ 02″ W	° ′ ″	° ′ ″

Seasonal or Periodic Discharge Data

3.2 Do any of the outfalls described under Item 3.1 have seasonal or periodic discharges?

☐ Yes ☑ No ➔ SKIP to Item 3.4.

3.3 If so, provide the following information for each applicable outfall.

	Outfall Number ____	Outfall Number ____	Outfall Number ____
Number of times per year discharge occurs			
Average duration of each discharge (specify units)			
Average flow of each discharge	mgd	mgd	mgd
Months in which discharge occurs			

Diffuser Type

3.4 Are any of the outfalls listed under Item 3.1 equipped with a diffuser?

☑ Yes ☐ No ➔ SKIP to Item 3.6.

3.5 Briefly describe the diffuser type at each applicable outfall.

	Outfall Number ____	Outfall Number ____	Outfall Number ____
	Five (5) 14" diffuser heads are equally spaced along end of 30" outfall on the bed of the Alabama River.		

Waters of the U.S.

3.6 Does the treatment works discharge or plan to discharge wastewater to waters of the United States from one or more discharge points?

☑ Yes ☐ No ➔ SKIP to Section 6.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

Receiving Water Description

3.7 Provide the receiving water and related information (if known) for each outfall.

	Outfall Number 0013	Outfall Number ____	Outfall Number ____
Receiving water name	Alabama River		
Name of watershed, river, or stream system			
U.S. Soil Conservation Service 14-digit watershed code			
Name of state management/river basin			
U.S. Geological Survey 8-digit hydrologic cataloging unit code			
Critical low flow (acute)	cfs	cfs	cfs
Critical low flow (chronic)	cfs	cfs	cfs
Total hardness at critical low flow	mg/L of $CaCO_3$	mg/L of $CaCO_3$	mg/L of $CaCO_3$

Treatment Description

3.8 Provide the following information describing the treatment provided for discharges from each outfall.

	Outfall Number 0013	Outfall Number ____	Outfall Number ____
Highest Level of Treatment (check all that apply per outfall)	☑ Primary ☐ Equivalent to secondary ☑ Secondary ☐ Advanced ☑ Other (specify) Bio Nutrient Removal	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) ____	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) ____
Design Removal Rates by Outfall			
BOD_5 or $CBOD_5$	85 %	%	%
TSS	85 %	%	%
Phosphorus	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Nitrogen	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Other (specify) ____	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %

Treatment Description Continued

3.9 Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe below.

UV disinfection (with backup chlorine disinfection)

	Outfall Number 0013	Outfall Number ____	Outfall Number ____
Disinfection type	UV		
Seasons used	all		
Dechlorination used?	☑ Not applicable ☐ Yes ☐ No	☐ Not applicable ☐ Yes ☐ No	☐ Not applicable ☐ Yes ☐ No

Effluent Testing Data

3.10 Have you completed monitoring for all Table A parameters and attached the results to the application package?

☑ Yes ☐ No

3.11 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?

☑ Yes ☐ No ➔ SKIP to Item 3.13.

3.12 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.

	Outfall Number 001T		Outfall Number ____		Outfall Number ____	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Number of tests of discharge water	4					
Number of tests of receiving water						

3.13 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☑ Yes ☐ No ➔ SKIP to Item 3.16.

3.14 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?

☑ Yes ➔ Complete Table B, including chlorine. ☐ No ➔ Complete Table B, omitting chlorine.

3.15 Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package?

☑ Yes ☐ No

3.16 Does one or more of the following conditions apply?

- 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).

☑ Yes ➔ Complete Tables C, D, and E as applicable. ☐ No ➔ SKIP to Section 4.

3.17 Have you completed monitoring for all applicable Table C pollutants and attached the results to this application package?

☑ Yes ☐ No

3.18 Have you completed monitoring for all applicable Table D pollutants required by your NPDES permitting authority and attached the results to this application package?

☐ Yes ☑ No additional sampling required by NPDES permitting authority.

Effluent Testing Data Continued

3.19 Has the POTW conducted either (1) minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years?

☑ Yes ☐ No ➔ Complete tests and Table E and SKIP to Item 3.26.

3.20 Have you previously submitted the results of the above tests to your NPDES permitting authority?

☑ Yes ☐ No ➔ Provide results in Table E and SKIP to Item 3.26.

3.21 Indicate the dates the data were submitted to your NPDES permitting authority and provide a summary of the results.

Date(s) Submitted (MM/DD/YYYY)	Summary of Results
11/14/2019	pass
10/26/2020	pass
10/28/2021	pass
11/23/2022	pass

3.22 Regardless of how you provided your WET testing data to the NPDES permitting authority, did any of the tests result in toxicity?

☐ Yes ☑ No ➔ SKIP to Item 3.26.

3.23 Describe the cause(s) of the toxicity:

3.24 Has the treatment works conducted a toxicity reduction evaluation?

☐ Yes ☐ No ➔ SKIP to Item 3.26.

3.25 Provide details of any toxicity reduction evaluations conducted.

3.26 Have you completed Table E for all applicable outfalls and attached the results to the application package?

☑ Yes ☐ Not applicable because previously submitted information to the NPDES permitting authority.

SECTION 4. INDUSTRIAL DISCHARGES AND HAZARDOUS WASTES (40 CFR 122.21(j)(6) and (7))

Industrial Discharges and Hazardous Wastes

4.1 Does the POTW receive discharges from SIUs or NSCIUs?

☐ Yes ☑ No ➔ SKIP to Item 4.7.

4.2 Indicate the number of SIUs and NSCIUs that discharge to the POTW.

Number of SIUs	Number of NSCIUs

4.3 Does the POTW have an approved pretreatment program?

☐ Yes ☐ No

4.4 Have you submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program?

☐ Yes ☐ No ➔ SKIP to Item 4.6.

4.5 Identify the title and date of the annual report or pretreatment program referenced in Item 4.4. SKIP to Item 4.7.

4.6 Have you completed and attached Table F to this application package?

☐ Yes ☐ No

Industrial Discharges and Hazardous Wastes Continued

4.7 Does the POTW receive, or has it been notified that it will receive, by truck, rail, or dedicated pipe, any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261?

☐ Yes ☑ No ➔ SKIP to Item 4.9.

4.8 If yes, provide the following information:

Hazardous Waste Number	Waste Transport Method (check all that apply)	Annual Amount of Waste Received	Units
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		

4.9 Does the POTW receive, or has it been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and Sections 3004(7) or 3008(h) of RCRA?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.10 Does the POTW receive (or expect to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e)?

☐ Yes ➔ SKIP to Section 5. ☐ No

4.11 Have you reported the following information in an attachment to this application: identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW?

☐ Yes ☐ No

SECTION 5. COMBINED SEWER OVERFLOWS (40 CFR 122.21(j)(8))

CSO Map and Diagram

5.1 Does the treatment works have a combined sewer system?

☐ Yes ☑ No ➔ SKIP to Section 6.

5.2 Have you attached a CSO system map to this application? (See instructions for map requirements.)

☐ Yes ☐ No

5.3 Have you attached a CSO system diagram to this application? (See instructions for diagram requirements.)

☐ Yes ☐ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

CSO Outfall Description

5.4 For each CSO outfall, provide the following information. (Attach additional sheets as necessary.)

	CSO Outfall Number ___	CSO Outfall Number ___	CSO Outfall Number ___
City or town			
State and ZIP code			
County			
Latitude	° ' "	° ' "	° ' "
Longitude	° ' "	° ' "	° ' "
Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.

CSO Monitoring

5.5 Did the POTW monitor any of the following items in the past year for its CSO outfalls?

	CSO Outfall Number ___	CSO Outfall Number ___	CSO Outfall Number ___
Rainfall	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO flow volume	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO pollutant concentrations	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Receiving water quality	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO frequency	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Number of storm events	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

CSO Events in Past Year

5.6 Provide the following information for each of your CSO outfalls.

	CSO Outfall Number ___	CSO Outfall Number ___	CSO Outfall Number ___
Number of CSO events in the past year	events	events	events
Average duration per event	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated
Average volume per event	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated
Minimum rainfall causing a CSO event in last year	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated

CSO Receiving Waters

5.7 Provide the information in the table below for each of your CSO outfalls.

	CSO Outfall Number	CSO Outfall Number	CSO Outfall Number
Receiving water name			
Name of watershed/ stream system			
U.S. Soil Conservation Service 14-digit watershed code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Name of state management/river basin			
U.S. Geological Survey 8-Digit Hydrologic Unit Code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Description of known water quality impacts on receiving stream by CSO (see instructions for examples)			

SECTION 6. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

6.1 In Column 1 below, mark the sections of Form 2A that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2	
☑ Section 1: Basic Application Information for All Applicants	☐ w/ variance request(s)	☐ w/ additional attachments
☑ Section 2: Additional Information	☑ w/ topographic map ☐ w/ additional attachments	☑ w/ process flow diagram
☑ Section 3: Information on Effluent Discharges	☑ w/ Table A ☑ w/ Table B ☑ w/ Table C	☐ w/ Table D ☑ w/ Table E ☑ w/ additional attachments
☐ Section 4: Industrial Discharges and Hazardous Wastes	☐ w/ SIU and NSCIU attachments ☐ w/ additional attachments	☐ w/ Table F
☐ Section 5: Combined Sewer Overflows	☐ w/ CSO map ☐ w/ CSO system diagram	☐ w/ additional attachments
☑ Section 6: Checklist and Certification Statement	☐ w/ attachments	

6.2 **Certification Statement**

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.

Name (print or type first and last name)	Official title
Bill Gillespie, Jr.	Mayor
Signature: Bill Gillespie Jr.	Date signed: 12-07-23

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	0013

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

TABLE A. EFFLUENT PARAMETERS FOR ALL POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Biochemical oxygen demand ☐ BOD_5 or ☑ $CBOD_5$ (report one)	6.73	mg/L	3.12	mg/L	156	M5210 B 4E6	2 mg/L ☑ ML ☐ MDL
Fecal coliform	187.3	col/100 mL	8.82	col/100 mL	156	SM9222D	1col/100m ☐ ML ☑ MDL
Design flow rate	5.84	MGD	2.48	MGD	365		
pH (minimum)	6.01	S.U.					
pH (maximum)	7.53	S.U.					
Temperature (winter)	N/A	N/A	N/A	N/A	N/A		
Temperature (summer)	N/A	N/A	N/A	N/A	N/A		
Total suspended solids (TSS)	31.17	mg/L	5.61	mg/L	156	M2540 C	2 mg/L ☑ ML ☐ MDL

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

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	0013

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

TABLE B. EFFLUENT PARAMETERS FOR ALL POTWS WITH A FLOW EQUAL TO OR GREATER THAN 0.1 MGD

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Ammonia (as N)	1.748	mg/L	1.24	mg/L	156	M4500-NH3 BF	0.05mg/L ☐ ML ☑ MDL
Chlorine (total residual, TRC)[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A ☐ ML ☐ MDL
Dissolved oxygen	7.76	mg/L	7.05	mg/L	156	M4500-O G	0.1mg/L ☐ ML ☑ MDL
Nitrate/nitrite	16.3	mg/L	8.27	mg/L	12	M4500-NO3 F	0.1mg/L ☐ ML ☑ MDL
Kjeldahl nitrogen	7.31	mg/L	2.22	mg/L	156	M4500-N B G	0.05mg/L ☐ ML ☑ MDL
Oil and grease	N/A	N/A	N/A	N/A	N/A	N/A	N/A ☐ ML ☐ MDL
Phosphorus	3.48	mg/L	1.67	mg/L	12	M4500-P B5 H	0.05mg/L ☐ ML ☑ MDL
Total dissolved solids	N/A	N/A	N/A	N/A	N/A	N/A	N/A ☐ ML ☐ MDL

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

[2] Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent are not required to report data for chlorine.

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	0013

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

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Metals, Cyanide, and Total Phenols							
Hardness (as $CaCO_3$)	76.3	mg/L	74.97	mg/L	3	EPA 200.8	5.0 mg/L ☐ ML ☑ MDL
Antimony, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	1.0 mg/L ☐ ML ☑ MDL
Arsenic, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	1.0 mg/L ☐ ML ☑ MDL
Beryllium, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	0.5 mg/L ☐ ML ☑ MDL
Cadmium, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	1.0 mg/L ☐ ML ☑ MDL
Chromium, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	1.0 mg/L ☐ ML ☑ MDL
Copper, total recoverable	0.0082	mg/L	0.006933	mg/L	3	EPA 200.8	3.0 mg/L ☐ ML ☑ MDL
Lead, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	1.0 mg/L ☐ ML ☑ MDL
Mercury, total recoverable	0.8	ng/L	0.53	ng/L	3	EPA 1631E	0.2 ng/L ☐ ML ☑ MDL
Nickel, total recoverable	0.0011	mg/L	0.0007	mg/L	3	EPA 200.8	1.0 mg/L ☐ ML ☑ MDL
Selenium, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	1.0 mg/L ☐ ML ☑ MDL
Silver, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	0.5 mg/L ☐ ML ☑ MDL
Thallium, total recoverable	ND	mg/L	ND	mg/L	3	EPA 200.8	0.5 mg/L ☐ ML ☑ MDL
Zinc, total recoverable	0.064	mg/L	0.045667	mg/L	3	EPA 200.8	5 mg/L ☐ ML ☑ MDL
Cyanide	ND	mg/L	ND	mg/L	3	SM 4500-CN-E	20 mg/L ☐ ML ☑ MDL
Total phenolic compounds	0.033	mg/L	0.0183	mg/L	3	EPA 624.1	10 mg/L ☐ ML ☑ MDL
Volatile Organic Compounds							
Acrolein	ND	ug/L	ND	ug/L	3	EPA 624.1	20.0 ug/L ☐ ML ☑ MDL
Acrylonitrile	ND	ug/L	ND	ug/L	3	EPA 624.1	20.0 ug/L ☐ ML ☑ MDL
Benzene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Bromoform	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	0013

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

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Carbon tetrachloride	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Chlorobenzene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Chlorodibromomethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Chloroethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
2-chloroethylvinyl ether	ND	ug/L	ND	ug/L	3	EPA 624.1	20.0 ug/L ☐ ML ☑ MDL
Chloroform	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Dichlorobromomethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,1-dichloroethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,2-dichloroethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
trans-1,2-dichloroethylene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,1-dichloroethylene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,2-dichloropropane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,3-dichloropropylene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Ethylbenzene	ND	ug/L	ND	ug/L	3	EPA 624.1	2.0 ug/L ☐ ML ☑ MDL
Methyl bromide	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Methyl chloride	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Methylene chloride	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,1,2,2-tetrachloroethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Tetrachloroethylene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Toluene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,1,1-trichloroethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
1,1,2-trichloroethane	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	0013

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

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Trichloroethylene	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Vinyl chloride	ND	ug/L	ND	ug/L	3	EPA 624.1	5.0 ug/L ☐ ML ☑ MDL
Acid-Extractable Compounds							
p-chloro-m-cresol	ND	ug/L	ND	ug/L	3	EPA 625.1	2.5 ug/L ☐ ML ☑ MDL
2-chlorophenol	ND	ug/L	ND	ug/L	3	EPA 625.1	2.5 ug/L ☐ ML ☑ MDL
2,4-dichlorophenol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
2,4-dimethylphenol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
4,6-dinitro-o-cresol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
2,4-dinitrophenol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
2-nitrophenol	ND	ug/L	ND	ug/L	3	EPA 625.1	2.5 ug/L ☐ ML ☑ MDL
4-nitrophenol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Pentachlorophenol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Phenol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
2,4,6-trichlorophenol	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Base-Neutral Compounds							
Acenaphthene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Acenaphthylene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Anthracene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Benzidine	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Benzo(a)anthracene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Benzo(a)pyrene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
3,4-benzofluoranthene	ND	ug/L	ND	ug/L	3	EPA 625.1	2.5 ug/L ☐ ML ☑ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	0013

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

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Benzo(ghi)perylene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Benzo(k)fluoranthene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Bis (2-chloroethoxy) methane	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Bis (2-chloroethyl) ether	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Bis (2-chloroisopropyl) ether	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Bis (2-ethylhexyl) phthalate	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
4-bromophenyl phenyl ether	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Butyl benzyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
2-chloronaphthalene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
4-chlorophenyl phenyl ether	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Chrysene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
di-n-butyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
di-n-octyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Dibenzo(a,h)anthracene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
1,2-dichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
1,3-dichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
1,4-dichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
3,3-dichlorobenzidine	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Diethyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Dimethyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
2,4-dinitrotoluene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
2,6-dinitrotoluene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	0013

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

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
1,2-diphenylhydrazine	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Fluoranthene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Fluorene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Hexachlorobenzene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Hexachlorobutadiene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Hexachlorocyclo-pentadiene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Hexachloroethane	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Indeno(1,2,3-cd)pyrene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Isophorone	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Naphthalene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Nitrobenzene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
N-nitrosodi-n-propylamine	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
N-nitrosodimethylamine	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
N-nitrosodiphenylamine	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Phenanthrene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
Pyrene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL
1,2,4-trichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 625.1	5.0 ug/L ☐ ML ☑ MDL

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

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	

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

TABLE D. ADDITIONAL POLLUTANTS AS REQUIRED BY NPDES PERMITTING AUTHORITY

Pollutant (list)	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
☑ No additional sampling is required by NPDES permitting authority.							
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
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							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL

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

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

Test Information	Test Number [1]	Test Number [1]	Test Number
Test species	Pimephales promelas	Ceriodaphnia dubia	
Age at initiation of test	<24 hours	<24 hours	
Outfall number	001T	001T	
Date sample collected	09/09/2019	09/09/2019	
Date test started	09/10/2019	09/10/2019	
Duration	2 days	2 days	
Toxicity Test Methods			
Test method number	EPA 821/R-02/012	EPA 821/R-02/012	
Manual title	Short-term Methods for Estimating the Chroni	Short-term Methods for Estimating the Chroni	
Edition number and year of publication	4th Edition (2002)	4th Edition (2002)	
Page number(s)			
Sample Type			
Check one:	☐ Grab ☑ 24-hour composite	☐ Grab ☑ 24-hour composite	☐ Grab ☐ 24-hour composite
Sample Location			
Check one:	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before disinfection ☐ After disinfection ☐ After dechlorination
Point in Treatment Process			
Describe the point in the treatment process at which the sample was collected for each test.	final effluent 0011	final effluent 0011	
Toxicity Type			
Indicate for each test whether the test was performed to asses acute or chronic toxicity, or both. (Check one response.)	☑ Acute ☐ Chronic ☐ Both	☑ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 1	Test Number 1	Test Number ____
Test Type			
Indicate the type of test performed. (Check one response.)	☑ Static ☐ Static-renewal ☐ Flow-through	☑ Static ☐ Static-renewal ☐ Flow-through	☐ Static ☐ Static-renewal ☐ Flow-through
Source of Dilution Water			
Indicate the source of dilution water. (Check one response.)	☑ Laboratory water ☐ Receiving water	☑ Laboratory water ☐ Receiving water	☐ Laboratory water ☐ Receiving water
If laboratory water, specify type.	20% DMW	20% DMW	
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)	☐ Fresh water ☐ Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.	6%	6%	

Parameters Tested						
Check the parameters tested.	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen

Acute Test Results			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% confidence interval	%	%	%
Control percent survival	%	%	%

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 1		Test Number 1		Test Number ____	
Acute Test Results Continued						
Other (describe)	pass		pass			
Chronic Test Results						
NOEC	%		%		%	
IC_{25}	%		%		%	
Control percent survival	%		%		%	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
Was reference toxicant test within acceptable bounds?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?	08/26/2019		08/28/2019			
Other (describe)						

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TABLE F. INDUSTRIAL DISCHARGE INFORMATION

Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU ___	SIU ___	SIU ___
Name of SIU			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Description of all industrial processes that affect or contribute to the discharge.			
List the principal products and raw materials that affect or contribute to the SIU's discharge.			
Indicate the average daily volume of wastewater discharged by the SIU.	gpd	gpd	gpd
How much of the average daily volume is attributable to process flow?	gpd	gpd	gpd
How much of the average daily volume is attributable to non-process flow?	gpd	gpd	gpd
Is the SIU subject to local limits?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the SIU subject to categorical standards?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU ____	SIU ____	SIU ____
Under what categories and subcategories is the SIU subject?			
Has the POTW experienced problems (e.g., upsets, pass-through interferences) in the past 4.5 years that are attributable to the SIU?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If yes, describe.			

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

Test Information	Test Number 2	Test Number 2	Test Number ____
Test species	Pimephales promelas	Ceriodaphnia dubia	
Age at initiation of test	<24 hours	<24 hours	
Outfall number	001T	001T	
Date sample collected	09/14/2020	09/14/2020	
Date test started	09/15/2020	09/15/2020	
Duration	2 days	2 days	
Toxicity Test Methods			
Test method number	EPA 821/R-02/012	EPA 821/R-02/012	
Manual title	Short-term Methods for Estimating the Chroni	Short-term Methods for Estimating the Chroni	
Edition number and year of publication	4th Edition (2002)	4th Edition (2002)	
Page number(s)			
Sample Type			
Check one:	☐ Grab ☑ 24-hour composite	☐ Grab ☑ 24-hour composite	☐ Grab ☐ 24-hour composite
Sample Location			
Check one:	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before disinfection ☐ After disinfection ☐ After dechlorination
Point in Treatment Process			
Describe the point in the treatment process at which the sample was collected for each test.	final effluent 0011	final effluent 0011	
Toxicity Type			
Indicate for each test whether the test was performed to asses acute or chronic toxicity, or both. (Check one response.)	☑ Acute ☐ Chronic ☐ Both	☑ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 2	Test Number 2	Test Number ____
Test Type			
Indicate the type of test performed. (Check one response.)	☑ Static ☐ Static-renewal ☐ Flow-through	☑ Static ☐ Static-renewal ☐ Flow-through	☐ Static ☐ Static-renewal ☐ Flow-through
Source of Dilution Water			
Indicate the source of dilution water. (Check one response.)	☑ Laboratory water ☐ Receiving water	☑ Laboratory water ☐ Receiving water	☐ Laboratory water ☐ Receiving water
If laboratory water, specify type.	20% DMW	20% DMW	
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)	☐ Fresh water ☐ Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.	6%	6%	

Parameters Tested						
Check the parameters tested.	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen

Acute Test Results			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% confidence interval	%	%	%
Control percent survival	%	%	%

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 2		Test Number 2		Test Number	
Acute Test Results Continued						
Other (describe)	pass		pass			
Chronic Test Results						
NOEC	%		%		%	
IC_{25}	%		%		%	
Control percent survival	%		%		%	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
Was reference toxicant test within acceptable bounds?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?	08/21/2020		08/21/2020			
Other (describe)						

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 3	Test Number 3	Test Number ____
Test Information			
Test species	Pimephales promelas	Ceriodaphnia dubia	
Age at initiation of test	<24 hours	<24 hours	
Outfall number	001T	001T	
Date sample collected	09/21/2021	09/21/2021	
Date test started	09/23/2021	09/23/2021	
Duration	2 days	2 days	
Toxicity Test Methods			
Test method number	EPA 821/R-02/012	EPA 821/R-02/012	
Manual title	Short-term Methods for Estimating the Chroni	Short-term Methods for Estimating the Chroni	
Edition number and year of publication	4th Edition (2002)	4th Edition (2002)	
Page number(s)			
Sample Type			
Check one:	☐ Grab ☑ 24-hour composite	☐ Grab ☑ 24-hour composite	☐ Grab ☐ 24-hour composite
Sample Location			
Check one:	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before disinfection ☐ After disinfection ☐ After dechlorination
Point in Treatment Process			
Describe the point in the treatment process at which the sample was collected for each test.	final effluent 0011	final effluent 0011	
Toxicity Type			
Indicate for each test whether the test was performed to asses acute or chronic toxicity, or both. (Check one response.)	☑ Acute ☐ Chronic ☐ Both	☑ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 3	Test Number 3	Test Number ____
Test Type			
Indicate the type of test performed. (Check one response.)	☑ Static ☐ Static-renewal ☐ Flow-through	☑ Static ☐ Static-renewal ☐ Flow-through	☐ Static ☐ Static-renewal ☐ Flow-through
Source of Dilution Water			
Indicate the source of dilution water. (Check one response.)	☑ Laboratory water ☐ Receiving water	☑ Laboratory water ☐ Receiving water	☐ Laboratory water ☐ Receiving water
If laboratory water, specify type.	20% DMW	20% DMW	
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)	☐ Fresh water ☐ Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.	5%	5%	

Parameters Tested						
Check the parameters tested.	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen
Acute Test Results						
Percent survival in 100% effluent	%		%		%	
LC_{50}						
95% confidence interval	%		%		%	
Control percent survival	%		%		%	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 3		Test Number 3		Test Number	
Acute Test Results Continued						
Other (describe)	pass		pass			
Chronic Test Results						
NOEC	%		%		%	
IC_{25}	%		%		%	
Control percent survival	%		%		%	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
Was reference toxicant test within acceptable bounds?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?	09/14/2021		09/14/2021			
Other (describe)						

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

Test Information	Test Number 4	Test Number 4	Test Number ____
Test species	Pimephales promelas	Ceriodaphnia dubia	
Age at initiation of test	<24 hours	<24 hours	
Outfall number	001T	001T	
Date sample collected	09/19/2022	09/19/2022	
Date test started	09/20/2022	09/20/2022	
Duration	2 days	2 days	
Toxicity Test Methods			
Test method number	EPA 821/R-02/012	EPA 821/R-02/012	
Manual title	Short-term Methods for Estimating the Chroni	Short-term Methods for Estimating the Chroni	
Edition number and year of publication	4th Edition (2002)	4th Edition (2002)	
Page number(s)			
Sample Type			
Check one:	☐ Grab ☑ 24-hour composite	☐ Grab ☑ 24-hour composite	☐ Grab ☐ 24-hour composite
Sample Location			
Check one:	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before Disinfection ☑ After Disinfection ☐ After Dechlorination	☐ Before disinfection ☐ After disinfection ☐ After dechlorination
Point in Treatment Process			
Describe the point in the treatment process at which the sample was collected for each test.	final effluent 0011	final effluent 0011	
Toxicity Type			
Indicate for each test whether the test was performed to asses acute or chronic toxicity, or both. (Check one response.)	☑ Acute ☐ Chronic ☐ Both	☑ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 4	Test Number 4	Test Number ____
Test Type			
Indicate the type of test performed. (Check one response.)	☑ Static ☐ Static-renewal ☐ Flow-through	☑ Static ☐ Static-renewal ☐ Flow-through	☐ Static ☐ Static-renewal ☐ Flow-through
Source of Dilution Water			
Indicate the source of dilution water. (Check one response.)	☑ Laboratory water ☐ Receiving water	☑ Laboratory water ☐ Receiving water	☐ Laboratory water ☐ Receiving water
If laboratory water, specify type.	20% DMW	20% DMW	
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)	☐ Fresh water ☐ Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.	5%	5%	

Parameters Tested						
Check the parameters tested.	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen

Acute Test Results			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% confidence interval	%	%	%
Control percent survival	%	%	%

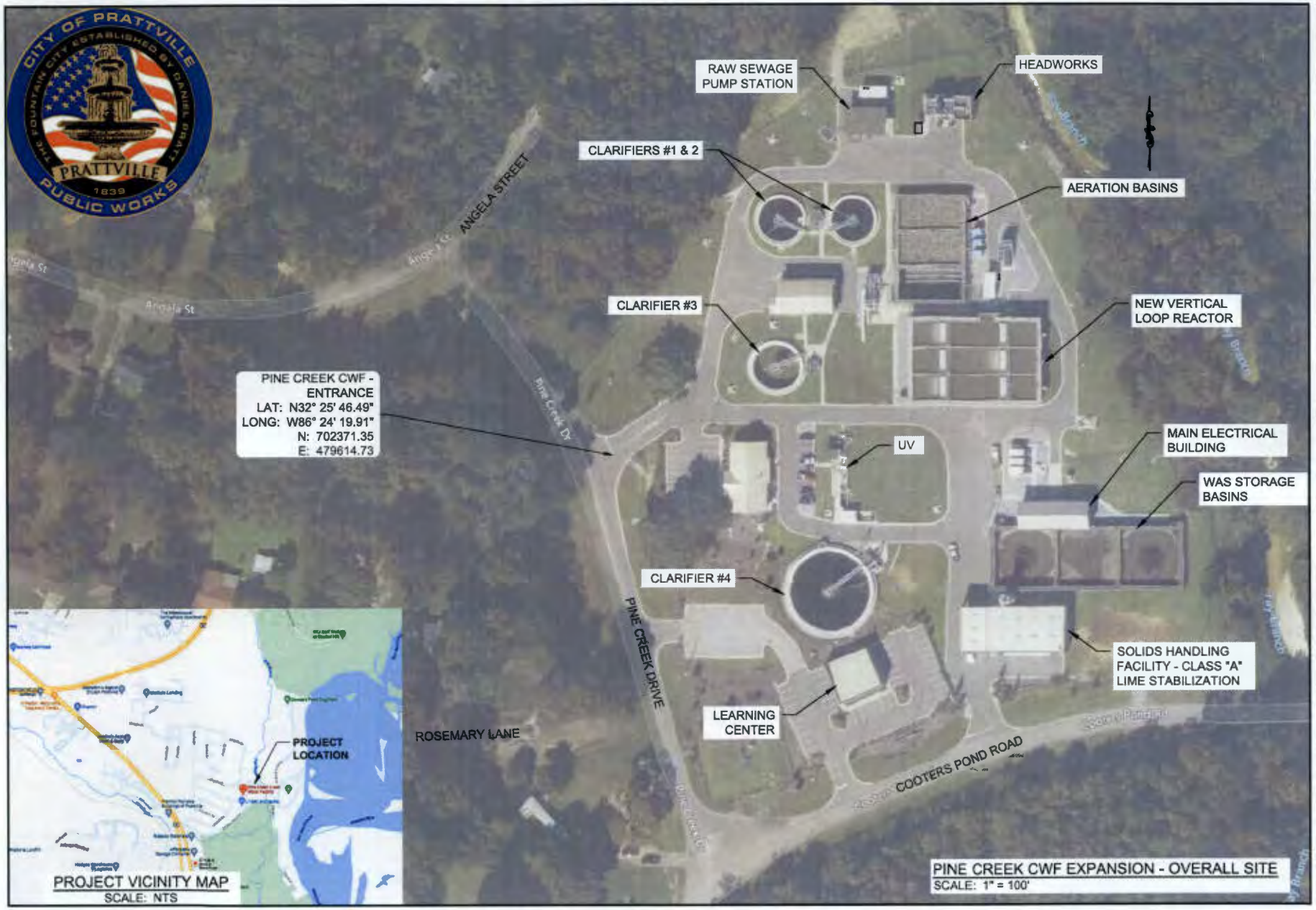
EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	001T

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number 4		Test Number 4		Test Number ____	
Acute Test Results Continued						
Other (describe)	pass		pass			
Chronic Test Results						
NOEC	%		%		%	
IC_{25}	%		%		%	
Control percent survival	%		%		%	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
Was reference toxicant test within acceptable bounds?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?	09/14/2022		09/14/2022			
Other (describe)						



ENGINEERS OF THE SOUTH

PRELIMINARY, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION

REVISIONS

NO	DATE	DESCRIPTION

FOR REVIEW AND COMMENT ☐ AS-BID ☐ CONSTRUCTION REVISIONS ☐ AS-BUILT

CITY OF PRATTVILLE, AL
PUBLIC WORKS DEPT - WASTEWATER DIVISION

PINE CREEK CWF
NPDES PERMIT RENEWAL

BOX IS 2 IN WIDE AT FULL SCALE

JOB NO:	PV-2300
DATE:	SEPT 2023
DESIGNED BY:	
DRAWN BY:	
DWG:	OVERALL
SHEET NUMBER	

PROJECT VICINITY MAP
SCALE: NTS

PINE CREEK CWF EXPANSION - OVERALL SITE
SCALE: 1" = 500'

ENGINEERS OF THE SOUTH

PRELIMINARY, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION

REVISIONS

NO	DATE	DESCRIPTION

FOR REVIEW AND COMMENT ☐ AS-BID ☐ CONSTRUCTION REVISIONS ☐ AS-BUILT

CITY OF PRATTVILLE, AL
PUBLIC WORKS DEPT - WASTEWATER DIVISION

PINE CREEK CWF
NPDES PERMIT RENEWAL

OVERALL (QUAD)

BOX IS 2 IN WIDE AT FULL SCALE

JOB NO:	PV-2300
DATE:	SEPT 2023
DESIGNED BY:	
DRAWN BY:	
DWG:	OVERALL (QUAD)
SHEET NUMBER	

NPDES Individual Permit - Modification/Reissuance - Municipal (Form 188)

version 1.11

(Submission #: HPX-N38N-99EQB, version 5)

Details

Submission ID HPX-N38N-99EQB

Form Input

General Instructions

NPDES Individual Permit Modification and Reissuance Form ◆ Publicly-Owned Treatment Works (POTW), Other Treatment Works Treating Domestic Sewage (TWTDS), and Public Water Supply Treatment Plants

IF YOU ARE APPLYING FOR A PERMIT MODIFICATION, PLEASE CONTACT YOUR ASSIGNED PERMIT CONTACT TO DISCUSS THE TYPE OF MODIFICATION YOU SHOULD APPLY FOR BEFORE COMPLETING THIS FORM.

This form should be used to submit the following permit requests for permitted Publicly-Owned Treatment Works (POTW), Other Treatment Works Treating Domestic Sewage (TWTDS), and Public Water Supply Treatment Plants:

(1) Permit Transfers
(2) Permittee/Facility Name Changes
(3) Minor Modifications
This modification may not be used for changes that would result in changes to permit conditions
(4) Major Modifications (No Effluent Limit Change)
(5) Major Modifications (Effluent Limit Change)
(6) Reissuances
Reissuance of a permit due to approaching expiration
Revocation and Reissuance of permit prior to its scheduled expiration

Please complete all questions and attach all necessary documentation as prompted throughout the application process. Incomplete or incorrect information will delay processing.

Applicable Fees:

Permit Transfers and/or Permittee/Facility Name Changes
$800
Minor Modifications
$800
Major Modifications (No Effluent Limit Change)
$3,140 (Major Sources)
$2,250 (Minor Sources or Public Water Supply Treatment Plants)
Major Modifications (Effluent Limit Change)
$7,060 (Major Sources)
$4,290 (Minor Sources or Public Water Supply Treatment Plants)
Reissuances
$7,060 (Major Sources)
$4,290 (Minor Sources or Public Water Supply Treatment Plants)
For assistance, please click here to determine the permit engineer responsible for the site or call (334) 271-7810.

Processing Information

Purpose of Application
Reissuance of Permit Due to Approaching Expiration

Please indicate if the Permittee is applying for a permit transfer and/or name change in addition to permit modification or reissuance:
None

Action Type
Reissuance

Briefly describe any planned changes at the facility that are included in this reissuance application:
N/A

Do you have additional contacts associated with this site?
No

Permit Information

Permit Number
AL0027723

Current Permittee Name
City Of Prattville

Permittee

Permittee Name
City Of Prattville

Mailing Address

101 West Main Street

Prattville, AL 36067

Is the Operator the same as the Permittee?
Yes

Has the Operator's scope of responsibility changed?
No

Responsible Official

Prefix
Mr.

First Name **Last Name**
Napoleon *Wilks*

Title
Plant Manager

Organization Name
City of Prattville

Phone Type **Number** **Extension**

Business 3342961851

Email
Napoleon.Wilks@prattvilleal.gov

Mailing Address

101 West Main Street

Prattville, AL 36067

Existing Permit Contacts

Affiliation Type	Contact Information	Remove?
Responsible Official,Notification Recipient	Bill Gillespie, City of Prattville	NONE PROVIDED
Permittee	City Of Prattville	NONE PROVIDED
Environmental Contact,DMR Contact,Emergency Contact	Ricky Teague, City of Prattville	Remove

Facility/Site Information

Facility/Site Name
Prattville Pine Creek Clean Water Facility

Organization/Ownership Type
Municipality (City or Town)

The Facility/Site Address is the physical location of the treatment plant. Do not enter a PO Box. Do not enter the address of the office of the Permittee if different from the treatment plant.

Facility/Site Physical Location Address

100 Pine Creek Drive
Prattville, AL 36066

Facility/Site County
Elmore

Facility/Site Contact

Prefix
Mr.

First Name	Last Name
Napoleon	*Wilks*

Title
Plant Manager

Organization Name
City of Prattville

Phone Type	Number	Extension
Business	3342961851	

Email
Napoleon.Wilks@prattvilleal.gov

Note

Detailed directions should be included if a street address is not available.

Detailed Directions to the Facility/Site
Head towards Cooters Pond Park and the facility is on your left.

Please refer to the link below for Lat/Long map instruction help.
Map Instruction Help

Facility/Site Front Gate Latitude and Longitude
32.42951300000000,-86.40532900000000

100 Pine Creek Drive, Prattville, AL

Primary SIC Code
4952-Sewerage Systems

Primary NAICS Code
221320-Sewage Treatment Facilities

Emergency Contact

Prefix
Mr.

First Name	Last Name
Napoleon	*Wilks*

Title
Plant Manager

Phone Type	Number	Extension
Business	3342961851	

Email
Napoleon.Wilks@prattvilleal.gov

Does the facility have a designated Environmental Contact who is different than the Facility Contact or Emergency Contact listed above?
No

Enforcement History

Has the applicant been issued any Notices of Violation, Orders (Consent or Administrative/Unilateral), or Judicial Actions (Complaint, Settlement Agreement, Consent Decree, or Court Order) concerning water pollution or other permit violations within the State of Alabama in the past five years?
No

Wastewater Treatment & Discharge Information

Please indicate which type of operations occur at this facility:
Treatment Works Treating Domestic Sewage

What treatment type is used at this facility:
Mechanical (WWTP)

What discharge options are used at this facility:
Surface Water

What is the Total Design Flow (in millions of gallons per day, MGD) for this facility?
4

What is the facility's total 2-Year Actual Average Flow (in millions of gallons per day, MGD)?
2.2

Does this facility have any current or proposed stormwater outfalls from the treatment facility?
Yes

Process Flow Schematic
FLOW DIAGRAM.pdf - 10/02/2023 07:11 AM
Comment
NONE PROVIDED

Do you share an outfall with another facility?
No

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

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

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

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

Schematic Diagram

OVERALL - proposed-OVERALL.pdf - 10/02/2023 07:12 AM

Comment

NONE PROVIDED

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)?

No

Treatment Methods (TWTDS)

Treatment Level

Secondary Treatment [e.g., suspended growth biological treatment; attached growth and combined biological treatment].

Wastewater Disinfection Technology Information

Ultraviolet Light Disinfection

Please select all POTW Treatment Categories that apply.

Activated Sludge Process & Modifications
Disinfection
Clarification
Aeration
Phosphorus Removal (Biological)
Nitrogen Removal (Biological)

Please select all unit operations that apply for Activated Sludge Process & Modifications:

Activated Sludge, Anaerobic/Anoxic/Oxic
Reactor, Vertical Loop

Please select all unit operations that apply for Aeration:

Aeration (general)

Please select all unit operations that apply for Clarification:

Clarification, Secondary

Please select all unit operations that apply for Disinfection:

Disinfection, Ultraviolet
Disinfection, Chlorination

Please select all unit operations that apply for Phosphorus Removal (Biological):

Phosphorus Removal, Biological

Waste Storage & Disposal Information

Any storage of solids or liquids at the facility that have any potential for accidental discharge to a water of the state?

Yes

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 app

Description of Waste	Description of Storage Location	Disposal Location
Petroleum products & polymer	Indoors	On-site
Diesel Fuel	Generator (with double wall tank)	On-site

Collection System Information

Collection Systems

Collection System ID	Collection System Name	Owner Type of Collection System	Population of Collection System
NONE PROVIDED	NONE PROVIDED	Publicly owned (Owned by State, municipality, or Tribal government. This includes a district association or other public body created by or pursuant to State law and having jurisdiction over the disposal of sewage).	18,500

Industrial Indirect Discharge Contributors

Does this wastewater treatment system receive or plan to receive industrial source wastewater contributions?
No

Coastal Zone Information

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County?
No

Anti-Degradation Evaluation

Does this modification/reissuance include a new or increased discharge that began after April 3, 1991?
Yes

Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced above?
No

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

EPA Form 2A

Form 2A Table E - Test #2.pdf - 09/22/2023 09:18 AM
Form 2A Table E - Test #3.pdf - 09/22/2023 09:19 AM
Form 2A Table E - Test #4.pdf - 09/22/2023 09:19 AM
Form 2A Table C - Test #2 Results.pdf - 09/28/2023 06:03 PM
Form 2A Table C - Test #3 Results.pdf - 09/28/2023 06:04 PM
Form 2A Table E - Test #1 Results.pdf - 09/28/2023 06:04 PM
Form 2A Table E - Test #2 Results.pdf - 09/28/2023 06:04 PM
Form 2A Table E - Test #3 Results.pdf - 09/28/2023 06:04 PM
Form 2A Table E - Test #4 Results.pdf - 09/28/2023 06:05 PM
FLOW DIAGRAM.pdf - 10/02/2023 07:18 AM
OVERALL - proposed-OVERALL.pdf - 10/02/2023 07:18 AM
Form 2A Table C - Test #1 Results.pdf - 11/27/2023 04:01 PM
EPA Form 2A1.pdf - 12/13/2023 07:47 AM
EPA Form 2A.pdf - 12/13/2023 07:47 AM

Comment

NONE PROVIDED

EPA Form 2F

Form 2f (stormwater).pdf - 10/02/2023 07:48 AM
EPA Form 2F.pdf - 12/13/2023 07:47 AM

Comment

NONE PROVIDED

EPA form 2S

OVERALL - proposed-SLUDGE FIELD.pdf - 09/21/2023 11:25 AM
Pine Creek WWTP - Form 2S.pdf - 10/02/2023 07:54 AM
PINE CREEK CWF - EPA FORM 2S - PLAN.pdf - 12/04/2023 03:52 PM

Comment

NONE PROVIDED

Other attachments (as needed)

NONE PROVIDED

Comment

NONE PROVIDED

Topographic Map

Attach topographic map here.

OVERALL - proposed-OVERALL (QUAD).pdf - 10/02/2023 07:54 AM

Comment

NONE PROVIDED

Engineering Report/BMP Plan Requirements

Engineering Report/BMP Plan Requirements

NONE PROVIDED

Comment

NONE PROVIDED

Outfalls (1 of 1)

Outfall: 001

Do you want to remove this outfall from the modified/reissued permit?

No

Outfall Identifier

001

Is this Outfall equipped with a diffuser?
Yes

Description of Diffuser:
Five (5) 14" diffuser heads are equally spaced along end of 30" outfall on the bed of the Alabama River.

What is this Outfall's 2-Year Average Flow (in millions of gallons per day, MGD)?
2.2

Receiving Water
Alabama River (Woodruff Lake)

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Please refer to the link below for Lat/Long map instruction help.
Map Instruction Help

Location of Outfall or Discharge Point/Receiving Water
32.42599800000000, -86.40033400000000

A list of the 303(d) impaired waters can be found here.

303(d) Segment?
No

A list of waters subject to a TMDL can be found here.

TMDL Segment?
No

NOTE

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, and 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 the requested compliance schedule.

TMDL Attachments
NONE PROVIDED
Comment
NONE PROVIDED

Stormwater Outfall(s) (1 of 1)

Stormwater Outfall: 002

Do you want to remove this outfall from the modified/reissued permit?
No

Stormwater Outfall Identifier
002

Receiving Water
Fay Branch

Does the discharge enter the named receiving water via an unnamed tributary?
NONE PROVIDED

Please refer to the link below for Lat/Long map instruction help.
Map Instruction Help

Location of Outfall or Discharge Point/Receiving Water
32.42879700000000, -86.40315600000000

303(d) Segment?
No

TMDL Segment?
No

Fee

Fee
7060

Note: Additional Fees may be assessed after the review of the application is complete. These fees may include any of the following:
Modeling with Data Collection (10 Stations) - $60,390
Modeling with Data Collection (5 Stations) - $49,315
Modeling - desktop - $4,855
Review of Model Performed by Others - $2,705
Seasonal Limits - $4,855/additional season
Biomonitoring & Toxicity Limits - $1,015

Please contact your area engineer if you have any questions about which additional fees may be assessed for this application.

Application Preparer

Application Preparer

Prefix
Mr.

First Name **Last Name**
Napoleon *Wilks*

Title
Plant Manager

Organization Name
City of Prattville

Phone Type **Number** **Extension**
Business 3342961851

Email
Napoleon.Wilks@prattvilleal.gov

Address
101 West Main Street
Prattville, AL 36067

Revisions

Revision	Revision Date	Revision By
Revision 1	9/14/2023 7:00 AM	Napoleon Wilks IV
Revision 2	11/27/2023 3:59 PM	Napoleon Wilks IV
Revision 3	12/4/2023 9:05 AM	Napoleon Wilks IV
Revision 4	12/4/2023 9:20 AM	Napoleon Wilks IV
Revision 5	12/4/2023 11:00 AM	Napoleon Wilks IV

Agreements and Signature(s)

SUBMISSION AGREEMENTS

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

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 lawthat 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.

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.

Signed By Napoleon Wilks IV on 12/13/2023 at 7:48 AM

United States Environmental Protection Agency | Office of Water Washington, D.C. | EPA Form 3510-2F Revised March 2019

Water Permits Division

EPA

Application Form 2F

Stormwater Discharges Associated with Industrial Activity

NPDES Permitting Program

Note: Complete this form ***and*** Form 1 if you are a new or existing facility whose discharge is composed entirely of stormwater associated with industrial activity, excluding discharges from construction activity under 40 CFR 122.26(b)(14)(x) or (b)(15). If your discharge is composed of stormwater *and* non-stormwater, you must complete Forms 1 and 2F, *and* you must complete Form 2C, 2D, or 2E, as appropriate. See the "Instructions" inside for further details.

Paperwork Reduction Act Notice

The U.S. Environmental Protection Agency estimates the average burden to collect and complete Form 2F to be 28.1 hours. The estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments about the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

FORM 2F—INSTRUCTIONS

General Instructions

Who Must Complete Form 2F?

You must complete Form 2F if you answered "Yes" to Item 1.2.5 on Form 1—that is, you are a new or existing facility and your discharge is composed entirely of stormwater associated with industrial activity (excluding discharges from construction activity under 40 CFR 122.26(b)(14)(x) or (b)(15)) *or* composed of stormwater and non-stormwater and are seeking coverage under an *individual* National Pollutant Discharge Elimination System (NPDES) permit. Note that applicants in the latter category must also complete Forms 2C, 2D, or 2E, as applicable. See inset below.

Notes

- Form 2F must be completed by any operator of a facility that discharges stormwater associated with industrial activity or the operator of any stormwater discharger that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.
- For discharges composed entirely of stormwater, the operator must complete Form 2F in conjunction with Form 1.
- For discharges of stormwater combined with process wastewater, the operator must complete and submit Form 2F, Form 1, and Form 2C. Process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater.
- For discharges of stormwater combined with nonprocess wastewater, the operator must complete Form 2F, Form 1, and Form 2E. Nonprocess wastewater includes noncontact cooling water and sanitary wastes that are not regulated by effluent guidelines, except discharges by educational, medical, or commercial chemical laboratories.
- For new discharges of stormwater associated with industrial activity that will be combined with other new non-stormwater discharges, the operator must submit Form 2F, Form 1, and Form 2D.

Where to File Your Completed Form

Submit your completed application package (Forms 1 and 2F plus any other applicable forms) to your NPDES permitting authority. Consult Exhibit 1–1 of Form 1's "General Instructions" to identify your NPDES permitting authority.

Public Availability of Submitted Information

The U.S. Environmental Protection Agency (EPA) will make information from NPDES permit application forms available to the public for inspection and copying upon request. You may not claim any information on Form 2F (or related attachments) as confidential.

You may make a claim of confidentiality for any information that you submit to EPA that goes beyond the information required by Form 2F. Note that NPDES permitting authorities will deny claims for treating any effluent data (estimated or actual) as confidential. If you do not assert a claim of confidentiality at the time you submit your information to the NPDES permitting authority, EPA may make the information available to the public without further notice to you. EPA will handle claims of confidentiality in accordance with the Agency's business confidentiality regulations in Part 2 of Title 40 of the *Code of Federal Regulations* (CFR).

Completion of Forms

Print or type in the specified areas only. If you do not have enough space on the form to answer a question, you may continue on additional sheets, as necessary, using a format consistent with the form.

Provide your EPA Identification Number from the Facility Registry Service, NPDES permit number, and facility name at the top of each page of Form 2F and any attachments. If your facility is new (i.e., not yet constructed), write or type "New Facility" in the space provided for the EPA Identification Number an NPDES permit number. If you do not know your EPA Identification Number, contact your NPDES permitting authority. See Exhibit 1–1 of Form 1's "General Instructions" for contact information. Additionally, for Tables A through D, provide the applicable outfall number at the top of each page.

Do not leave any response areas blank unless the form directs you to skip them. If the form directs you to respond to an item that does not apply to your facility or activity, enter "NA" for "not applicable" to show that you considered the item and determined a response was not necessary for your facility.

The NPDES permitting authority will consider your application complete when it and any supplementary material are received and completed according to the authority's satisfaction. The NPDES permitting authority will judge the completeness of any application independently of the status of any other permit application or permit for the same facility or activity.

Definitions

The legal definitions of all key terms used in these instructions and Form 2F are in the "Glossary" at the end of the "General Instructions" in Form 1.

Line-by-Line Instructions

Section 1. Outfall Location

Item 1.1. Identify each of the facility's outfalls by number. For each outfall, specify the latitude and longitude to the nearest 15 seconds and name of the receiving water. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or USGS). The location of each outfall (i.e., where the coordinates are collected) shall be the location where collected and concentrated stormwater flows are discharged from the facility such that the first receiving water body into which the discharge flows, either directly or through a separate storm sewer system, is a water of the United States. If you need further guidance in responding to Item 1.1, refer to http://www.epa.gov/geospatial/latitudelongitude-data-standard.

Note: In EPA's stormwater permits, "outfalls" are referred to as "discharge points."

Note that space has been provided on the form for six outfalls. If you have more than this number, type your information on a separate sheet of paper in a format similar to that of the form. Make sure you note the EPA Identification Number, NPDES permit number, and facility name at the top of the page and indicate the specific item of the form to which you are responding—Item 1.1 in this case. In other sections of the form, you will be asked to provide information by outfall number (Sections 2, 4, 5, and 7).

Section 2. Improvements

Item 2.1. Indicate if you are required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application. The requirements include, but are not limited to, permit conditions, administrative enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. If yes, continue to Item 2.2. If no, skip to Section 3.

Item 2.2. Briefly identify and describe each applicable project (e.g., consent decree, enforcement order, or permit condition). For each condition, specify the affected outfall number(s), the source(s) of the discharge, the required final compliance date, and the projected final compliance date.

Item 2.3. OPTIONAL ITEM. Indicate if you have attached any sheets describing any additional water pollution control programs (or other environmental projects that could affect your discharges) that you may now have underway or planned. If you attach additional sheets, indicate in the attachment whether each program is actually underway or is planned, and indicate your actual or planned schedule for construction. Be sure to note your EPA Identification Number, NPDES permit number, and facility name at the top of any attached pages.

Section 3. Site Drainage Map

Item 3.1 Attach a site drainage map showing the topography of the facility. If a topographic map is unavailable, you may provide an outline of drainage areas served by the outfall(s) covered in the application. The site map must include the following information:

- Each of its drainage and discharge structures.
- The drainage area of each stormwater outfall.
- Paved areas and buildings within the drainage area of each stormwater outfall; each past or present area used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in stormwater runoff; materials loading and access areas; and areas where pesticides, herbicides, soil conditioners, and fertilizers are applied.
- Each hazardous waste treatment, storage, or disposal facility (including each area not required to have a Resource Conservation and Recovery Act permit and is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34).
- Each well where fluids from the facility are injected underground.
- Springs and other surface water bodies that receive stormwater discharges from the facility.

When you have completed and attached your site map to Form 2F, answer "Yes" to Item 3.1.

Section 4. Pollutant Sources

Item 4.1. List all outfalls discharging stormwater. Provide an estimate of the impervious surface area drained by the outfall. Specify units of measure. (Impervious surfaces are surfaces where stormwater runs off at rates significantly higher than background rates—e.g., predevelopment levels. They include paved areas, building roofs, parking lots, and roadways.)

Provide an estimate of the total surface area (impervious and pervious areas) drained by each outfall (within a mile radius of the facility). You may use the site map developed under Item 3.1 to estimate the total area drained by each outfall. For areas under 5 acres, consult your NPDES permitting authority to determine whether the area should be reported to the nearest tenth of an acre or nearest quarter of an acre.

Item 4.2. Provide a narrative description of the following:

- Significant materials that in three years prior to the submittal of this application have been treated, stored, or disposed of in a manner to allow exposure to stormwater.
- Method of treatment, storage, or disposal of such materials.
- Materials management practices employed, in the three years prior to the submittal of this application, to minimize contact by these materials with stormwater runoff.
- Materials loading and access areas.
- The location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

You should identify your significant materials by chemical name,

form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. The term "significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act; any chemical the facility is required to report pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act; and fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges.

Item 4.3. For each outfall, list the location and type of existing structural and non-structural control measure(s) to reduce pollutants in stormwater runoff. Structural controls include structures that enclose materials handling or storage areas; structures that cover materials; and berms, dikes, or diversion ditches around manufacturing, production, storage, or treatment units and retention ponds. Spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures are examples of non-structural controls.

Describe the treatment, including the schedule and type of maintenance activities performed, and the ultimate disposal of any solid or fluid wastes other than by discharge. For each structural control identified, indicate the type of treatment the stormwater receives using the codes in Exhibit 2F–1, at the end of the instructions. For each non-structural control identified, indicate "Not Applicable" in the "Codes from Exhibit 2F–1" column.

Section 5. Non-Stormwater Discharges

Item 5.1. Provide a certification that all outfalls that should contain stormwater discharges associated with industrial activity have been tested or evaluated for the presence of non-stormwater discharges. Tests for such non-stormwater discharges can include smoke tests, fluorometric dye tests, analysis of accurate schematics, and others.

Item 5.2. Include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test used to support the certification in Item 5.1. All non-stormwater discharges must be identified in a Form 2C, 2D, or 2E. See "Who Must Complete Form 2F?" above for more information.

Section 6. Significant Leaks or Spills

Item 6.1. Describe any significant leaks or spills of toxic or hazardous pollutants at the facility within the three years prior to the submittal of this application. Include the approximate date and location of the spill or leak and the type and amount of material released.

Section 7. Discharge Information

Item 7.1. Answer whether you are a new source or new discharge. Contact your NPDES permitting authority to determine if you are a new source or new discharge.

Tables A, B, C, and D

Items 7.2 to 7.17. These items require you to collect and report data in Tables A through D, at the end of Form 2F, for the parameters and pollutants listed in Exhibits 2F–2, 2F–3, and 2F–4 (at the end of the instructions). The instructions for completing Tables A through D are table-specific, as are the criteria for determining who should complete them.

Important note: Read the "General Instructions for Reporting, Sampling, and Analysis" below before completing Items 7.2 to 7.17.

Item 7.2 and Table A. All applicants must complete Table A. If the discharge is an existing discharge and your discharge is composed exclusively of stormwater (i.e., no process or nonprocess wastewater) then you only need to provide monitoring data for oil and grease, total phosphorus, total Kjeldahl nitrogen, and total nitrogen. Indicate "NA" for "not applicable" in the columns for all other parameters. Answer "Yes" to Item 7.2 once you have completed this task.

Item 7.3 and Table B. Indicate whether the facility is subject to an effluent limitations guideline (ELG) (see 40 CFR Subchapter N to determine which pollutants are limited in ELGs) or if the facility is subject to effluent limitations in an NPDES permit for its process wastewater or stormwater (if the facility is operating under an existing NPDES permit). If yes, continue to Item 7.4. If no, skip to Item 7.5.

Note: Stormwater discharges from certain industrial sources or activities have specific ELGs for which they must comply. These *stormwater-specific* ELGs include:

Regulated Discharge	40 CFR Section
Discharges resulting from spraydown or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, byproducts or waste products (SIC 2874)	Part 418, Subpart A
Runoff from asphalt emulsion facilities	Part 443, Subpart A
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, and D
Runoff from hazardous waste and non-hazardous waste landfills	Part 445, Subparts A and B
Runoff from coal storage piles at steam electric generating facilities	Part 423
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449

Item 7.4. In Table B, list all pollutants that are limited in an ELG to which the facility is subject and all pollutants listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit) and provide quantitative data for each pollutant (provide actual data for existing dischargers and estimated data for new sources and new dischargers). If a pollutant in Exhibits 2F–2 or 2F–3 is indirectly limited by an ELG through an indicator (e.g., use of total suspended solids as an indicator to control the discharge of iron and aluminum), you must provide data for the pollutant in Table B. Complete one table for each outfall. Answer "Yes" to Item 7.4 once you have completed this task.

Item 7.5 and Table C. Table C requires you to address the pollutants in Exhibits 2F–2, 2F–3, and 2F–4 for each outfall. Pollutants in each of these exhibits are addressed differently.

Indicate whether you know or have reason to believe any pollutants in Exhibit 2F–2 are present in the discharge. If yes, continue to Item 7.6. If no, skip to Item 7.7.

Item 7.6. For each outfall, list all pollutants in Exhibit 2F–2 that you know or have reason to believe are present in the discharge in Table C (except pollutants previously listed in Table B that are limited directly or indirectly by an ELG) and either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged. Answer "Yes" to Item 7.6 once you have completed this task.

Item 7.7. This item asks if you qualify as a "small business." If so, you are exempt from the reporting requirements for the organic toxic pollutants listed in Exhibit 2F–3.

You can qualify as a small business in two ways: (1) If your facility is a coal mine and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants; (2) If your facility is not a coal mine and if your gross total annual sales for the most recent three years average less than $100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production or sales data must be for the facility that is the source of the discharge. The data should not be limited to production or sales for the process or processes that contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intra-corporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980 = 100). This index is available online from the U.S. Department of Commerce, Bureau of Economic Analysis at http://www.bea.gov/national/pdf/SNTables.pdf.

If you qualify as a small business according to the criteria above, answer "Yes" to Item 7.7 and skip to Item 7.18. Otherwise, answer "No" and continue to Item 7.8.

Item 7.8. Indicate whether you know or have reason to believe any pollutants in Exhibit 2F–3 are present in the discharge. If yes, continue to Item 7.9. If no, skip to Item 7.10.

Item 7.9. For each outfall, list all pollutants in Exhibit 2F–3 that you know or have reason to believe are present in the discharge in Table C (except pollutants previously listed in Table B). Answer "Yes" to Item 7.9 once you have completed this task.

Item 7.10. Indicate whether you expect any of the pollutants from Exhibit 2F–3 to be discharged in concentrations of 10 parts per billion (ppb) or greater. If yes, continue to Item 7.11. If no, skip to Item 7.12.

Item 7.11. Provide quantitative data in Table C for those pollutants in Exhibit 2F–3 that you expect to be discharged in concentrations of 10 ppb or greater (provide actual data for existing dischargers and estimated data for new sources and new dischargers). Answer "Yes" to Item 7.11 once you have completed this task.

Item 7.12. Indicate whether you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater. If yes, continue to Item 7.13. If no, skip to Item 7.14.

Item 7.13. Provide quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater (provide actual data for existing dischargers and estimated data for new sources and new dischargers). Answer "Yes" to Item 7.13 once you have completed this task.

Item 7.14. For any pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the above four pollutants), either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged in Table C. Answer "Yes" to Item 7.14 once you have completed this task.

Item 7.15. Indicate whether you know or have reason to believe any pollutants in Exhibit 2F–4 are present in the discharge. If yes, continue to Item 7.16. If no, skip to Item 7.17.

Item 7.16. For each outfall, list any pollutant in Exhibit 2F–4 that you know or believe to be present in the discharge in Table C and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report it. Answer "Yes" to Item 7.16 once you have completed this task.

Note: Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed in Exhibit 2F-5) may be exempted from the requirements of CWA Section 311, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance can be exempted if the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. If you would like to apply for an exemption from the requirements of CWA Section 311, attach additional sheets of paper to your application, setting forth the following information:

1. The substance and the amount of each substance that might be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment to be provided for the discharge by:
   a. An onsite treatment system separate from any treatment system treating your normal discharge;
   b. A treatment system designed to treat your normal discharge and that is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
   c. Any combination of the above.

See 40 CFR 117.12(a)(2) and (c) or contact your NPDES permitting authority for further information on exclusions from CWA Section 311.

Item 7.17 and Table D. Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow weighted composite sample in Table D. If sampling is conducted during more than one storm event, you only need to report the information

requested on Table D for the storm event(s) that resulted in any maximum pollutant concentration reported on Tables A through C.

Provide flow measurements or estimates of the flow rate, as well as the total amount of discharge for the storm event(s) sampled, the method of flow measurement, or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements, or estimates of the storm event that generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event. Answer "Yes" to Item 7.17 once you have completed this task.

Used or Manufactured Toxics

Item 7.18. Review Exhibits 2F–2 through 2F–4 and determine if you currently use or manufacture any of the pollutants listed as intermediate or final products or byproducts. If so, answer "Yes." You should also answer "Yes" if you know or have reason to believe that 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD) is discharged or if you use or manufacture 2,4,5-trichlorphenoxy acetic acid (2,4,5-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorphenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP). If your answer to Item 7.18 is "No," skip to Section 8.

Item 7.19. List all of the toxic pollutants identified under Item 7.18, including TCDD. Note that the NPDES permitting authority may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the NPDES permitting authority has adequate information to issue your permit. You may not claim any information submitted in response to Item 7.18 as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Section 8. Biological Toxicity Testing Data

Item 8.1. Answer whether you know of or have reason to believe that biological toxicity testing has been conducted of your wastewater treatment, including engineering reports or pilot plant studies. If no, skip to Section 9. Otherwise, continue.

Item 8.2. List any tests of which you are aware and their purposes.

Section 9. Contract Analysis Information

Item 9.1. Indicate if any of the analyses performed in Section 7 were performed by a contract laboratory or consulting firm. If no, skip to Section 10. If yes, continue to Item 9.2.

Item 9.2. Provide the name, address, phone number, and pollutants analyzed by the laboratory or consulting firm(s) in the spaces provided.

Section 10. Checklist and Certification Statement

Item 10.1. Review the checklist provided on the application. In Column 1, mark the sections of Form 2F that you have completed and are submitting with your application. For each section in Column 2, indicate whether you are submitting attachments.

Item 10.2. The Clean Water Act (CWA) provides for severe penalties for submitting false information on this application form. Section 309(c)(2) of the CWA provides that, "Any person who knowingly makes any false material statement, representation, or certification in any application, ...shall upon conviction be punished by a fine of not more than $10,000 or by imprisonment for not more than six months or both."

FEDERAL REGULATIONS AT 40 CFR 122.22 REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

A. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.

C. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

END

Submit your completed Form 1, Form 2F, and all associated attachments (and any other required NPDES application forms) to your NPDES permitting authority.

General Instructions for Reporting, Sampling, and Analysis

Important note: Read these instructions before completing Tables A through C and Section 7 of Form 2F.

General Items

Complete the applicable tables for each outfall at your facility. Be sure to note the EPA Identification Number, NPDES permit number, facility name, and applicable outfall number at the top of each table page and any associated attachments.

You may report some or all of the required data by attaching separate sheets of paper instead of completing Tables A through C for each of your outfalls so long as the sheets contain all of the required information and are similar in format to Tables A through C. For example, you may be able to print a report in a compatible format from the data system used in your gas chromatography/ mass spectrometry (GC/MS) analysis completed under Table B.

If you are an existing discharger, you are required to report *actual* quantitative data. See "Use of Historic Data" below for use of historic data. If you are a new source or discharge, you may supply *estimated* data along with the source of each estimate. If you have quantitative data available, however, you must provide it. Base estimates on available, in-house or contractor engineering reports, or any other studies performed on the proposed facility. Use the following codes to report your source information in the "Source of Information" column:

Data Source	Code
Engineering reports	1
Actual data from pilot plants	1
Estimates from other engineering reports	2
Data from other similar plants	3
Best professional estimates	4
Others	5 and specify on the table

No later than 24 months after your facility commences to discharge, you must complete and submit sampling and analysis data for the pollutants and parameters in Tables A through C. However, you need not report results for tests you have already performed and reported under the discharge monitoring requirements of your NPDES permit.

Table A requires you to report at least one analysis for each pollutant listed. Tables B and C require you to report analytical data in two ways. For some pollutants addressed in Tables B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Tables B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See Items 7.2 through 7.17 of the instructions for completing Tables A through C.). Base your determination that a pollutant is/will be present in your discharge on your knowledge of the facility's raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent.

Sampling

The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or stormwater discharges. You may contact your NPDES permitting authority for detailed guidance on sampling techniques and for answers to specific questions. See Exhibit 1–1 of Form 1 for contact information. Any specific requirements in the analytical methods—for example, sample containers, sample preservation, holding times, and the collection of duplicate samples—must be followed.

The time when you sample should be representative of your normal operation, to the extent feasible, with all processes that contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Collect samples from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present NPDES permit, or at any site adequate for the collection of a representative sample.

Grab samples must be taken in the first 30 minutes of discharge (or as soon thereafter as practicable) for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*) and enterococci (previously known as fecal streptococcus at 40 CFR 122.26(d)(2)(iii)(A)(3)), and volatile organic compounds. You are not required to analyze a flow-weighted composite for these parameters.

For all other pollutants, both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples must be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

A grab sample must be taken during the first 30 minutes of the discharge (or as soon thereafter as practicable), and a flow-weighted composite must be taken for the entire event or for the first three hours of the event.

Grab and composite samples are defined as follows:

Grab sample: An individual sample of at least 100 milliliters collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

Flow-weighted composite sample: A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge

for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of 15 minutes between aliquot collections. The composite must be flow proportional; the time interval between either each aliquot or the volume of each aliquot must be proportional to either the stream (effluent) flow at the time of sampling or the total stream (effluent) flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. Where GC/MS volatile organic analysis is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Use of Historical Data

Existing data may be used, if available, in lieu of sampling conducted solely for the purposes of this application, provided it is representative of the present discharge and was collected within 3 years of the application due date. If you sample for a listed pollutant on a monthly or more frequent basis, summarize the data collected within one year of the application for the pollutant(s) at issue.

Among the factors that would cause the data to be unrepresentative are significant changes in production level; changes in raw materials, processes, or final products; and changes in stormwater treatment. The NPDES permitting authority may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The NPDES permitting authority may allow or establish appropriate site-specific sampling procedures or requirements including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rainfall), protocols for collecting samples under 40 CFR 136, and additional time for submitting data on a case-by-case basis.

Reporting

Report sampling results for all pollutants in Tables A through C as concentration *and* mass, with the exception of flow, temperature, pH, color, and fecal coliform organisms.

Flow, temperature, pH, color, and fecal coliform organisms must be reported as million gallons per day (mgd), degrees Celsius (°C), standard units, color units, and most probable number per 100 milliliters (MPN/100 mL), respectively. Use the following abbreviations in the columns requiring "units" in Tables A through C.

Concentration	Mass
ppm = parts per million	lbs = pounds
mg/L = milligrams per liter	ton = tons (English tons)
ppb = parts per billion	mg = milligrams
µg/L = micrograms per liter	g = grams
MPN = most probable number per 100 milliliters	kg = kilograms
	T = tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal" unless:

- An applicable, promulgated ELG specifies the limitation for the metal in dissolved, valent, or total form;
- All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- The NPDES permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations of the metal in dissolved, valent, or total form to carry out the provisions of the CWA.

If you measure only one grab sample and one flow-weighted composite sample for a given outfall, complete only the "Maximum Daily Discharge" columns in the tables and enter "1" in the "Number of Storm Events Sampled" column. The NPDES permitting authority may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are representative of your discharge, you must report them. You must describe your method of testing and analysis.

The "Average Daily Discharge" column on Tables A to C is *not* compulsory but should be filled out if data are available. To complete the "Average Daily Discharge" column, determine the average of all values within the last year and report the concentration and mass. Report the total number of storm events sampled under the "Number of Storm Events Sampled" column.

Substantially Identical Outfalls

If you have two or more substantially identical outfalls, you may request permission from your NPDES permitting authority to sample and analyze only one outfall and submit the results of the analysis for all substantially identical outfalls. If your request is granted, submit the following information on a separate sheet attached to the application form: the identity of the outfall you did test and an explanation of how it is substantially identical to the outfall(s) that you did not test.

Analysis

Except as specified below, all required quantitative data shall be collected in accordance with sufficiently sensitive analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O. A method is "sufficiently sensitive" when:

- The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter.
- The method ML is above the water quality criterion, but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge.

General Instructions for Reporting, Sampling, and Analysis Continued	
• The method has the lowest ML of the analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O, for the measured pollutant or pollutant parameter. Consistent with 40 CFR 136, you may provide matrix- or sample-specific MLs rather than the published levels. Further, where you can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive," the analytical results are not consistent with the quality assurance (QA)/quality control (QC) specifications for that method, then the NPDES permitting authority may determine that the method is not performing adequately and the NPDES permitting authority should	select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.21(e)(3)(i). Where no other EPA-approved methods exist, you must select a method consistent with 40 CFR 122.21(e)(3)(ii). When there is no analytical method that has been approved under 40 CFR 136; required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the NPDES permitting authority, you may use any suitable method but shall provide a description of the method. When selecting a suitable method, other factors such as a method's precision, accuracy, or resolution, may be considered when assessing the performance of the method.

Exhibit 2F–1. Codes for Treatment Units and Disposal of Wastes Not Discharged

1. PHYSICAL TREATMENT PROCESSES

1–A.....Ammonia stripping
1–B.....Dialysis
1–C .....Diatomaceous earth filtration
1–D .....Distillation
1–E.....Electrodialysis
1–F.....Evaporation
1–G .....Flocculation
1–H .....Flotation
1–I.....Foam fractionation
1–J .....Freezing
1–K.....Gas-phase separation
1–L .....Grinding (*comminutors*)
1–M.....Grit removal
1–N .....Microstraining
1–O.....Mixing
1–P .....Moving bed filters
1–Q.....Multimedia filtration
1–R .....Rapid sand filtration
1–S .....Reverse osmosis (*hyperfiltration*)
1–T .....Screening
1–U .....Sedimentation (*settling*)
1–V .....Slow sand filtration
1–W .....Solvent extraction
1–X .....Sorption

2. CHEMICAL TREATMENT PROCESSES

2–A.....Carbon adsorption
2–B.....Chemical oxidation
2–C .....Chemical precipitation
2–D .....Coagulation
2–E.....Dechlorination
2–F.....Disinfection (*chlorine*)
2–G.....Disinfection (*ozone*)
2–H .....Disinfection (*other*)
2–I.....Electrochemical treatment
2–J .....Ion exchange
2–K .....Neutralization
2–L.....Reduction

3. BIOLOGICAL TREATMENT PROCESSES

3–A.....Activated sludge
3–B.....Aerated lagoons
3–C .....Anaerobic treatment
3–D .....Nitrification–denitrification
3–E .....Pre-aeration
3–F .....Spray irrigation/land application
3–G.....Stabilization ponds
3–H .....Trickling filtration

4. WASTEWATER DISPOSAL PROCESSES

4–A.....Discharge to surface Water
4–B.....Ocean discharge through outfall
4–C .....Reuse/recycle of treated effluent
4–D .....Underground injection

5. SLUDGE TREATMENT AND DISPOSAL PROCESSES

5–A.....Aerobic digestion
5–B.....Anaerobic digestion
5–C .....Belt filtration
5–D .....Centrifugation
5–E.....Chemical conditioning
5–F.....Chlorine treatment
5–G .....Composting
5–H .....Drying beds
5–I.....Elutriation
5–J .....Flotation thickening
5–K.....Freezing
5–L.....Gravity thickening
5–M.....Heat drying
5–N .....Heat treatment
5–O.....Incineration
5–P .....Land application
5–Q.....Landfill
5–R .....Pressure filtration
5–S .....Pyrolysis
5–T .....Sludge lagoons
5–U .....Vacuum filtration
5–V .....Vibration
5–W .....Wet oxidation

Exhibit 2F–2. Conventional and Nonconventional Pollutants (40 CFR 122.21, Appendix D, Table IV)

Bromide
Chlorine, total residual
Color
Fecal coliform
Fluoride
Nitrate-nitrite
Nitrogen, total organic (as N)
Oil and grease
Phosphorus (as P), total
Radioactivity (as alpha, total; beta, total; radium, total; and radium 226, total)
Sulfate (as SO_4)
Sulfide (as S)
Sulfite (as SO_3)
Surfactants
Aluminum, total
Barium, total
Boron, total
Cobalt, total
Iron, total
Magnesium, total
Molybdenum, total
Manganese, total
Tin, total
Titanium, total

Exhibit 2F–3. Toxic Pollutants (40 CFR 122.21, Appendix D, Tables II and III)

Toxic Pollutants and Total Phenol

Antimony, total	Copper, total	Silver, total
Arsenic, total	Lead, total	Thallium, total
Beryllium, total	Mercury, total	Zinc, total
Cadmium, total	Nickel, total	Cyanide, total
Chromium, total	Selenium, total	Phenols, total

GC/MS Fraction—Volatile Compounds

Acrolein	Dichlorobromomethane	1,1,2,2-tetrachloroethane
Acrylonitrile	1,1-dichloroethane	Tetrachloroethylene
Benzene	1,2-dichloroethane	Toluene
Bromoform	1,1-dichloroethylene	1,2-trans-dichloroethylene
Carbon tetrachloride	1,2-dichloropropane	1,1,1-trichloroethane
Chlorobenzene	1,3-dichloropropylene	1,1,2-trichloroethane
Chlorodibromomethane	Ethylbenzene	Trichloroethylene
Chloroethane	Methyl bromide	Vinyl chloride
2-Chloroethylvinyl ether	Methyl chloride	
Chloroform	Methylene chloride	

GC/MS Fraction—Acid Compounds

2-chlorophenol	2,4-dinitrophenol	Pentachlorophenol
2,4-dichlorophenol	2-nitrophenol	Phenol
2,4-dimethylphenol	4-nitrophenol	2,4,6-trichlorophenol
4,6-dinitro-o-cresol	P-chloro-m-cresol	

GC/MS Fraction—Base/Neutral Compounds

Acenaphthene	4-chlorophenyl phenyl ether	Hexachlorobenzene
Acenaphthylene	Chrysene	Hexachlorobutadiene
Anthracene	Dibenzo (a,h) anthracene	Hexachlorocyclopentadiene
Benzidine	1,2-dichlorobenzene	Hexachloroethane
Benzo (a) anthracene	1,3-dichlorobenzene	Indeno (1,2,3-cd) pyrene
Benzo (a) pyrene	1,4-dichlorobenzene	Isophorone
3,4-benzofluoranthene	3,3-dichlorobenzidine	Naphthalene
Benzo (ghi) perylene	Diethyl phthalate	Nitrobenzene
Benzo (k) fluoranthene	Dimethyl phthalate	N-nitrosodimethylamine
Bis (2-chloroethoxy) methane	Di-n-butyl phthalate	N-nitrosodi-n-propylamine
Bis (2-chloroethyl) ether	2,4-dinitrotoluene	N-nitrosodiphenylamine
Bis (2-chloroisopropyl) ether	2,6-dinitrotoluene	Phenanthrene
Bis (2-ethylhexyl) phthalate	Di-n-octyl phthalate	Pyrene
4-bromophenyl phenyl ether	1,2-diphenylhydrazine (as azobenzene)	1,2,4-trichlorobenzene
Butyl benzyl phthalate	Fluoranthene	
2-chloronaphthalene	Fluorene	

GC/MS Fraction—Pesticides

Aldrin	Dieldrin	PCB-1254
α-BHC	α-endosulfan	PCB-1221
β-BHC	β-endosulfan	PCB-1232
γ-BHC	Endosulfan sulfate	PCB-1248
δ-BHC	Endrin	PCB-1260
Chlordane	Endrin aldehyde	PCB-1016
4,4'-DDT	Heptachlor	Toxaphene
4,4'-DDE	Heptachlor epoxide	
4,4'-DDD	PCB-1242	

Exhibit 2F–4. Certain Hazardous Substances and Asbestos (40 CFR 122.21, Appendix D, Table V)

Toxic Pollutant

Asbestos

Hazardous Substances

Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D (2,4-dichlorophenoxyacetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone
2,2-dichloropropionic acid
Dichlorvos
Diethyl amine
Dimethyl amine
Dintrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
Kelthane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Naphthenic acid
Nitrotoluene
Parathion
Phenolsulfonate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
Styrene
2,4,5-T (2,4,5-trichlorophenoxyacetic acid)
TDE (tetrachlorodiphenyl ethane)
2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]
Trichlorofon
Triethanolamine
Triethylamine
Trimethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

Exhibit 2F–5. Hazardous Substances

1. Acetaldehyde
2. Acetic acid
3. Acetic anhydride
4. Acetone cyanohydrin
5. Acetyl bromide
6. Acetyl chloride
7. Acrolein
8. Acrylonitrile
9. Adipic acid
10. Aldrin
11. Allyl alcohol
12. Allyl chloride
13. Aluminum sulfate
14. Ammonia
15. Ammonium acetate
16. Ammonium benzoate
17. Ammonium bicarbonate
18. Ammonium bichromate
19. Ammonium bifluoride
20. Ammonium bisulfite
21. Ammonium carbamate
22. Ammonium carbonate
23. Ammonium chloride
24. Ammonium chromate
25. Ammonium citrate
26. Ammonium fluoroborate
27. Ammonium fluoride
28. Ammonium hydroxide
29. Ammonium oxalate
30. Ammonium silicofluoride
31. Ammonium sulfamate
32. Ammonium sulfide
33. Ammonium sulfite
34. Ammonium tartrate
35. Ammonium thiocyanate
36. Ammonium thiosulfate
37. Amyl acetate
38. Aniline
39. Antimony pentachloricle
40. Antimony potassium tartrate
41. Antimony tribromide
42. Antimony trichloride
43. Antimony trifluoride
44. Antimony trioxide
45. Arsenic disulfide
46. Arsenic pentoxide
47. Arsenic trichloride
48. Arsenic trioxide
49. Arsenic trisulfide
50. Barium cyanide
51. Benzene
52. Benzoic acid
53. Benzonitrile
54. Benzoyl chloride
55. Benzyl chloride
56. Beryllium chloride
57. Beryllium fluoride
58. Beryllium nitrate
59. Butylacetate
60. n-butylphthalate
61. Butylamine
62. Butyric acid
63. Cadmium acetate
64. Cadmium bromide
65. Cadmium chloride
66. Calcium arsenate
67. Calcium arsenite
68. Calcium carbide
69. Calcium chromate
70. Calcium cyanide
71. Calcium dodecylbenzenesulfonate
72. *Calcium hypochlorite*
73. Captan
74. Carbaryl
75. Carbofuran
76. Carbon disulfide
77. Carbon tetrachloride
78. Chlordane
79. Chlorine
80. Chlorobenzene
81. Chloroform
82. Chloropyrifos
83. Chlorosulfonic acid
84. Chromic acetate
85. Chromic acid
86. Chromic sulfate
87. Chromous chloride
88. Cobaltous bromide
89. Cobaltous formate
90. Cobaltous sulfamate
91. Coumaphos
92. Cresol
93. Crotonaldehyde
94. Cupric acetate
95. Cupric acetoarsenite
96. Cupric chloride
97. Cupric nitrate
98. Cupric oxalate
99. Cupric sulfate
100. Cupric sulfate ammoniated
101. Cupric tartrate
102. Cyanogen chloride
103. Cyclohexane
104. 2,4-D acid (2,4-dichlorophenoxyacetic acid)
105. 2,4-D esters (2,4-dichlorophenoxyacetic acid esters)
106. DDT
107. Diazinon
108. Dicamba
109. Dichlobenil
110. Dichlone
111. Dichlorobenzene
112. Dichloropropane
113. Dichloropropene
114. Dichloropropene-dichloproropane mix
115. 2,2-dichloropropionic acid
116. Dichlorvos
117. Dieldrin
118. Diethylamine
119. Dimethylamine
120. Dinitrobenzene
121. Dinitrophenol
122. Dinitrotoluene
123. Diquat
124. Disulfoton
125. Diuron
126. Dodecylbenzesulfonic acid
127. Endosulfan
128. Endrin
129. Epichlorohydrin
130. Ethion
131. Ethylbenzene
132. Ethylenediamine
133. Ethylene dibromide
134. Ethylene dichloride
135. Ethylene diaminetetracetic acid (EDTA)
136. Ferric ammonium citrate
137. Ferric ammonium oxalate
138. Ferric chloride
139. Ferric fluoride
140. Ferric nitrate
141. Ferric sulfate
142. Ferrous ammonium sulfate
143. Ferrous chloride
144. Ferrous sulfate
145. Formaldehyde
146. Formic acid
147. Fumaric acid
148. Furfural
149. Guthion
150. Heptachlor
151. Hexachlorocyclopentadiene
152. Hydrochloric acid
153. Hydrofluoric acid
154. Hydrogen cyanide
155. Hydrogen sulfide
156. Isoprene
157. Isopropanolamine dodecylbenzenesulfonate
158. Kelthane
159. Kepone
160. Lead acetate
161. Lead arsenate
162. Lead chloride
163. Lead fluoborate
164. Lead fluorite
165. Lead iodide
166. Lead nitrate
167. Lead stearate
168. Lead sulfate
169. Lead sulfide
170. Lead thiocyanate
171. Lindane
172. Lithium chromate
173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled
191. Naphthalene
192. Naphthenic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenol
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol
206. Phenol
207. Phosgene
208. Phosphoric acid
209. Phosphorus
210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (PCB)
214. Potassium arsenate
215. Potassium arsenite

Exhibit 2F–5. Hazardous Substances

216. Potassium bichromate
217. Potassium chromate
218. Potassium cyanide
219. Potassium hydroxide
220. Potassium permanganate
221. Propargite
222. Propionic acid
223. Propionic anhydride
224. Propylene oxide
225. Pyrethrins
226. Quinoline
227. Resorcinol
228. Selenium oxide
229. Silver nitrate
230. Sodium
231. Sodium arsenate
232. Sodium arsenite
233. Sodium bichromate
234. Sodium bifluoride
235. Sodium bisulfite
236. Sodium chromate
237. Sodium cyanide
238. Sodium dodecylbenzenesulfonate
239. Sodium fluoride
240. Sodium hydrosulfide
241. Sodium hydroxide
242. Sodium hypochlorite
243. Sodium methylate
244. Sodium nitrite
245. Sodium phosphate (dibasic)
246. Sodium phosphate (tribasic)
247. Sodium selenite
248. Strontium chromate
249. Strychnine
250. Styrene
251. Sulfuric acid
252. Sulfur monochloride
253. 2,4,5-T acid (2,4,5-trichlorophenoxyacetic acid)
254. 2,4,5-T amines (2,4,5-trichlorophenoxy acetic acid amines)
255. 2,4,5-T esters (2,4,5-trichlorophenoxy acetic acid esters)
256. 2,4,5-T salts (2,4,5-trichlorophenoxy acetic acid salts)
257. 2,4,5-TP acid (2,4,5-trichlorophenoxy propanoic acid)
258. 2,4,5-TP acid esters (2,4,5-trichlorophenoxy propanoic acid esters)
259. TDE (tetrachlorodiphenyl ethane)
260. Tetraethyl lead
261. Tetraethyl pyrophosphate
262. Thallium sulfate
263. Toluene
264. Toxaphene
265. Trichlorofon
266. Trichloroethylene
267. Trichlorophenol
268. Triethanolamine dodecylbenzenesulfonate
269. Triethylamine
270. Trimethylamine
271. Uranyl acetate
272. Uranyl nitrate
273. Vanadium penoxide
274. Vanadyl sulfate
275. Vinyl acetate
276. Vinylidene chloride
277. Xylene
278. Xylenol
279. Zinc acetate
280. Zinc ammonium chloride
281. Zinc borate
282. Zinc bromide
283. Zinc carbonate
284. Zinc chloride
285. Zinc cyanide
286. Zinc fluoride
287. Zinc formate
288. Zinc hydrosulfite
289. Zinc nitrate
290. Zinc phenolsulfonate
291. Zinc phosphide
292. Zinc silicofluoride
293. Zinc sulfate
294. Zirconium nitrate
295. Zirconium potassium fluoride
296. Zirconium sulfate
297. Zirconium tetrachloride

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

Form 2F NPDES

U.S Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

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

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below

Outfall Number	Receiving Water Name	Latitude	Longitude
002S	Faye Branch	32° 25′ 43.67″ N	-86° 24′ 11.36″ W
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″

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

Improvements

2.1 Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☑ No ➔ SKIP to Section 3.

2.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

2.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (Optional Item)

☐ Yes ☐ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(c)(1)(i)(A))

Site Drainage Map

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

☑ Yes ☐ No

SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(c)(1)(i)(B))

Pollutant Sources

4.1 Provide information on the facility's pollutant sources in the table below.

Outfall Number	Impervious Surface Area (within a mile radius of the facility)		Total Surface Area Drained (within a mile radius of the facility)	
002S	2.77 (+/-)	specify units: acres	9.20 (+/-)	specify units: acres
		specify units		specify units
		specify units		specify units
		specify units		specify units
		specify units		specify units
		specify units		specify units

4.2 Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)

The Pine Creek CWF stores diesel fuel and oils inside buildings to limit exposure to runoff. Polymer is stored inside as well. Roundup type weed killer is used along the fence line approximately 4 times per your. All other grass is mowed.

4.3 Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)

Stormwater Treatment		
Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F–1 (list)
002S	The rain garden provides detention & natural filtration of runoff prior to entering the	
	stormwater piping system	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

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

Non-Stormwater Discharges

5.1 *I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.*

Name (print or type first and last name)	Official title
Bill Gillespie, Jr.	Mayor
Signature	**Date signed**
Bill Gillespie	12-07-23

5.2 Provide the testing information requested in the table below.

Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test

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

Significant Leaks or Spills

6.1 Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years.

There have been no significant leaks or spills at the Pine Creek CWF in that past three years.

SECTION 7. DISCHARGE INFORMATION (40 CFR 122.26(c)(1)(i)(E))

Discharge Information

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

7.1 Is this a new source or new discharge?

☐ Yes → See instructions regarding submission of *estimated* data. ☑ No → See instructions regarding submission of *actual* data.

Tables A, B, C, and D

7.2 Have you completed Table A for each outfall?

☑ Yes ☐ No

Discharge Information Continued

7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? ☐ Yes ☑ No ➔ SKIP to Item 7.5.
7.4	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater? ☐ Yes ☐ No
7.5	Do you know or have reason to believe any pollutants in Exhibit 2F–2 are present in the discharge? ☐ Yes ☑ No ➔ SKIP to Item 7.7.
7.6	Have you listed all pollutants in Exhibit 2F–2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C? ☐ Yes ☐ No
7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? ☐ Yes ➔ SKIP to Item 7.18. ☑ No
7.8	Do you know or have reason to believe any pollutants in Exhibit 2F–3 are present in the discharge? ☐ Yes ☑ No ➔ SKIP to Item 7.10.
7.9	Have you listed all pollutants in Exhibit 2F–3 that you know or have reason to believe are present in the discharge in Table C? ☐ Yes ☐ No
7.10	Do you expect any of the pollutants in Exhibit 2F–3 to be discharged in concentrations of 10 ppb or greater? ☐ Yes ☑ No ➔ SKIP to Item 7.12.
7.11	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F–3 that you expect to be discharged in concentrations of 10 ppb or greater? ☐ Yes ☐ No
7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? ☐ Yes ☑ No ➔ SKIP to Item 7.14.
7.13	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater? ☐ Yes ☐ No
7.14	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)? ☐ Yes ☑ No
7.15	Do you know or have reason to believe any pollutants in Exhibit 2F–4 are present in the discharge? ☐ Yes ☑ No ➔ SKIP to Item 7.17.
7.16	Have you listed pollutants in Exhibit 2F–4 that you know or believe to be present in the discharge and provided an explanation in Table C? ☐ Yes ☐ No
7.17	Have you provided information for the storm event(s) sampled in Table D? ☑ Yes ☐ No

Discharge Information Continued

Used or Manufactured Toxics

7.18 Is any pollutant listed on Exhibits 2F–2 through 2F–4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct?

☐ Yes ☑ No ➔ SKIP to Section 8.

7.19 List the pollutants below, including TCDD if applicable.

1.	4.	7.
2.	5.	8.
3.	6.	9.

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

Biological Toxicity Testing Data

8.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years?

☐ Yes ☑ No ➔ SKIP to Section 9.

8.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	

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

Contract Analysis Information

9.1 Were any of the analyses reported in Section 7 (on Tables A through C) performed by a contract laboratory or consulting firm?

☑ Yes ☐ No ➔ SKIP to Section 10.

9.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	Pace Analytical		
Laboratory address	3516 Greensboro Avenue Tuscaloosa, AL 35401		
Phone number	(205) 614-6630		
Pollutant(s) analyzed	See attached		

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

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

Checklist and Certification Statement

10.1 In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.

Column 1	Column 2
☑ Section 1	☐ w/ attachments (e.g., responses for additional outfalls)
☐ Section 2	☐ w/ attachments
☑ Section 3	☑ w/ site drainage map
☑ Section 4	☐ w/ attachments
☐ Section 5	☐ w/ attachments
☑ Section 6	☐ w/ attachments
☑ Section 7	☑ Table A ☐ w/ small business exemption request ☐ Table B ☐ w/ analytical results as an attachment ☐ Table C ☐ Table D
☐ Section 8	☐ w/attachments
☐ Section 9	☐ w/attachments (e.g., responses for additional contact laboratories or firms)
☑ Section 10	☐

10.2 **Certification Statement**

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.

Name (print or type first and last name)	Official title
Bill Gillespie, Jr.	Mayor
Signature: Bill Gillespie	Date signed: 12-07-23

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	002S

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

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

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

	Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	ND				1	
2.	Biochemical oxygen demand (BOD_5)	40.9 mg/L	1.6 mg/L			1	
3.	Chemical oxygen demand (COD)	132 mg/L	20.0 mg/L			1	
4.	Total suspended solids (TSS)	540 mg/L	ND			1	
5.	Total phosphorus	0.43 mg/L	0.15 mg/L			1	
6.	Total Kjeldahl nitrogen (TKN)	3.6 mg/L	0.73 mg/L			1	
7.	Total nitrogen (as N)	6.8 mg/L	1.0 mg/L			1	
8.	pH (minimum)	8.83 S.U.				1	
	pH (maximum)	N/A				1	

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

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	002S

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

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		

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

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0027723	Pine Creek CWF	002S

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

TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

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

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		

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

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EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
	AL0027723	Pine Creek CWF	002S

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

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

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

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
12/06/2021	0.42	0.10	>48	Unknown	0.810 CFS or 0.524 MGD

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

Rational Method calculation was used based on the storm event intensity and calculated site specific runoff coefficient.

United States Environmental Protection Agency | Office of Water Washington, D.C. | EPA Form 3510-2S Revised March 2019

Water Permits Division

Application Form 2S

New and Existing Treatment Works Treating Domestic Sewage

NPDES Permitting Program

Note: Complete Form 2S if you are a new or existing treatment works treating domestic sewage.

Paperwork Reduction Act Notice

The U.S. Environmental Protection Agency estimates the average burden to collect and complete Form 2S to be 9.1 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments about the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

Who Must Complete Form 2S?

A person must complete Form 2S to apply for a National Pollutant Discharge Elimination System (NPDES) permit covering sewage sludge (biosolids) use or disposal standards if they own or operate a treatment works treating domestic sewage (TWTDS). A person is an owner or operator of a TWTDS if the facility generates, changes the quality of, or provides final disposition of solids, practices for which are ultimately subject to Part 503 of Title 40 of the *Code of Federal Regulations* (CFR).[1]

The TWTDS that are *required* to apply for NPDES permits include the following:

- All generators of sewage sludge that are regulated by 40 CFR 503 (i.e., it is applied to the land, placed on a surface disposal site, fired in a sewage sludge incinerator, or placed in a municipal solid waste landfill unit).
- Industrial facilities that *separately* treat domestic sewage and generate sewage sludge that are regulated by 40 CFR 503.
- All surface disposal site owners/operators.
- All sewage sludge incinerator owners/operators.
- Any person (e.g., individual, corporation, or government entity) who changes the quality of sewage sludge regulated by 40 CFR 503 (e.g., sewage sludge blenders or processors).[2]
- Any other person or facility designated by the NPDES permitting authority as a TWTDS.

TWTDSs and other persons that *may* be required to apply for an NPDES permit[3] include the following:

- Sewage sludge land appliers, haulers, persons who store, or transporters who do not generate or do not change the quality of the sewage sludge.
- Landowners of property on which sewage sludge are applied.
- Domestic septage pumpers/haulers/treaters/appliers.
- Sewage sludge packagers/baggers that do not change the quality of the sewage sludge.

If any of the above TWTDS categories are owned and operated by different persons/entities, it is the operator's duty to obtain the NPDES permit.

Notes

[1]The U.S. Environmental Protection Agency (EPA) developed regulations in 1993 as required by the Clean Water Act (CWA) Amendments of 1987 to protect public health and the environment from any reasonably anticipated adverse effects of pollutants that might be present in sewage sludge biosolids. The regulation, *The Standards for the Use or Disposal of Sewage Sludge* (40 CFR 503) was published in the *Federal Register* on February 19, 1993 (58 CFR 9248 to 9404) and became effective March 22, 1993. The regulations are often referred to as "the Part 503 rule" or "Part 503."

[2]If all the sewage sludge received by a sewage sludge blender or composter are of exceptional quality (EQ) per 40 CFR 503, then no permit will be required for the person who receives or processes the EQ sludge.

[3]The NPDES permitting authority may request permit applications from these facilities when necessary to protect public health and the environment from reasonably anticipated effects of pollutants that may be present in sewage sludge.

If you are a TWTDS and discharge wastewater to surface water, you must also complete NPDES application Form 2A.

40 CFR 503 defines "sewage sludge" as a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes scum or solids removed in primary, secondary, or advanced wastewater treatment processes and any material derived from sewage sludge (e.g., a blended sewage sludge/fertilizer product) but does not include grit and screenings or ash generated by the firing of sewage sludge in an incinerator.

40 CFR 503 considers domestic septage as sewage sludge and sets separate requirements for domestic septage applied to agricultural land, forests, or reclamation sites. "Domestic septage" is defined as a liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar system that receives only domestic sewage. The 40 CFR 503 definition of domestic septage excludes grease-trap pumpings and commercial or industrial waste.

At the state level, either EPA or an approved state agency administers the NPDES permit program. If you are located in a jurisdiction in which an EPA regional office administers the NPDES permit program, you should use Form 2S. If you are located in a jurisdiction where a state administers the NPDES permit program, contact the state to determine the forms you should complete. States often develop their own application forms rather than use the federal forms. See http://www.epa.gov/npdes/npdes-state-program-information for a list of states that have approved NPDES permit programs and those that do not.

Exhibit 2S–1 (see end of this section) provides contact information for each of EPA's 10 regional offices. Since the exhibit's content is subject to change, consult EPA's website for the latest information: http://www.epa.gov/aboutepa#regional.

Where to File Your Completed Form

- If you are in a jurisdiction with an approved state sewage sludge NPDES permit program, file according to the instructions on the state forms.
- If you are in a jurisdiction where EPA is the sewage sludge NPDES permitting authority (i.e., the state is *not* a sewage-sludge-authorized state), mail the completed application forms to the EPA regional office that covers the state in which your facility is located (see Exhibit 2S–1).
- To determine where to send your completed Form 2S, visit http://www.epa.gov/biosolids/forms/contact-us-about-biosolids.

When to File Your Completed Form

A TWTDS with a currently effective NPDES permit must submit a permit application at the time of its next NPDES permit renewal application (i.e., at least 180 days before your present NPDES permit expires). Any other TWTDS must submit the information in Part 1 of Form 2S within one year after publication of a standard applicable to its sewage sludge or disposal practice(s). The

NPDES permitting authority will determine when such TWTDS must submit a full permit application. The NPDES permitting authority may require permit applications from a TWTDS at any time if it determines that a permit is necessary to protect public health and the environment from any potential adverse effects that may occur from toxic pollutants in sewage sludge. Any TWTDS that commences operations after promulgation of an applicable "standard for sewage sludge use or disposal" must submit an application to the NPDES permitting authority at least 180 days prior to the date proposed for commencing operations.

Fees

EPA does not require applicants to pay a fee for applying for NPDES permits. However, states that administer the NPDES programs may charge fees. Consult with state officials for further information.

Public Availability of Submitted Information

EPA will make information from NPDES permit application forms available to the public for inspection and copying upon request. You may not claim any information on Form 2S (or related attachments) as confidential.

You may make a claim of confidentiality for any information that you submit to EPA that goes beyond the information required by Form 2S. Note that NPDES authorities will deny claims for treating any biosolids data as confidential. If you do not assert a claim of confidentiality at the time you submit your information to the NPDES permitting authority, EPA may make the information available to the public without further notice to you. EPA will handle claims of confidentiality in accordance with the Agency's business confidentiality regulations at Part 2 of Title 40 of the CFR.

Completion of Forms

Print or type in the specified areas only. If you do not have enough space on the form to answer a question, you may continue on additional sheets, as necessary, using a format consistent with the form.

Provide your EPA Identification Number from the Facility Registry Service, NPDES permit number, and facility name at the top of each page of Form 2S and any attachments. If your facility is new (i.e., not yet constructed), write or type "New Facility" in the space provided for the EPA Identification Number and NPDES permit number. If you do not know your EPA Identification Number, contact your NPDES permitting authority. See Exhibit 2S–1 for contact information.

Do not leave any response areas blank unless the form directs you to skip them. If the form directs you to respond to an item that does not apply to your facility or activity, enter "NA" for "not applicable" to show that you considered the item and determined a response was not necessary for your facility.

If you have previously submitted information that answers a specific question to EPA or an approved state NPDES agency, you may either repeat the information in the space provided or attach a copy of the previous submission. Some items in the form require narrative explanations. If more space is necessary to answer a question, attach a separate sheet titled "Additional Information." Provide your information on this attachment in a format that is consistent with the form.

Upon request of the NPDES permitting authority, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

The NPDES permitting authority will consider your application complete when it and any supplementary material are received and completed according to the authority's satisfaction. The NPDES permitting authority will judge the completeness of any application independently of the status of any other permit application or permit for the same facility or activity.

Which Parts of the Form Apply?

Form 2S is presented in a modular format, enabling information collection to be tailored to your facility's sewage sludge generation, treatment, use, or disposal practices. The form specifies which parts must be filled out for each type of applicant.

Part 1 requests a limited amount of information from "sludge-only" facilities (facilities without a currently effective NPDES permit) that are not directed by the permitting authority to submit a full permit application at this time. It is intended to allow the permitting authority to identify these facilities, track sewage sludge use and disposal, and establish priorities for permitting.

Part 2 is for any facility that is submitting a full NPDES permit application. See Exhibit 2S–2, at the end of these general instructions, to determine which sections of Part 2 cover your facility's sewage sludge use or disposal practices.

Complete the "Preliminary Information" section on page 1 by indicating whether your facility has an effective NPDES permit or you have been directed by your NPDES permitting authority to submit a full Form 2S permit application. If yes, skip Part 1 and complete Part 2 of the application package (see the line-by-line instructions for Part 2). If no, complete only Part 1 of the application package.

Definitions

The legal definitions of all key terms used in the various NPDES application forms are included in the "Glossary" at the end of these instructions.

Exhibit 2S–1. Addresses of EPA Regional Contacts and Covered States

REGION 1 U.S. Environmental Protection Agency, Region 1 5 Post Office Square, Suite 100, Boston, MA 02109-3912 Phone: (617) 918-1111; toll free: (888) 372-7341 Fax: (617) 918-0101 Website: http://www.epa.gov/aboutepa/epa-region-1-new-england Covered states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	**REGION 6** U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200, Dallas, TX 75202-2733 Phone: (214) 665-2200; toll free: (800) 887-6063 Fax: (214) 665-7113 Website: http://www.epa.gov/aboutepa/epa-region-6-south-central Covered states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
REGION 2 U.S. Environmental Protection Agency, Region 2 290 Broadway, New York, NY 10007-1866 Phone: (212) 637-3000; toll free: (877) 251-4575 Fax: (212) 637-3526 Website: http://www.epa.gov/aboutepa/epa-region-2 Covered states: New Jersey, New York, Virgin Islands, and Puerto Rico	**REGION 7** U.S. Environmental Protection Agency, Region 7 11201 Renner Boulevard, Lenexa, KS 66219 Phone: (913) 551-7003; toll free: (800) 223-0425 Website: http://www.epa.gov/aboutepa/epa-region-7-midwest Covered states: Iowa, Kansas, Missouri, and Nebraska
REGION 3 U.S. Environmental Protection Agency, Region 3 1650 Arch Street, Philadelphia, PA 19103-2029 Phone: (215) 814-5000; toll free: (800) 438-2474 Fax: (215) 814-5103 Website: http://www.epa.gov/aboutepa/epa-region-3-mid-atlantic Covered states: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	**REGION 8** U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street, Denver, CO 80202-1129 Phone: (303) 312-6312; toll free: (800) 227-8917 Fax: (303) 312-6339 Website: http://www.epa.gov/aboutepa/epa-region-8-mountains-and-plains Covered states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming
REGION 4 U.S. Environmental Protection Agency, Region 4 Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW, Atlanta, GA 30303-8960 Phone: (404) 562-9900; toll free: (800) 241-1754 Fax: (404) 562-8174 Website: http://www.epa.gov/aboutepa/about-epa-region-4-southeast Covered states: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee	**REGION 9** U.S. Environmental Protection Agency, Region 9 75 Hawthorne Street, San Francisco, CA 94105 Phone: (415) 947-8000; toll free: (866) EPA-WEST Fax: (415) 947-3553 Website: http://www.epa.gov/aboutepa/epa-region-9-pacific-southwest Covered states: Arizona, California, Hawaii, Nevada, Guam, American Samoa, and Trust Territories
REGION 5 U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, Chicago, IL 60604-3507 Phone: (312) 353-2000; toll free: (800) 621-8431 Fax: (312) 353-4135 Website: http://www.epa.gov/aboutepa/epa-region-5 Covered states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	**REGION 10** U.S. Environmental Protection Agency, Region 10 1200 Sixth Avenue, Suite 900, Seattle, WA 98101 Phone: (206) 553-1200; toll free: (800) 424-4372 Fax: (206) 553-2955 Website: http://www.epa.gov/aboutepa/epa-region-10-pacific-northwest Covered states: Alaska, Idaho, Oregon, and Washington

Exhibit 2S–2. Part 2 Sections to Complete

Activity(ies) Performed	Part 2 Sections to Complete				
	1	2	3	4	5
	GENERAL INFORMATION	GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE	LAND APPLICATION OF BULK SEWAGE SLUDGE	SURFACE DISPOSAL	INCINERATION
Generates sewage sludge or derives material from sewage sludge that: • Meets ceiling concentrations in Table 1 of 40 CFR 503.13, pollutant concentrations in Table 3 of Section 503.13, Class A pathogen requirements in Section 503.32, and one of the eight vector attraction reduction options in 40 CFR 503.33(b)(1)–(8) • Is sold or given away in bags or other containers for application to the land (and not already addressed in Item 2.4) • Is shipped off site for treatment or blending • Is placed on a surface disposal site • Is fired in an incinerator • Is sent to a municipal solid waste landfill	✓	✓			
Generates sewage sludge or derives material from sewage sludge that is applied to the land in bulk form	✓	✓	✓		
Applies bulk sewage sludge to land or generates sewage sludge that is applied to the land by others	✓		✓		
Owns or operates a surface disposal site	✓			✓	
Owns or operates a sewage sludge incinerator	✓				✓

Part 1—Limited Background Information

Complete Part 1 if your facility is a "sludge-only" facility (i.e., a facility that does not currently have, and is not applying for, an NPDES permit for a direct discharge to a surface body of water).

Section 1. Facility Information

Item 1.1. Enter the facility's official or legal name. Do not use a colloquial name. Provide the *mailing* address of the facility. Next, give the name (first and last), title, work telephone number, and email address of the person who is thoroughly familiar with the operation of the facility and with the facts reported in this application.

Include a complete *location address* for the facility if different from the mailing address. If the facility or site lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 1.2. Indicate the legal status of the owner of the facility by marking the appropriate box. If the facility is a federal facility (i.e., owned by the U.S. government), check the box for "Public—federal." If the facility is owned by a state government, check the box for "Public—state." If the facility is owned by a county government, municipal (e.g., city or town) government, tribal government, school district, water district, or other local government entity, check the box for "Other public" and specify the type of government entity. If the facility is owned by a corporation or other private entity, check the box for "Private." If the facility has mixed ownership (e.g., public/private) or is not owned by an entity previously listed, check the box for "Other" and specify the type of entity.

Section 2. Applicant Information

Item 2.1. Indicate if the applicant is different from the entity listed under Item 1.1. If yes, continue to Item 2.2. If no, skip to Item 2.3 (Part 1, Section 2).

Item 2.2. Enter the applicant's name and mailing address. Provide the name (first and last), title, work telephone number, and email address of the contact person for the applicant.

Item 2.3. Indicate if the applicant is the facility's owner, operator, or both.

Item 2.4. Specify whether the NPDES permitting authority should send correspondence to the facility or the applicant.

Section 3. Sewage Sludge Amount

Item 3.1. Provide the total dry metric tons of sewage sludge generated, treated, used (i.e., received from off site), and disposed over the last 365-day period.

Section 4. Pollutant Concentrations

Item 4.1. Provide the most recent sewage sludge monitoring data available on the quality of the sewage sludge, including for pollutants for which limits in sewage sludge have been established in 40 CFR 503 for your facility's expected use or disposal practices. Provide the average monthly concentration in milligrams per kilogram (mg/kg) dry weight, analytical method, and detection level. If available, base data on three or more samples taken at least one month apart, no more than 4.5 years old. If providing the monitoring data in a separate attachment, check the box to indicate that this information has been attached to the application package.

Section 5. Treatment Provided at Your Facility

Item 5.1. In the "Use or Disposal Practice" column, check the sewage sludge use or disposal practice used at your facility. In the following columns, indicate the amount of sewage sludge used or disposed of, the pathogen class and reduction alternative, and the vector attraction reduction option associated with the practice. To determine the applicable pathogen class and reduction alternative, see 40 CFR 503.32. To determine the applicable vector attraction reduction option, see 40 CFR 503.33. Vector attraction reduction options 1 through 8 are typically met at the point where sewage sludge is generated or where a material is derived from sewage sludge, and options 9 through 11 are typically met at the point of use or disposal. Complete Item 5.1 for each sewage sludge use or disposal practice by attaching additional sheets, as necessary.

Item 5.2. For each use or disposal practice indicated in Item 5.1, identify the treatment process(es) used at your facility to reduce pathogens or vector attraction properties in sewage sludge. If you check "Other," specify the treatment process(es) in the space provided or in a separate attachment.

Section 6. Sewage Sludge Sent to Other Facilities

Item 6.1. Indicate whether the sewage sludge meets ceiling concentrations in Table 1 of 40 CFR 503.13, pollutant concentrations in Table 3 of 40 CFR 53.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), *and* one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8). If yes, skip to Item 8.1 (Part 1, Section 8). If no, continue to Item 6.2.

Item 6.2. Indicate whether sewage sludge from your facility is provided to another facility for treatment, distribution or disposal. If yes, continue to Item 6.3. If no, skip to Item 7.1 (Part 1, Section 7).

Item 6.3. Enter the name and mailing address of the receiving facility. Provide the name (first and last), title, work telephone number, and email address of the contact person for the receiving facility.

Item 6.4. Indicate the activities provided by the receiving facility. If you check "Other," provide a description in the space provided or in a separate attachment.

Section 7. Use and Disposal Sites

Complete Items 7.1 through 7.2 for each site on which sewage sludge from the facility is used or disposed of. Check the box to indicate that this information has been attached to the application package.

Item 7.1. Specify the site name or number and mailing address. Provide the name (first and last), title, work telephone number, and email address of the contact person for the use or disposal site.

Include a complete location address for the site if different from the mailing address. If the facility or site lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 7.2. Identify the type of use or disposal site (e.g., agricultural, surface disposal, reclamation, lawn or home garden, public contact, municipal solid waste landfill, forest, incineration). If you check "Other," provide a description in the space provided or in a separate attachment.

Section 8. Checklist and Certification Statement

Item 8.1. Review the checklist provided. In Column 1, mark the sections of Form 2S, Part 1, that you have completed and are submitting with your application. For each section that you have completed, indicate in Column 2 whether you are submitting attachments.

Item 8.2. The CWA provides for severe penalties for submitting false information on this application form. CWA Section 309(c)(2) provides that "Any person who knowingly makes any false statement, representation, or certification in any application, ...shall upon conviction, be punished by a fine of no more than $10,000 or by imprisonment for not more than six months, or both."

FEDERAL REGULATIONS AT 40 CFR 122.22 REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

A. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.

C. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

END OF PART 1

Submit your completed Part 1 of Form 2S and all associated attachments to your NPDES permitting authority.

Part 2—Permit Application Information

Complete Part 2 if you have an effective NPDES permit or have been directed by the NPDES permitting authority to submit a full permit application. Part 2 is divided into five sections. Section 1 pertains to all applicants. The applicability of Sections 2 to 5 depends on your facility's sewage sludge use or disposal practices. See Exhibit 2S–2 at the end of the general instructions to determine the sections that you are required to complete.

Section 1. General Information

Facility Information

Item 1.1. Enter the facility's official or legal name. Do not use a colloquial name. Provide the *mailing address* of the facility. Next, give the name (first and last), title, work telephone number, and email address of the person who is thoroughly familiar with the operation of the facility and with the facts reported in this application.

Include a complete *location address* for the facility if different from the mailing address. If the facility or site lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 1.2. Indicate whether the facility is a Class I sludge management facility.

Item 1.3. Provide the facility design flow rate in million gallons per day (mgd).

Item 1.4. Provide the total population served by the facility. Enter the best estimate of the actual population served at the time of application for all areas served by the treatment works (municipalities and unincorporated service areas). If another treatment works discharges into this treatment works, provide on a separate attachment the name of the other treatment works and the actual population it serves. It is not necessary to list the communities served by the other treatment works.

Item 1.5. Indicate the ownership status of the owner of the facility by marking the appropriate box. If the facility is a federal facility (i.e., owned by the U.S. government), check the box for "Public—federal." If the facility is owned by a state government, check the box for "Public—State." If the facility is owned by a county government, municipal (e.g., city or town) government, tribal government, school district, water district, or other local government entity, check the box for "Other public" and specify the type of government entity. If the facility is owned by a corporation or other private entity, check the box for "Private." If the facility has mixed ownership (e.g., public/private) or is not owned by an entity previously listed, check the box for "Other" and specify the type of entity.

Applicant Information

Item 1.6. Indicate if the applicant is different from the entity listed under Item 1.1. If yes, continue to Item 1.7. If no, skip to Item 1.8 (Part 2, Section 1).

Item 1.7. Enter the applicant's name and mailing address. Provide the name (first and last), title, work telephone number, and email address of the contact person for the applicant.

Item 1.8. Indicate if the applicant is the facility's owner, operator, or both.

Item 1.9. Specify whether the NPDES permitting authority should send correspondence to the facility or the applicant.

Permit Information

Item 1.10. Provide the facility's NPDES permit number or check the box to indicate that you do not have an NPDES permit number but are otherwise required to submit Part 2 of Form 2S by your NPDES permitting authority.

Item 1.11. Indicate all other federal, state, and local permits or construction approvals received or applied for that regulate the facility's sewage sludge management practices. If you check "Other," specify the permit or approval in the space provided. You may list permits or approvals and corresponding permit numbers in a separate attachment. If so, check the box to indicate that this information has been attached to the application package.

Indian Country

Item 1.12. Indicate whether any generation, treatment, storage, application to land, or disposal of sewage sludge from the facility occurs in Indian Country. If yes, continue to Item 1.13. If no, skip to Item 1.14 (Part 2, Section 1).

Item 1.13. In the space provided or in a separate attachment, describe the generation, treatment, storage, land application, or disposal of sewage sludge that occurs in Indian Country.

Topographic Map

Item 1.14. Provide a topographic map(s) of the area extending at least 1 mile beyond the property boundaries of the facility that clearly shows the following:

- The legal boundaries of the facility.
- All sewage sludge management facilities, including onsite treatment, storage, and disposal sites.
- Wells, springs, and other surface water bodies that are within ¼ mile of the property boundaries and listed in public records or otherwise known to applicant.

On the map, include the map scale, a meridian arrow showing north, and latitude and longitude to the nearest second. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or USGS).

You may develop your map by going to USGS's National Map website at http://nationalmap.gov/. (For a map from this site, use the traditional 7.5-minute quadrangle format. If none is available, use a USGS 15-minute series map.) You may also use a plat or other appropriate map.

Note that you have completed your topographic map and attached it to the application.

Line Drawing

Item 1.15. Provide a line drawing and/or narrative description that identifies all sewage sludge practices that will be employed during the permit term, including all units used for collecting, dewatering, storing, or treating sewage sludge; the destination(s) of all liquids and solids leaving each such unit; and all processes used for pathogen reduction and vector attraction reduction. Answer "Yes" when a line drawing and/or narrative description containing all required information has been attached to the application.

Contractor Information

Item 1.16. Indicate whether contractors have any operational or maintenance responsibilities related to sewage sludge generation, treatment, use, or disposal at the facility. If yes, continue to Item 1.17. If no, skip to Item 1.8 (Part 2, Section 1).

Item 1.17. Provide the company name, mailing address, contact name (first and last), telephone number, and email address for each contractor and describe the contractor's responsibilities. The application form provides reporting space for three contractors. If your facility has more than three contractors, attach additional sheets as necessary.

Pollutant Concentrations

Item 1.18. Provide the most recent sewage sludge monitoring data available on the quality of the sewage sludge, including for pollutants for which limits in sewage sludge have been established in 40 CFR 503 for your facility's expected use or disposal practices. Provide the average monthly concentration in milligrams per kilogram (mg/kg) dry weight, analytical method, and detection level. If available, base data on three or more samples taken at least one month apart, no more than 4.5 years old. If providing the monitoring data in a separate attachment, check the box to indicate that this information has been attached to the application package.

Checklist and Certification Statement

Item 1.19. Review the checklist provided. In Column 1, mark the sections of Form 2S, Part 2, that you have completed and are submitting with your application. For each section that you have completed, indicate in Column 2 whether you are submitting attachments.

Item 1.20. The CWA provides for severe penalties for submitting false information on this application form. Section 309(c)(2) of the CWA provides that "Any person who knowingly makes any false statement, representation, or certification in any application, ...shall upon conviction, be punished by a fine of no more than $10,000 or by imprisonment for not more than six months or both."

FEDERAL REGULATIONS AT 40 CFR 122.22 REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

A. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer *means: (1) a president, secretary, treasurer, or vice-*president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.

C. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

Section 2. Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge

Complete this section if you are a "person who prepares sewage sludge." This section pertains to any POTW or other TWTDS that generates sewage sludge, as well as to any facility that derives a material from sewage sludge (e.g., it composts sewage sludge or blends sewage sludge with another material). Simply distributing sewage sludge or placing it in a bag or other container for sale or give-away for application to the land is not considered "deriving a material" from sewage sludge (because it does not change sludge quality), and thus a facility that only distributes or bags a sewage sludge is not required to provide the information in this section.

Item 2.1. Answer "Yes" or "No" to indicate if the facility generates sewage sludge or derives a material from sewage sludge (e.g., it composts sewage sludge or blends sewage sludge with another material). If yes, continue to Item 2.2. If no, skip to Part 2, Section 3.

Amount Generated On Site

Item 2.2. Provide the total dry metric tons of sewage sludge generated at the facility over a 365-day period.

Amount Received from Offsite Facility

Item 2.3. Indicate whether the facility receives sewage sludge from another facility for treatment, use, or disposal. If yes, continue to Item 2.4. If no, skip to Item 2.7 (Part 2, Section 2).

Item 2.4. Indicate the total number of facilities from which your facility receives sewage sludge for treatment, use, or disposal.

Item 2.5. Complete Items 2.5 through 2.7 for each facility from which your facility receives sewage sludge for treatment, use or

disposal. Check the box to indicate that this information has been attached to the application package.

Enter the name and mailing address of the facility. Provide the name (first and last), title, work telephone number, and email address of the contact person for the facility. Provide a complete location address for the facility if different from the mailing address. If the facility or site lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 2.6. Indicate the amount of sewage sludge received, the applicable pathogen class and reduction alternative, and the applicable vector attraction reduction option provided at the offsite facility. To determine the applicable pathogen class and reduction alternative, see 40 CFR 503.32. To determine the applicable vector attraction reduction option, see 40 CFR 503.33. Vector attraction reduction options 1 through 8 are typically met at the point where sewage sludge is generated or where a material is derived from sewage sludge, and options 9 through 11 are typically met at the point of use or disposal.

Item 2.7. Identify the treatment process(es) that are known to occur at the offsite facility, including blending activities and treatment to reduce pathogens or vector attraction properties in sewage sludge. If you check "Other," specify the treatment process(es) in the space provided or in a separate attachment.

Treatment Provided at Your Facility

Item 2.8. In the "Use or Disposal Practice" column, check the sewage sludge use or disposal practice used at your facility. In the following columns, indicate the pathogen class and reduction alternative and the vector attraction reduction option associated with the practice. To determine the applicable pathogen class and reduction alternative, see 40 CFR 503.32. To determine the applicable vector attraction reduction option, see 40 CFR 503.33. Vector attraction reduction options 1 through 8 are typically met at the point where sewage sludge is generated or where a material is derived from sewage sludge, and options 9 through 11 are typically met at the point of use or disposal. Complete Item 2.8 for each sewage sludge use or disposal practice by attaching additional sheets, as necessary.

Item 2.9. For each use or disposal practice indicated in Item 2.8, identify the treatment process(es) used at your facility to reduce pathogens or vector attraction properties in sewage sludge. If you check "Other," specify the treatment process(es) in the space provided or in a separate attachment.

Item 2.10. Use the space provided to describe any other sewage sludge treatment or blending activities not identified in Items 2.8 and 2.9. Check the box if your description has been attached to the application package.

Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1 to 8

Item 2.11. Indicate whether the sewage sludge meets the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of 40 CFR 503.12, Class A pathogen reduction requirements at 40 CFR 503.32(a), and one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8) and is land applied. Sewage sludge meeting all of these criteria is often referred to as "exceptional quality (EQ)" and is exempt from the general requirements of 40 CFR 503.12 and the management practices of 40 CFR 503.14, and thus fewer permitting and permit application requirements typically pertain to facilities generating such sludge. For this reason, if you check "Yes" for Item 2.11, complete Items 2.12 and 2.13; then you may skip Items 2.14 through 2.16, Items 2.17 through 2.26, and Items 2.27 through 2.31 unless specifically required to complete any of them by the permitting authority. If you check "No," skip to Item 2.14 (Part 2, Section 2).

Item 2.12. Provide the total dry metric tons of sewage sludge, meeting the requirements specified in Item 2.11 that is applied to land per 365-day period.

Item 2.13. Indicate whether the subject sewage sludge is placed in a bag or other container and sold or given away for land application. Check the box indicating completion of Items 2.11 through 2.13 and skip to Item 2.32 (Part 2, Section 2).

Sale or Give-Away in a Bag or Other Container for Application to the Land

Item 2.14. Indicate whether the subject sewage sludge is placed in a bag or other container and sold or given away for land application. If yes, continue to Item 2.15. If no, skip to Item 2.17 (Part 2, Section 2).

Item 2.15. Provide the dry metric tons of sewage sludge placed in a bag or other container and sold or given away for land application per 365-day period.

Item 2.16. When sewage sludge is placed in a bag or other container for sale or give-away for application to the land, either a label must be affixed to the bag or other container, or an information sheet must be provided to the person receiving the sewage sludge. The information that must be on the label or information sheet is listed at 40 CFR 503.14(e). Attach copies of all labels or notices that accompany sewage sludge being sold or given away in a bag or other container for land application. Check the box to indicate that these copies have been attached to the application package.

Check the box indicating completion of Items 2.14 through 2.16 and skip to Item 2.32 (Part 2, Section 2).

Shipment Off Site for Treatment or Blending

Item 2.17. Indicate whether another facility provides treatment or blending of your facility's sewage sludge. (This does not pertain to dewatered sludge sent directly to a land application or surface disposal site.) If yes, continue to Item 2.18. If no, skip to Item 2.32 (Part 2, Section 2).

Item 2.18. Indicate the total number of facilities that provide treatment or blending of your facility's sewage sludge. Complete Items 2.19 through 2.26 for each facility that provides treatment or

blending of your facility's sewage sludge. Check the box to indicate if this information has been attached to the application package.

Item 2.19. Enter the name and mailing address of the receiving facility. Provide the name (first and last), title, work telephone number, and email address of the contact person for the receiving facility. Include a complete location address for the facility if different from the mailing address. If the facility or site lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 2.20. Provide the dry metric tons of sewage sludge provided to the receiving facility per 365-day period.

Item 2.21 Indicate whether the receiving facility provides any additional treatment to reduce pathogens in, or vector attraction properties of, the sewage sludge from your facility. If yes, continue to Item 2.22. If no, skip to Item 2.24 (Part 2, Section 2).

Item 2.22. Indicate the pathogen class and reduction alternative and the vector attraction reduction option met for the sewage sludge at the receiving facility. To determine the applicable pathogen class and reduction alternative, see 40 CFR 503.32. To determine the applicable vector attraction reduction option, see 40 CFR 503.33. Vector attraction reduction options 1 through 8 are typically met at the point where sewage sludge is generated or where a material is derived from sewage sludge, and options 9 through 11 are typically met at the point of use or disposal.

Item 2.23. Identify the treatment process(es) used at the receiving facility to reduce pathogens or vector attraction properties of sewage sludge from your facility. If you check "Other," specify the treatment process(es) in the space provided or in a separate attachment.

Item 2.24. Attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement under 40 CFR 503.12(g). Check the box to indicate that this information has been attached to the application package.

Item 2.25. Indicate whether the receiving facility places sewage sludge from your facility in a bag or other container to sell or give away for land application. If yes, continue to Item 2.26. If no, skip to Item 2.32 (Part 2, Section 2).

Item 2.26. When sewage sludge is placed in a bag or other container for sale or give-away for application to the land, either a label must be affixed to the bag or other container, or an information sheet must be provided to the person receiving the sewage sludge. The information that must be on the label or information sheet is listed at 40 CFR 503.14(e). Attach copies of all labels or notices that accompany sewage sludge being sold or given away in a bag or other container for land application. Check the box to indicate that this information has been attached to the application package.

Item 2.36. Enter the site name or number and mailing address of the surface disposal site you do not own or operate. Provide the name (first and last), title, work telephone number, and email address of the contact person for the surface disposal site.

Item 2.37. Indicate whether the site contact is the owner and/or operator of the surface disposal site.

Item 2.38. Provide the total dry metric tons of sewage sludge from your facility placed on the surface disposal site per 365-day period.

Incineration

Item 2.39. Answer "Yes" or "No" to indicate if sewage sludge from your facility is fired in a sewage sludge incinerator. If yes, continue to Item 2.40. If no, skip to Item 2.46 (Part 2, Section 2).

Item 2.40. Provide the total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period.

Item 2.41. Answer "Yes" or "No" to indicate if you own or operate all sewage sludge incinerators to which you send sewage sludge for firing. If yes, skip to Item 2.46. If no, continue to Item 2.42 (Part 2, Section 2).

Item 2.42. Indicate the total number of sewage sludge incinerators used that you do not own or operate. Complete Items 2.43 through 2.45 for each sewage sludge incinerator used that you do not own or operate. Check the box to indicate that this information has been attached to the application package.

Item 2.43. Enter the name or number and mailing address of sewage sludge incinerator used that you do not own or operate. Provide the name (first and last), title, work telephone number, and email address of the contact person for the incinerator.

Include a complete location address for the incinerator if different from the mailing address. If the incinerator lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 2.44. Indicate whether the site contact is the owner and/or operator of the incinerator.

Item 2.45. Provide the total dry metric tons of sewage sludge from your facility fired in the sewage sludge incinerator per 365-day period.

Disposal in a Municipal Solid Waste Landfill

Item 2.46. Indicate whether sewage sludge from your facility is placed on a municipal solid waste landfill. If yes, continue to Item 2.47. If no, skip to Part 2, Section 3.

Item 2.47. Provide the total number of municipal solid waste landfills to which you send sewage sludge. Complete Items 2.48 through 2.52 for each landfill used. Check the box to indicate that this information has been attached to the application package.

Item 2.48. Enter the name and mailing address of the municipal solid waste landfill. Provide the name (first and last), title, work telephone number, and email address of the contact person for the landfill.

Include a complete location address for the landfill if different from the mailing address. If the landfill lacks a street name or route

number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Item 2.49. Provide the total dry metric tons of sewage sludge from your facility placed in each municipal solid waste landfill per 365-day period.

Item 2.50. In the space provided or in a separate attachment, list the number and type of all other federal, state, and local permits that regulate the operation of this municipal solid waste landfill.

Item 2.51. Attach information to determine whether the sewage sludge meets applicable requirements for disposal in a municipal solid waste landfill (e.g., results of paint filter liquids test and toxicity characteristic leaching procedure, or TCLP, test). Check the box to indicate that this information has been attached to the application package.

Item 2.54. Sewage sludge placed on a municipal solid waste landfill must meet requirements in 40 CFR 258 concerning the quality of materials placed on a landfill unit. Part 258 specifies minimum federal criteria for municipal solid waste landfills, including landfills that accept sewage sludge along with household waste. In contrast to 40 CFR 503, 40 CFR 258 controls sewage sludge placed in municipal solid waste landfills through a facility design and management practice approach. In 40 CFR 503, EPA has adopted the 40 CFR 258 criteria as the appropriate standard for sewage sludge disposed of with municipal waste. EPA concluded that if sewage sludge is disposed of in a municipal solid waste landfill complying with 40 CFR 258 criteria, public health and the environment are protected. Note that the POTW is legally responsible for knowing whether a municipal solid waste landfill is in compliance with 40 CFR 258 and may be liable if it sends sludge to a municipal solid waste landfill that is not in compliance with 40 CFR 258. Indicate whether the municipal solid waste landfill complies with applicable criteria set forth in 40 CFR 258.

Section 3. Land Application of Bulk Sewage Sludge

Complete this section if you completed Section B, Items 2.27 through 2.31. Unless the NPDES permitting authority specifically requires you to complete this section, you may skip this section for sewage sludge that is covered in any of the following portions of this application:

- Section B, Items 2.11 through 3.13. Such sewage sludges are exempt from the general requirements and management practices of 40 **CFR** 503 when they are land applied (unless the permitting authority requires otherwise), and thus the site information in Section C is not required for permitting.
- Section B, Items 2.17 through 2.26. Section C does not apply to a generator that sends sewage sludge to another facility for treatment or for blending, because the 40 CFR 503 requirements addressed by Section C will largely be the responsibility of the receiving facility.

Provide the information in this section for each land application site that has been identified at the time of permit application. In cases where the sewage sludge is applied to numerous sites with similar characteristics, you may combine the information for several sites under a single response (the name and address of each site must still be provided, however).

Item 3.1. Indicate whether your facility applies sewage sludge to land. If yes, continue to Item 3.2. If no, skip to Part 2, Section 4.

Item 3.2. Indicate if any of the following conditions apply:

- The sewage sludge meets the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen requirements at 40 CFR 503.32(a), and one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8).
- The sewage sludge is sold or given away in a bag or other container for application to the land.
- You provide the sewage sludge to another facility for treatment or blending.

If yes, skip to Part 2, Section 4. If no, continue to Item 3.3.

Item 3.3. Complete the remainder of Section 3 for each site on which sewage sludge is applied. Check the box to indicate if this information has been attached to the application package.

Identification of Land Application Site

Item 3.4. Enter the name or number and location address for the land application site. If the site lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Provide the latitude and longitude to the nearest second for the site and method of determination. The location of the land application site (i.e., where the coordinates are collected) shall be the approximate center of the area where the sewage sludge is directly released to the environment. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS). For further guidance, refer to http://www.epa.gov/geospatial/latitudelongitude-data-standard.

Item 3.5. Check the box to indicate that a topographic map (or other appropriate map if a topographic map is unavailable) showing the site location has been attached to the application. See Item 1.14 (Part 2, Section 1) for guidance on obtaining a topographic map.

Owner Information

Item 3.6. Indicate whether you are the owner of the land application site. If yes, skip to Item 3.8 (Part 2, Section 3). If no, continue to Item 3.7.

Item 3.7. Enter the name and mailing address of the owner of the land application site. Provide the name (first and last), title, work telephone number, and email address of the contact person for the owner.

Applier Information

Item 3.8. Indicate whether you are the person who applies, or is responsible for application of, sewage sludge to this land application site. If yes, skip to Item 3.10 (Part 2, Section 3). If no, continue to Item 3.9.

Item 3.9. Enter the name and mailing address of the applier. Provide the name (first and last), title, work telephone number, and email address of the contact person for the applier.

Site Type

Item 3.10. Identify the type of land application site (e.g., agricultural land, forest, reclamation site, public contact site, or other). If you check "Other," provide a description in the space provided or in a separate attachment.

Crop or Other Vegetation Grown on Site

Item 3.11. In the space provided or in a separate attachment, describe the type of crop or other vegetation that is grown on the site. If the crop or vegetation to be grown on the site is not yet known, or is likely to change in an unforeseeable manner during the life of the permit, you may so indicate instead of providing the type of crop or other vegetation.

Item 3.12. In the space provided or in a separate attachment, indicate the nitrogen requirement for the crop or other vegetation identified in Item 3.11. You can get information on the nitrogen content of vegetation grown on the site from local agricultural extension services, a local Farm Advisor's Office, or published sources.

Vector Attraction Reduction

Item 3.13. Indicate whether the vector attraction reduction requirements at 40 CFR 503.33(b)(9) and (b)(10) are met when sewage sludge is applied to the land application site. If yes, continue to Item 3.14. If no, skip to Item 3.16 (Part 2, Section 3).

Item 3.14. Indicate which vector attraction option (Option 9, injection below land surface, or Option 10, incorporation into soil within 6 hours) is met when sewage sludge is applied to the land application site.

Item 3.15. In the space provided or in a separate attachment, describe any treatment processes used at the land application site to reduce vector attraction properties of sewage sludge. Check the box to indicate that your description has been attached to the application package.

Cumulative Loadings and Remaining Allotments

Item 3.16. Indicate whether the sewage sludge applied to this site since July 20, 1993, is subject to the cumulative pollutant loading rates (CPLRs) at 40 CFR 503.13(b)(2). If yes, continue to Item 3.17. If no, skip to Part 2, Section 4.

Item 3.17. Indicate whether you have contacted the NPDES permitting authority in the state where the bulk sewage sludge subject to CPLRs will be applied, to ascertain whether bulk sewage sludge subject to CPLRs has been applied to this site on or since July 20, 1993. If yes, continue to Item 3.18. If no, because sewage sludge subject to CPLRs may not be applied to this site, skip to Part 2, Section 4.

Item 3.18. Provide your NPDES permitting authority's name, contact person, telephone number, and email address.

Item 3.19. Indicate, based on your inquiry, whether bulk sewage sludge subject to CPLRs has been applied to the site since July 20, 1993. If yes, continue to Item 3.20. If no, skip to Part 2, Section 4.

Item 3.20. Provide the name and mailing address for every facility other than yours that is sending, or has sent, bulk sewage sludge subject to CPLRs to this site since July 20, 1993, Give the name (first and last), title, work telephone number, and email address of the contact person for the facility that is sending, or has sent, bulk sewage sludge subject to CPLRs to this site since July 20, 1993.

Section 4. Surface Disposal

Complete this section if you own or operate a surface disposal site and are required to submit a full permit application (i.e., Part 2 of Form 2S) at this time. A sewage sludge surface disposal site is, by definition, a TWTDS, and the owner/operator of the site is required to apply for a permit.

Item 4.1. Indicate whether you own or operate a surface disposal site. If yes, continue to Item 4.2. If no, skip to Part 2, Section 5.

Item 4.2. Complete the remainder of Section 4 for each active sewage sludge unit you own or operate. Check the box to indicate that this information has been attached to the application package.

Information on Active Sewage Sludge Units

Most requirements for surface disposal of sewage sludge under 40 CFR 503 pertain to individual active sewage sludge units at a surface disposal site. The information required in Items 4.3 through 4.15 may be developed on a unit-by-unit basis, or may be developed for the entire surface disposal site if all units are sufficiently similar.

Item 4.3. Enter the name or number and mailing address of the active sewage sludge unit. Provide the name (first and last), title, work telephone number, and email address of the contact person for the active sewage sludge unit.

Include a complete location address for the unit if different from the mailing address. If the unit lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Provide the latitude and longitude to the nearest second for the unit and method of determination. The location of the unit (i.e., where the coordinates are collected) shall be the approximate center of the area where the sewage sludge is directly released to the environment. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS). For further guidance, refer to http://www.epa.gov/geospatial/latitudelongitude-data-standard.

Item 4.4. Check the box to indicate that a topographic map (or other appropriate map if a topographic map is unavailable)

showing the site location has been attached to the application. See Item 1.14 (Part 2, Section 1) for guidance on obtaining a topographic map.

Item 4.5. Provide the total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period.

Item 4.6. Provide the total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit.

Item 4.7. Indicate whether the active sewage sludge unit has a liner with a maximum permeability of 10^{-7} centimeters per second (cm/sec). If yes, continue to Item 4.8. If no, skip to Item 4.9 (Part 2, Section 4).

Item 4.8. In the space provided or in a separate attachment, describe the liner. Check the box to indicate that a description has been attached to the application package.

Item 4.9. Indicate whether the active sewage sludge unit has a leachate collection system. If yes, continue to Item 4.10. If no, skip to Item 4.11 (Part 2, Section 4).

Item 4.10. In the space provided or in a separate attachment, describe the leachate collection system and the leachate disposal method. Also provide the numbers of any federal, state, or local permit(s) for leachate disposal. Check the box to indicate that this description has been attached to the application package.

Item 4.11. Indicate if the boundary of the active sewage sludge site is less than 150 meters from the property line of the surface disposal site. If yes, continue to Item 4.12. If no, skip to Item 4.13 (Part 2, Section 4).

Item 4.12. Provide the distance, in meters, between the active sewage sludge site boundary and the surface disposal site property line.

Item 4.13. Provide the remaining capacity of active sewage sludge in dry metric tons.

Item 4.14. List the anticipated closure date for the active sewage sludge unit, using the format MM/DD/YYYY, if known.

Item 4.15. Submit a copy of any closure plan that has been developed for this active sewage sludge unit. Check the box to indicate that you have attached a copy to the application package.

Sewage Sludge from Other Facilities

Item 4.16. Indicate whether sewage sludge is sent to this active sewage sludge unit from any facilities other than yours. If yes, continue to Item 4.17. If no, skip to Item 4.21 (Part 2, Section 4).

Item 4.17. Indicate the total number of facilities, other than yours, that send sewage sludge to this active sewage sludge unit. Complete Items 4.18 through 4.20 for each such facility.

Check the box to indicate that this information has been attached to the application package.

Item 4.18. Enter the name and mailing address of the facility that sends sewage sludge to this active sewage sludge unit. Provide the name (first and last), title, work telephone number, and email address of the contact person for the facility.

Item 4.19. Indicate the pathogen class and reduction alternative and the vector attraction reduction option met for the sewage sludge before leaving the other facility. To determine the applicable pathogen class and reduction alternative, see 40 CFR 503.32. To determine the applicable vector attraction reduction option, see 40 CFR 503.33. Vector attraction reduction options 1 through 8 are typically met at the point where sewage sludge is generated or where a material is derived from sewage sludge, and options 9 through 11 are typically met at the point of use or disposal.

Item 4.20. Identify the treatment process(es) used at the other facility to reduce pathogens or vector attraction properties of sewage sludge before leaving the other facility. If you check "Other," specify the treatment process(es) in the space provided or in a separate attachment.

Vector Attraction Reduction

Item 4.21. Indicate which, if any, vector attraction reduction option (Option 9, injection below land surface; Option 10, incorporation into soil within 6 hours; Option 11, covering active sewage sludge unit daily; or none) is met when sewage sludge is placed on this active sewage sludge unit.

Item 4.22. In the space provided or in a separate attachment, describe any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge. Check the box to indicate that this description has been attached to the application package.

Groundwater Monitoring

Placement of sewage sludge on an active sewage sludge unit must not contaminate an aquifer. Compliance must be demonstrated through either (1) the results of a groundwater monitoring program developed by a qualified groundwater scientist or (2) certification by a qualified groundwater scientist that contamination has not occurred. This section solicits existing groundwater monitoring data and other documentation to indicate the potential for contamination of an aquifer at the active sewage sludge unit, and the capability of the owner/operator of the surface disposal site to demonstrate that contamination has not occurred.

Item 4.23. Indicate whether groundwater monitoring is currently conducted at, or ground monitoring data is otherwise available for, this active sewage sludge unit. If yes, continue to Item 4.24. If no, skip to Item 4.26 (Part 2, Section 4).

Item 4.24. Provide a copy of available groundwater monitoring data. Check the box to indicate that the data have been attached to the application package.

Item 4.25. In the space provided or in a separate attachment, describe the well locations, the approximate depth to groundwater, and the groundwater monitoring procedures used to obtain the data.

Check the box to indicate that the descriptions have been attached to the application package.

Item 4.26. Indicate whether a groundwater monitoring program has

been prepared for this active sewage sludge unit. If yes, continue to Item 4.27. If no, skip to Item 4.28 (Part 2, Section 4).

Item 4.27. Submit a copy of the groundwater monitoring program that has been developed for this active sewage sludge unit. Check the box to indicate that this documentation has been attached to the application package.

Item 4.28. Indicate whether you have obtained certification from a qualified groundwater scientist that the aquifer below the active sewage sludge unit has not been contaminated. If yes, continue to Item 4.29. If no, skip to Item 4.30 (Part 2, Section 4).

Item 4.29. Submit a copy of the certification indicating that the aquifer below the active sewage sludge unit has not been contaminated. Check the box to indicate that this certification has been attached to the application package.

Site-Specific Limits

After August 18, 1993, you are allowed to seek site-specific pollutant limits only for good cause, and must do so within 180 days of becoming aware that good cause exists. If you request site-specific pollutant limits with this permit application, you are required to submit information supporting the request, including a demonstration that existing values for site parameters specified by the permitting authority differ from the values for those parameters used to develop the pollutant limits in Table 1 of 40 CFR 503.23. You must also submit follow-up information at the request of the NPDES permitting authority. If the NPDES permitting authority determines that site-specific pollutant limits are appropriate, he or she may specify site-specific limits in the permit as long as the existing concentrations of the pollutants in the sewage sludge are not exceeded.

Item 4.30. Indicate whether you are seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit. If yes, continue to Item 4.31. If no, skip to Part 2, Section 5.

Item 4.31. Submit information to support the request for site-specific pollutant limits. Check the box to indicate that this information has been attached to the application package.

Section 5. Incineration

Complete this section if you own or operate a sewage sludge incinerator. A sewage sludge incinerator is, by definition, a treatment works treating domestic sewage, and the owner/operator of a sewage sludge incinerator is required to submit a full permit application.

Incinerator Information

Item 5.1. Indicate whether you fire sewage sludge in a sewage sludge incinerator. If yes, continue to Item 5.2. If no, skip to the end.

Item 5.2. Indicate the total number of incinerators used at your facility. Complete the remainder of Section 5 for each incinerator. Check the box to indicate that you have attached information for one or more incinerators.

Item 5.3. Enter the incinerator's name or number. Include a complete location address for the incinerator. If the incinerator lacks a street name or route number, give the most accurate alternative geographic information (e.g., section number or quarter section number from county records or "at intersection of Routes 425 and 22").

Provide the latitude and longitude to the nearest second for the incinerator and method of determination. The location of the incinerator (i.e., where the coordinates are collected) shall be the approximate center of the area where the sewage sludge is directly released to the environment. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., https://mynasadata.larc.nasa.gov/latitudelongitude-finder/), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or USGS). For further guidance, refer to http://www.epa.gov/geospatial/latitudelongitude-data-standard.

Amount Fired

Item 5.4. Provide the dry metric tons of sewage sludge fired in the sewage sludge incinerator per 365-day period.

Beryllium NESHAP

The firing of sewage sludge in a sewage sludge incinerator must not violate the National Emission Standard for Hazardous Air Pollutants (NESHAP) for beryllium as established in Subpart C of 40 CFR 61. The beryllium NESHAP only applies, however, to sewage sludge incinerators firing "beryllium-containing waste." The beryllium NESHAP is 10 grams of beryllium in the exit gas over a 24-hour period, unless the incinerator owner/operator has been approved to meet a 30-day average ambient concentration limit on beryllium in the vicinity of the sewage sludge incinerator of 0.01 $\mu g/m^3$. Complete this section to demonstrate compliance with the beryllium NESHAP.

Item 5.5. Submit information, test data, and a description of measures taken that demonstrate whether the sewage sludge incinerated is beryllium-containing waste and will continue to remain as such. Check the box to indicate that this material has been attached to the application package.

Item 5.6. Indicate whether the sewage sludge fired in the incinerator is beryllium-containing waste as defined at 40 CFR 61.31. If yes, continue to Item 5.7. If no, skip to Item 5.8 (Part 2, Section 5).

Item 5.7. Submit a complete report of the latest beryllium emission testing *and* documentation of ongoing incinerator operating parameters indicating that the NESHAP emission rate limit for beryllium has been and will continue to be met. Check the box to indicate that this documentation has been attached to the application package.

Mercury NESHAP

The firing of sewage sludge in a sewage sludge incinerator must not violate the NESHAP for mercury as established in Subpart E of 40 CFR 61. Complete this section to demonstrate compliance with the mercury NESHAP. Information on stack testing and sewage sludge sampling can be found at 40 CFR 61.53 and 61.54.

Item 5.8. Indicate whether compliance with the mercury NESHAP is being demonstrated via stack testing. If yes, continue to Item 5.9. If no, skip to Item 5.11 (Part 2, Section 5).

Item 5.9. Submit a complete report of stack testing *and* documentation of ongoing incinerator operating parameters indicating that the NESHAP emission rate limit for mercury has been and will continue to be met. Check the box to indicate that this documentation has been attached to the application package.

Item 5.10. Provide copies of mercury emission rate tests for the two most recent years in which testing was conducted. Check the box to indicate that this information has been attached to the application package.

Item 5.11. Indicate whether you demonstrate compliance with the mercury NESHAP by performing sewage sludge sampling. If yes, continue to Item 5.12. If no, skip to Item 5.13 (Part 2, Section 5).

Item 5.12. Submit a complete report of sewage sludge sampling *and* documentation of ongoing incinerator operating parameters indicating that the incinerator has been meeting and will continue to meet the NESHAP emission rate limit for mercury. Check the box to indicate that this documentation has been attached to the application package.

Dispersion Factor

Item 5.13. Provide the dispersion factor in micrograms/cubic meter per gram/second.

Item 5.14. Specify the name and type of dispersion model.

Item 5.15 Submit a copy of the modeling results and supporting documentation. Check the box to indicate that the documentation has been attached to the application package.

Control Efficiency

Item 5.16. Provide the control efficiency, in hundredths, for arsenic, cadmium, chromium, lead, and nickel.

Item 5.17. Submit the results of performance testing and supporting documentation, including test dates. Check the box to indicate that this documentation has been attached to the application package.

Risk-specific Concentration for Chromium

Item 5.18. Provide the risk-specific concentration (RSC) used for chromium in micrograms per cubic meter.

Item 5.19. Indicate whether the RSC was determined using Table 2 at 40 CFR 503.43. If yes, continue to Item 5.20. If no, skip to Item 5.21 (Part 2, Section 5).

Item 5.20. Identify the incinerator used as the basis, as either fluidized bed with wet scrubber, other types with wet scrubber, fluidized bed with wet scrubber and wet electrostatic precipitator, or other types with wet scrubber and wet electrostatic precipitator.

Item 5.21. Indicate whether the RSC was determined using Table 2 at 40 CFR 503.43 (site-specific determination). If yes, continue to Item 5.22. If no, skip to Item 5.23 (Part 2, Section 5).

Item 5.22. Provide the decimal fraction of hexavalent chromium to total chromium concentration in the stack exit gas.

Item 5.23. Submit the results of incinerator stack testing for hexavalent and total chromium concentrations, including test dates. Check the box to indicate that these results have been attached to the application package, or check "Not applicable."

Incinerator Parameters

Item 5.24. Indicate whether you monitor total hydrocarbons (THC) in the exit gas of the sewage sludge incinerator.

Item 5.25. Indicate whether you monitor carbon monoxide (CO) in the exit gas of the sewage sludge incinerator.

Item 5.26. Specify the type of sewage sludge incinerator used.

Item 5.27. Provide the incinerator stack height in meters.

Item 5.28. Indicate whether the value submitted in Item 5.27 is the actual stack height or creditable stack height.

Performance Test Operating Parameters

Item 5.29. Provide the maximum performance test combustion temperature.

Item 5.30. Provide the performance test sewage sludge feed rate, in dry metric tons/day.

Item 5.31. Indicate whether the value submitted in Item 5.30 is the average use rate or maximum design rate.

Item 5.32. Supply supporting documentation describing how the feed rate was calculated. Check the box to indicate that this documentation has been attached to the application package.

Item 5.33. Submit information documenting the performance test operating parameters for the air pollution control device(s) used for this sewage sludge incinerator. Check the box to indicate that this information has been attached to the application package.

Monitoring Equipment

Item 5.34. Use the table provided or a separate attachment, to indicate the equipment in place to monitor total hydrocarbons or carbon monoxide, percent oxygen, percent moisture, combustion temperature, and any other parameters not listed.

Air Pollution Control Equipment

Item 5.35. List all air pollution control equipment used with this sewage sludge incinerator. Check the box to indicate that the list has been attached to the application package.

END OF PART 2

Submit your completed Part 2 of Form 2S and all associated attachments to your NPDES permitting authority.

Note: This glossary includes terms used in the various NPDES application forms, including Form 2S. The definitions are from the NPDES regulations at 40 CFR 122.2 unless otherwise specified. If you have any questions concerning the meaning of any of these terms, contact your NPDES permitting authority.

ANIMAL FEEDING OPERATION (defined at § 122.23) means a lot or facility (other than an aquatic animal production facility) where the following conditions are met;

- Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and
- Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

APPLICATION means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in approved states, including any approved modifications or revisions.

APPROVED PROGRAM or **APPROVED STATE** means a State or interstate program which has been approved or authorized by EPA under part 123.

AQUACULTURE PROJECT (defined at § 122.25) means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals. **DESIGNATED PROJECT AREA** means the portions of the waters of the United States within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan or operation (including, but not limited to, physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants, and be harvested within a defined geographic area.

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 that month divided by the number of daily discharges measured during that month.

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.

BEST MANAGEMENT PRACTICES (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BIOSOLIDS (*see sewage sludge*).

BYPASS (defined at § 122.41(m)) means the intentional diversion of waste streams from any portion of a treatment facility.

COMBINED SEWER OVERFLOW (CSO) means a discharge from a combined sewer system (CSS) at a point prior to the Publicly Owned Treatment Works (POTW) Treatment Plant (defined at § 403.3(r)).

COMBINED SEWER SYSTEM (CSS) means a wastewater collection system owned by a State or municipality (as defined by section 502(4) of the CWA) which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and storm water through a single-pipe system to a Publicly Owned Treatment Works (POTW) Treatment Plant (as defined at § 403.3(r)).

CONCENTRATED ANIMAL FEEDING OPERATION (defined at § 122.23) means an animal feeding operation that is defined as a Large CAFO or as a Medium CAFO by the terms of (A) or (B) below, or that is designated as a CAFO in accordance with 40 CFR 122.23(c). Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.

A. **LARGE CONCENTRATED ANIMAL FEEDING OPERATION (LARGE CAFO)** means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories:

1. 700 mature dairy cows, whether milked or dry;
2. 1,000 veal calves;
3. 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
4. 2,500 swine each weighing 55 pounds or more;
5. 10,000 swine each weighing less than 55 pounds;
6. 500 horses;
7. 10,000 sheep or lambs;

8. 55,000 turkeys;
9. 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
10. 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
11. 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
12. 30,000 ducks (if the AFO uses other than a liquid manure handling system); or
13. 5,000 ducks (if the AFO uses a liquid manure handling system).

B. **MEDIUM CONCENTRATED ANIMAL FEEDING OPERATION (MEDIUM CAFO)** means any AFO with the type and number of animals that fall within any of the ranges listed below and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

1. The type and number of animals that it stables and confines falls within any of the following ranges:
   a. 200 to 699 mature dairy cows, whether milked or dry;
   b. 300 to 999 veal calves;
   c. 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
   d. 750 to 2,499 swine each weighing 55 pounds or more;
   e. 3,000 to 9,999 swine each weighing less than 55 pounds;
   f. 150 to 499 horses;
   g. 3,000 to 9,999 sheep or lambs;
   h. 16,500 to 54,999 turkeys;
   i. 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
   j. 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
   k. 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
   l. 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system); ore
   m. 1,500 to 4,999 ducks (if the AFO uses a liquid manure handling system); and
2. Either one of the following conditions are met:
   a. Pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or
   b. Pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with animals confined in the operation.

CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY (defined at § 122.24) means a hatchery, fish farm, or other facility which contains, grows, or holds aquatic animals in either of the following categories, or which the Director designates as such on a case-by-case basis:

A. Cold water fish species or other cold water aquatic animals including, but not limited to, the *Salmonidae* family of fish (e.g., trout and salmon) in ponds, raceways, or other similar structures which discharge at least 30 days per year but does not include:

1. Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
2. Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.

B. Warm water fish species or other warm water aquatic animals including, but not limited to, the *Ameiuridae, Cetrarchiclae*, and *Cyprinidae* families of fish (e.g., respectively, catfish, sunfish, and minnows) in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include;

1. Closed ponds which discharge only during periods of excess runoff; or
2. Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92–500, as amended by Public Law 95–217, Public Law 95–576, Public Law 96–483 and Public Law 97–117, 33 U.S.C. 1251 *et seq.*

CWA AND REGULATIONS means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program, it includes State program requirements.

DAILY DISCHARGE means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

DIRECT DISCHARGE means the "discharge of a pollutant."

DIRECTOR means the Regional Administrator or the State Director, as the context requires, or an authorized representative. When there is no "approved State program," and there is an EPA administered program, "Director" means the Regional Administrator. When there is an approved State program, "Director" normally means the State Director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved State program. (For example, when EPA has issued an NPDES permit prior to the approval of a State program, EPA may retain jurisdiction over that permit after program approval, see § 123.1.) In such cases, the term "Director" means the Regional Administrator and not the State Director.

DISCHARGE (OF A POLLUTANT) means:

- Any addition of any pollutant or combination of pollutants to waters of the United States from any point source; or
- Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes discharges into waters of the United States from: surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger".

DISCHARGE MONITORING REPORT means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by "approved States" as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the state agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

DRAFT PERMIT means a document prepared under § 124.6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a "permit." A notice of intent to terminate a permit, and a notice of intent to deny a permit, as discussed in § 124.5, are types of "draft permits." A denial of a request for modification, revocation and reissuance, or termination, as discussed in § 124.5, is not a "draft permit." A "proposed permit" is not a "draft permit."

EFFLUENT LIMITATION means any restriction imposed by the Director on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

EFFLUENT LIMITATIONS GUIDELINES means a regulation published by the Administrator under section 304(b) of the CWA to adopt or revise "effluent limitations."

ENVIRONMENTAL PROTECTION AGENCY (EPA) means the United States Environmental Protection Agency.

FACILITY or **ACTIVITY** means any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

GENERAL PERMIT means an NPDES "permit" issued under § 122.28 authorizing a category of discharges under the CWA within a geographical area.

HAZARDOUS SUBSTANCE means any substance designated under 40 CFR part 116 pursuant to section 311 of the CWA.

INDIAN COUNTRY (or **INDAN LANDS**) means:

- All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
- All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
- All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

INDIAN TRIBE means any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian reservation.

INDIRECT DISCHARGE means a nondomestic discharger introducing "pollutants" to a "publicly owned treatment works."

LARGE MUNICIPAL SEPARATE STORM SEWER SYSTEM (defined at § 122.26(b)(4)) means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of the Census (Appendix F of 40 CFR 122); or

(ii) Located in the counties listed in appendix H of 40 CFR 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraphs (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraphs (i) or (ii). In making this determination the Director may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (i);

(C) The quantity and nature of pollutants discharged to waters of the United States;

(D) The nature of the receiving waters; and

(E) Other relevant factors; or

(iv) The Director may, upon petition, designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), (iii).

LOG SORTING AND LOG STORAGE FACILITIES (defined at § 122.27) means facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held in self-contained bodies of water (mill ponds or log ponds) or stored on land where water is applied intentionally on the logs (wet decking). (See 40 CFR 429, subpart I, including the effluent limitations guidelines.)

MAJOR FACILITY means any NPDES "facility or activity" classified as such by the Regional Administrator, or, in the case of "approved State programs," the Regional Administrator in conjunction with the State Director.

MAXIMUM DAILY DISCHARGE LIMITATION means the highest allowable "daily discharge."

MEDIUM MUNICIPAL SEPARATE STORM SEWER SYSTEM (defined at § 122.26(b)(7)) means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census (appendix G of 40 CFR 122); or

(ii) Located in the counties listed in appendix I of 40 CFR 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (i) or (ii). In making this determination the Director may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (i);

(C) The quantity and nature of pollutants discharged to waters of the United States;

(D) The nature of the receiving waters; or

(E) Other relevant factors; or

(iv) The Director may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), (iii) of this section.

MUNICIPALITY means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA.

MUNICIPAL SEPARATE STORM SEWER (defined at § 122.26(b)(8)) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- Designed or used for collecting or conveying stormwater.
- Which is not a combined sewer; and
- Which is not part of a POTW as defined at 40 CFR 122.2.

MUNICIPAL SLUDGE (*see sewage sludge*)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the CWA. The term includes an "approved program."

NEW DISCHARGER means any building, structure, facility, or installation:

- From which there is or may be a "discharge of pollutants;"
- That did not commence the "discharge of pollutants" at a particular "site" prior to August 13, 1979;
- Which is not a "new source;" and
- Which has never received a finally effective NPDES permit for discharges at that "site."

This definition includes an "indirect discharger" which commences discharging into "waters of the United States" after August 13, 1979. It also means any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a "site" for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a "site" under EPA's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Regional Administrator in the issuance of a final permit to be an area of biological concern. In determining whether an area is an area of biological concern, the Regional Administrator shall consider the factors specified in 40 CFR 125.122(a)(1) through (10).

An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a "new discharger" only for the duration of its discharge in an area of biological concern.

NEW SOURCE means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

- After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- After proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

OWNER OR OPERATOR means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

PERMIT means an authorization, license, or equivalent control document issued by EPA or an "approved State" to implement the requirements of this part and parts 123 and 124. "Permit" includes an NPDES "general permit" (§ 122.28). Permit does not include any permit which has not yet been the subject of final agency action, such as a "draft permit" or a "proposed permit."

PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES FROM PESTICIDE APPLICATION means the application of biological pesticides, and the application of chemical pesticides that leave a residue, from point sources to waters of the United States. In the context of this definition of pesticide discharges to waters of the United States from pesticide application, this does not include agricultural storm water discharges and return flows from irrigated agriculture, which are excluded by law (33 U.S.C. 1342(l); 33 U.S.C. 1362(14)).

PESTICIDE RESIDUE for the purpose of determining whether a NPDES permit is needed for discharges to waters of the United States from pesticide application, means that portion of a pesticide application that is discharged from a point source to waters of the United States and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

POINT SOURCE means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. (See § 122.3).

POLLUTANT means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- Sewage from vessels; or
- Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources. Note: Radioactive materials covered by the Atomic Energy Act are those encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include radium and accelerator-produced isotopes. See *Train* v. *Colorado Public Interest Research Group, Inc.,* 426 U.S. 1 (1976).

PRIMARY INDUSTRY CATEGORY means any industry category listed in the NRDC settlement agreement (*Natural Resources Defense Council et al.* v. *Train,* 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in appendix A of part 122.

PRIVATELY OWNED TREATMENT WORKS means any device or system which is (1) used to treat wastes from any facility whose operator is not the operator of the treatment works and (2) not a "POTW."

PROCESS WASTEWATER means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

PROPOSED PERMIT means a state NPDES "permit" prepared after the close of the public comment period (and, when applicable, any public hearing and administrative appeals) which is sent to EPA for review before final issuance by the State. A "proposed permit" is not a "draft permit."

PUBLICLY OWNED TREATMENT WORKS or **POTW** (defined at § 403.3) means a treatment works as defined by CWA Section 212, which is owned by a state or municipality (as defined by CWA Section 502(4)). This definition includes any devices or systems used in the storage, treatment, recycling, and reclamation) of municipal sewage or industrial wastes of a liquid nature. This definition also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW. The term also means the municipality as defined in CWA Section 502(4), which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

REGIONAL ADMINISTRATOR means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

ROCK CRUSHING AND GRAVEL WASHING FACILITIES (defined at § 122.27) means facilities which process crushed and broken stone, gravel, and riprap (See 40 CFR 436, subpart B, including the effluent limitations guidelines).

SCHEDULE OF COMPLIANCE means a schedule of remedial measures included in a "permit", including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the CWA and regulations.

SECONDARY INDUSTRY CATEGORY means any industry category which is not a primary industry category.

SEWAGE FROM VESSELS means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under section 312 of the CWA, except that with respect to commercial vessels on the Great Lakes this term includes graywater. For the purposes of this definition, "graywater" means galley, bath, and shower water.

SEWAGE SLUDGE means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 CFR 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

SILVICULTURAL POINT SOURCE (defined at § 122.27) means any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States. This term does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. However, some of these activities (such as stream crossing for roads) may involve point source discharges of dredged or fill material which may require a CWA Section 404 permit (see 33 CFR 209.120 and part 233).

SITE means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

SLUDGE-ONLY FACILITY means any "treatment works treating domestic sewage" whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to section 405(d) of the CWA and is required to obtain a permit under § 122.1(b)(2).

STANDARDS FOR SEWAGE SLUDGE USE OR DISPOSAL means the regulations promulgated pursuant to section 405(d) of the CWA which govern minimum requirements for sludge quality, management practices, and monitoring and reporting applicable to sewage sludge or the use or disposal of sewage sludge by any person.

STATE means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in these regulations which meets the requirements of § 123.31 of this chapter.

STATE DIRECTOR means the chief administrative officer of any State or interstate agency operating an "approved program," or the delegated representative of the State Director. If responsibility is divided among two or more State or interstate agencies, "State Director" means the chief administrative officer of the State or interstate agency authorized to perform the particular procedure or function to which reference is made.

STORMWATER (or **STORM WATER**) (defined at § 122.26(b)(13)) means stormwater runoff, snow melt runoff, and surface runoff and drainage.

STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY (defined at § 122.26(b)(14)) means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities (including industrial facilities that are federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs 1 through 14 below) include those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of 40 CFR 122.26(b)(14):

1. Facilities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under paragraph 11 below);
2. Facilities classified as Standard Industrial Classification 24, Industry Group 241 that are rock crushing, gravel washing, log sorting, or log storage facilities operated in connection with silvicultural activities defined in 40 CFR 122.27(b)(2)–(3) and Industry Groups 242 through 249; 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373; (not included are all other types of silvicultural facilities);
3. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non--coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);
4. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;
5. Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA;
6. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

7. Steam electric power generating facilities, including coal handling sites;
8. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221–25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs 1–7 or 9–11 are associated with industrial activity;
9. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA;
10. Construction activity including clearing, grading and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more;
11. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221–25.

TOXIC POLLUTANT means any pollutant listed as toxic under section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA.

TREATMENT WORKS TREATING DOMESTIC SEWAGE (TWTDS) means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, "domestic sewage" includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR 503 as a "treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR 503.

UPSET (defined at § 122.41(n)) means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

VARIANCE means any mechanism or provision under section 301 or 316 of the CWA or under 40 CFR 125, or in the applicable "effluent limitations guidelines" which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of the CWA. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on sections 301(c), 301(g), 301(h), 301(i), or 316(a) of the CWA.

WATERS OF THE UNITED STATES as defined at § 122.2.

WHOLE EFFLUENT TOXICITY (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test.

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EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

Form 2S NPDES | EPA

U.S Environmental Protection Agency
Application for NPDES Permit for Sewage Sludge Management
NEW AND EXISTING TREATMENT WORKS TREATING DOMESTIC SEWAGE

PRELIMINARY INFORMATION

Does your facility currently have an effective NPDES permit or have you been directed by your NPDES permitting authority to submit a full Form 2S permit application?

☑ Yes ➔ Complete Part 2 of application package (begins p. 7). ☐ No ➔ Complete Part 1 of application package (below).

PART 1 — LIMITED BACKGROUND INFORMATION (40 CFR 122.21(c)(2)(ii))

Complete this part only if you are a "sludge-only" facility (i.e., a facility that does not currently have, and is not applying for, an NPDES permit for a direct discharge to a surface body of water).

PART 1, SECTION 1. FACILITY INFORMATION (40 CFR 122.21(c)(2)(ii)(A))

Facility Information

1.1	Facility name			
	Mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
	Location address (street, route number, or other specific identifier)		☐ Same as mailing address	
	City or town		State	ZIP code
1.2	**Ownership Status**			
	☐ Public—federal ☐ Public—state ☐ Other public (specify)_____			
	☐ Private ☐ Other (specify) _____			

PART 1, SECTION 2. APPLICANT INFORMATION (40 CFR 122.21(c)(2)(ii)(B))

Applicant Information

2.1	Is applicant different from entity listed under Item 1.1 above? ☐ Yes ☐ No ➔ SKIP to Item 2.3 (Part 1, Section 2).			
2.2	Applicant name			
	Applicant address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
2.3	Is the applicant the facility's owner, operator, or both? (Check only one response.) ☐ Owner ☐ Operator ☐ Both			
2.4	To which entity should the NPDES permitting authority send correspondence? (Check only one response.) ☐ Facility ☐ Applicant ☐ Facility and applicant (they are one and the same)			

PART 1, SECTION 3. SEWAGE SLUDGE AMOUNT (40 CFR 122.21(c)(2)(ii)(D))

Sewage Sludge Amount

3.1 Provide the total dry metric tons per the latest 365-day period of sewage sludge generated, treated, used, and disposed of:

Practice	Dry Metric Tons per 365-Day Period
Amount generated at the facility	
Amount treated at the facility	
Amount used (i.e., received from off site) at the facility	
Amount disposed of at the facility	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

PART 1, SECTION 4. POLLUTANT CONCENTRATIONS (40 CFR 122.21(c)(2)(ii)(E))

Pollutant Concentrations

4.1 Using the table below or a separate attachment, provide existing sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR 503 for your facility's expected use or disposal practices. If available, base data on three or more samples taken at least one month apart and no more than 4.5 years old.

☐ Check here if you have provided a separate attachment with this information.

Pollutant	Concentration (mg/kg dry weight)	Analytical Method	Detection Level for Analysis
Arsenic			
Cadmium			
Chromium			
Copper			
Lead			
Mercury			
Molybdenum			
Nickel			
Selenium			
Zinc			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			
Other (specify) _____			

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

PART 1, SECTION 5. TREATMENT PROVIDED AT YOUR FACILITY (40 CFR 122.21(c)(2)(ii)(C))

Treatment Provided at Your Facility

5.1 For each sewage sludge use or disposal practice, indicate the amount of sewage sludge used or disposed of, the applicable pathogen class and reduction alternative, and the applicable vector attraction reduction option. Attach additional pages, as necessary.

Use or Disposal Practice (check one)	Amount (dry metric tons)	Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Land application of bulk sewage ☐ Land application of biosolids (bulk) ☐ Land application of biosolids (bags) ☐ Surface disposal in a landfill ☐ Other surface disposal ☐ Incineration		☐ Not applicable ☐ Class A, Alternative 1 ☐ Class A, Alternative 2 ☐ Class A, Alternative 3 ☐ Class A, Alternative 4 ☐ Class A, Alternative 5 ☐ Class A, Alternative 6 ☐ Class B, Alternative 1 ☐ Class B, Alternative 2 ☐ Class B, Alternative 3 ☐ Class B, Alternative 4 ☐ Domestic septage, pH adjustment	☐ Not applicable ☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4 ☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8 ☐ Option 9 ☐ Option 10 ☐ Option 11

5.2 For each of the use and disposal practices specified in Item 5.1, identify the treatment process(es) used at your facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge. (Check all that apply.)

- ☐ Preliminary operations (e.g., sludge grinding and degritting)
- ☐ Thickening (concentration)
- ☐ Stabilization
- ☐ Anaerobic digestion
- ☐ Composting
- ☐ Conditioning
- ☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)
- ☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
- ☐ Heat drying
- ☐ Thermal reduction
- ☐ Methane or biogas capture and recovery
- ☐ Other (specify) _____

PART 1, SECTION 6. SEWAGE SLUDGE SENT TO OTHER FACILITIES (40 CFR 122.21(c)(2)(ii)(C))

Sewage Sludge Sent to Other Facilities

6.1 Does the sewage sludge from your facility meet the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), *and* one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8)?

☐ Yes ➔ SKIP to Part 1, Section 8 (Certification). ☐ No

6.2 Is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disposal?

☐ Yes ☐ No ➔ SKIP to Part 1, Section 7.

6.3

Receiving facility name			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

6.4 Which activities does the receiving facility provide? (Check all that apply.)

- ☐ Treatment or blending
- ☐ Sale or give-away in bag or other container
- ☐ Land application
- ☐ Surface disposal
- ☐ Incineration
- ☐ Other (describe)
- ☐ Composting

PART 1, SECTION 7. USE AND DISPOSAL SITES (40 CFR 122.21(c)(2)(ii)(C))

Use and Disposal Sites

Provide the following information for each site on which sewage sludge from this facility is used or disposed of.

☐ Check here if you have provided separate attachments with this information.

7.1

Site name or number			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address
Location address (street, route number, or other specific identifier)			☐ Same as mailing address
City or town		State	ZIP code
County		County code	☐ Not available

7.2 Site type (check all that apply)

☐ Agricultural	☐ Lawn or home garden	☐ Forest
☐ Surface disposal	☐ Public contact	☐ Incineration
☐ Reclamation	☐ Municipal solid waste landfill	☐ Other (describe)

PART 1, SECTION 8. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

8.1 In Column 1 below, mark the sections of Form 2S, Part 1, that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2
☐ Section 1: Facility Information	☐ w/ attachments
☑ Section 2: Applicant Information	☐ w/ attachments
☑ Section 3: Sewage Sludge Amount	☑ w/ attachments
☐ Section 4: Pollutant Concentrations	☐ w/ attachments
☐ Section 5: Treatment Provided at Your Facility	☐ w/ attachments
☐ Section 6: Sewage Sludge Sent to Other Facilities	☐ w/ attachments
☐ Section 7: Use and Disposal Sites	☐ w/ attachments
☐ Section 8: Checklist and Certification Statement	

Checklist and Certification Statement Continued

8.2

Certification Statement

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.

Name (print or type first and last name)	Official title	Phone number

Signature	Date signed

PART 1 APPLICANTS STOP HERE.

Submit completed application package to your NPDES permitting authority.

This page intentionally left blank.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

PART 2 **PERMIT APPLICATION INFORMATION (40 CFR 122.21(q))**

Complete this part if you have an effective NPDES permit or have been directed by the NPDES permitting authority to submit a full permit application. In other words, complete this part if your facility has, or is applying for, an NPDES permit.
Part 2 is divided into five sections. Section 1 pertains to all applicants. The applicability of Sections 2 to 5 depends on your facility's sewage sludge use or disposal practices. See the instructions to determine which sections you are required to complete.

PART 2, SECTION 1. GENERAL INFORMATION (40 CFR 122.21(q)(1 7) AND (q)(13))

General Information

All Part 2 applicants must complete this section.

Facility Information

1.1	Facility name Pine Creek CWF			
	Mailing address (street or P.O. box) 101 West Main Street			
	City or town Prattville	State AL	ZIP code 36067	Phone number (334) 595-0481
	Contact name (first and last) Dale Gandy	Title Director of Public Works	Email address dale.gandy@prattvilleal.gov	
	Location address (street, route number, or other specific identifier) 100 Pine Creek Drive			☐ Same as mailing address
	City or town Prattville	State AL	ZIP code 36067	
1.2	Is this facility a Class I sludge management facility? ☑ Yes ☐ No			
1.3	**Facility Design Flow Rate**	4.0 million gallons per day (mgd)		
1.4	**Total Population Served**	18,500		
1.5	**Ownership Status** ☐ Public—federal ☐ Public—state ☑ Other public (specify) Municipality ☐ Private ☐ Other (specify) _____			

Applicant Information

1.6	Is applicant different from entity listed under Item 1.1 above? ☐ Yes ☑ No ➔SKIP to Item 1.8 (Part 2, Section 1).			
1.7	Applicant name			
	Applicant mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
1.8	Is the applicant the facility's owner, operator, or both? (Check only one response.) ☐ Operator ☐ Owner ☑ Both			
1.9	To which entity should the NPDES permitting authority send correspondence? (Check only one response.) ☐ Facility ☐ Applicant ☑ Facility and applicant (they are one and the same)			

1.10	Facility's NPDES permit number ☐ Check here if you do not have an NPDES permit but are otherwise required to submit Part 2 of Form 2S.	AL0027723

1.11 Indicate all other federal, state, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices below.

☐ RCRA (hazardous wastes)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ PSD (air emissions)	☐ Dredge or fill (CWA Section 404)	☐ Other (specify)
☐ Ocean dumping (MPRSA)	☐ UIC (underground injection of fluids)	

Indian Country

1.12 Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country?

☐ Yes ☑ No ➔ SKIP to Item 1.14 (Part 2, Section 1) below.

1.13 Provide a description of the generation, treatment, storage, land application, or disposal of sewage sludge that occurs.

Topographic Map

1.14 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.)

☑ Yes ☐ No

Line Drawing

1.15 Have you attached a line drawing and/or a narrative description that identifies all sewage sludge practices that will be employed during the term of the permit containing all the required information to this application? (See instructions for specific requirements.)

☑ Yes ☐ No

Contractor Information

1.16 Do contractors have any operational or maintenance responsibilities related to sewage sludge generation, treatment, use, or disposal at the facility?

☐ Yes ☑ No ➔ SKIP to Item 1.18 (Part 2, Section 1) below.

1.17 Provide the following information for each contractor.

☐ Check here if you have attached additional sheets to the application package.

	Contractor 1	Contractor 2	Contractor 3
Contractor company name			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Contact name (first and last)			
Telephone number			
Email address			

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

General Information Continued

1.17 cont.		Contractor 1	Contractor 2	Contractor 3
	Responsibilities of contractor			

Pollutant Concentrations

Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than 4.5 years old.

☐ Check here if you have attached additional sheets to the application package.

1.18

Pollutant	Average Monthly Concentration (mg/kg dry weight)	Analytical Method	Detection Level
Arsenic	0.38	EPA 6010	2.70
Cadmium	0.175	EPA 6010	0.36
Chromium	68.8	EPA 6010	0.73
Copper	122.703	EPA 6010	1.44
Lead	4.698	EPA 6010	2.89
Mercury	0.5415	EPA 7471 B	0.022
Molybdenum	4.54	EPA 6010	0.83
Nickel	10.603	EPA 6010	1.42
Selenium	1.563	EPA 6010	2.39
Zinc	208.545	EPA 6010	2.70

Checklist and Certification Statement

1.19 In Column 1 below, mark the sections of Form 2S, Part 2, that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing. Note that not all applicants are required to complete all sections or provide attachments. See Exhibit 2S–2 in the Instructions.

Column 1	Column 2
☐ Section 1 (General Information)	☐ w/ attachments
☑ Section 2 (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)	☐ w/ attachments
☑ Section 3 (Land Application of Bulk Sewage Sludge)	☑ w/ attachments
☐ Section 4 (Surface Disposal)	☐ w/ attachments
☐ Section 5 (Incineration)	☐ w/ attachments

1.20 **Certification Statement**

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.

Name (print or type first and last name)	Official title
Bill Gillespie, Jr.	Mayor
Signature	Date signed
	12-07-23
Telephone number	[redacted]

Upon the request of the NPDES permitting authority, you must submit any other information the authority deems necessary to assess sewage sludge use or disposal practices at your facility and identify appropriate permitting requirements.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

PART 2, SECTION 2. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE (40 CFR 122.21(q)(8) THROUGH (12))

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge

2.1 Does your facility generate sewage sludge or derive a material from sewage sludge?

☑ Yes ☐ No ➔ SKIP to Part 2, Section 3.

Amount Generated Onsite

2.2 Total dry metric tons per 365-day period generated at your facility: 415.5

Amount Received from Off Site Facility

2.3 Does your facility receive sewage sludge from another facility for treatment use or disposal?

☑ Yes ☐ No ➔ SKIP to Item 2.7 (Part 2, Section 2) below.

2.4 Indicate the total number of facilities from which you receive sewage sludge for treatment, use, or disposal: 1

Provide the following information for each of the facilities from which you receive sewage sludge.

☐ Check here if you have attached additional sheets to the application package.

2.5

Name of facility: Autauga Creek CWF			
Mailing address (street or P.O. box): 101 West Main Street			
City or town: Prattville		State: AL	ZIP code: 36067
Contact name (first and last): Dale Gandy	Title: Public Works Director	Phone number: (334) 595-0481	Email address: dale.gandy@prattvilleal.gov
Location address (street, route number, or other specific identifier): 1123 Reuben Road			☐ Same as mailing address
City or town: Prattville		State: AL	ZIP code: 36067
County: Autauga		County code	☐ Not available

2.6 Indicate the amount of sewage sludge received, the applicable pathogen class and reduction alternative, and the applicable vector reduction option provided at the offsite facility.

Amount (dry metric tons)	Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
185.83	☑ Not applicable ☐ Class A, Alternative 1 ☐ Class A, Alternative 2 ☐ Class A, Alternative 3 ☐ Class A, Alternative 4 ☐ Class A, Alternative 5 ☐ Class A, Alternative 6 ☐ Class B, Alternative 1 ☐ Class B, Alternative 2 ☐ Class B, Alternative 3 ☐ Class B, Alternative 4 ☐ Domestic septage, pH adjustment	☑ Not applicable ☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4 ☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8 ☐ Option 9 ☐ Option 10 ☐ Option 11

2.7 Identify the treatment process(es) that are known to occur at the offsite facility, including blending activities and treatment to reduce pathogens or vector attraction properties. (Check all that apply.)

☐ Preliminary operations (e.g., sludge grinding and degritting)	☑ Thickening (concentration)
☐ Stabilization	☐ Anaerobic digestion
☐ Composting	☐ Conditioning
☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)	☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
☐ Heat drying	☐ Thermal reduction
☐ Methane or biogas capture and recovery	☐ Other (specify) _____

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

Treatment Provided at Your Facility

2.8 For each sewage sludge use or disposal practice, indicate the applicable pathogen class and reduction alternative and the applicable vector attraction reduction option provided at your facility. Attach additional pages, as necessary.

Use or Disposal Practice (check one)	Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Land application of bulk sewage	☐ Not applicable	☐ Not applicable
☑ Land application of biosolids (bulk)	☐ Class A, Alternative 1	☐ Option 1
☐ Land application of biosolids (bags)	☑ Class A, Alternative 2	☐ Option 2
☐ Surface disposal in a landfill	☐ Class A, Alternative 3	☐ Option 3
☐ Other surface disposal	☐ Class A, Alternative 4	☐ Option 4
☐ Incineration	☐ Class A, Alternative 5	☐ Option 5
	☐ Class A, Alternative 6	☑ Option 6
	☐ Class B, Alternative 1	☐ Option 7
	☐ Class B, Alternative 2	☐ Option 8
	☐ Class B, Alternative 3	☐ Option 9
	☐ Class B, Alternative 4	☐ Option 10
	☐ Domestic septage, pH adjustment	☐ Option 11

2.9 Identify the treatment process(es) used at your facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge? (Check all that apply.)

- ☐ Preliminary operations (e.g., sludge grinding and degritting)
- ☑ Stabilization
- ☐ Composting
- ☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)
- ☐ Heat drying
- ☐ Methane or biogas capture and recovery
- ☐ Thickening (concentration)
- ☐ Anaerobic digestion
- ☐ Conditioning
- ☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
- ☐ Thermal reduction

2.10 Describe any other sewage sludge treatment or blending activities not identified in Items 2.8 and 2.9 (Part 2, Section 2) above.

☐ Check here if you have attached the description to the application package.

Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1 to 8

2.11 Does the sewage sludge from your facility meet the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), *and* one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8) and is it land applied?

☐ Yes ☑ No ➔ SKIP to Item 2.14 (Part 2, Section 2) below.

2.12 Total dry metric tons per 365-day period of sewage sludge subject to this subsection that is applied to the land:

2.13 Is sewage sludge subject to this subsection placed in bags or other containers for sale or give-away for application to the land?

☐ Yes ☐ No

☐ Check here once you have completed Items 2.11 to 2.13, then ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

Sale or Give-Away in a Bag or Other Container for Application to the Land

2.14 Do you place sewage sludge in a bag or other container for sale or give-away for land application?

☐ Yes ☑ No ➔ SKIP to Item 2.17 (Part 2, Section 2) below.

2.15 Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land:

2.16 Attach a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

☐ Check here to indicate that you have attached all labels or notices to this application package.

☐ Check here once you have completed Items 2.14 to 2.16, then ➔ SKIP to Part 2, Section 2, Item 2.32.

Shipment Off Site for Treatment or Blending

2.17 Does another facility provide treatment or blending of your facility's sewage sludge? (This question does not pertain to dewatered sludge sent directly to a land application or surface disposal site.)

☐ Yes ☑ No ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

2.18 Indicate the total number of facilities that provide treatment or blending of your facility's sewage sludge. Provide the information in Items 2.19 to 2.26 (Part 2, Section 2) below for each facility.

☐ Check here if you have attached additional sheets to the application package.

2.19 Name of receiving facility

Mailing address (street or P.O. box)

City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

Location address (street, route number, or other specific identifier) ☐ Same as mailing address

City or town	State	ZIP code

2.20 Total dry metric tons per 365-day period of sewage sludge provided to receiving facility:

2.21 Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility or reduce the vector attraction properties of sewage sludge from your facility?

☐ Yes ☐ No ➔ SKIP to Item 2.24 (Part 2, Section 2) below.

2.22 Indicate the pathogen class and reduction alternative and the vector attraction reduction option met for the sewage sludge at the receiving facility.

Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Not applicable	☐ Not applicable
☐ Class A, Alternative 1	☐ Option 1
☐ Class A, Alternative 2	☐ Option 2
☐ Class A, Alternative 3	☐ Option 3
☐ Class A, Alternative 4	☐ Option 4
☐ Class A, Alternative 5	☐ Option 5
☐ Class A, Alternative 6	☐ Option 6
☐ Class B, Alternative 1	☐ Option 7
☐ Class B, Alternative 2	☐ Option 8
☐ Class B, Alternative 3	☐ Option 9
☐ Class B, Alternative 4	☐ Option 10
☐ Domestic septage, pH adjustment	☐ Option 11

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

2.23 Which treatment process(es) are used at the receiving facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge from your facility? (Check all that apply.)

- ☐ Preliminary operations (e.g., sludge grinding and degritting)
- ☐ Thickening (concentration)
- ☐ Stabilization
- ☐ Anaerobic digestion
- ☐ Composting
- ☐ Conditioning
- ☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)
- ☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
- ☐ Heat drying
- ☐ Thermal reduction
- ☐ Methane or biogas capture and recovery
- ☐ Other (specify) _____

2.24 Attach a copy of any information you provide the receiving facility to comply with the "notice and necessary information" requirement of 40 CFR 503.12(g).

☐ Check here to indicate that you have attached material.

2.25 Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land?

☐ Yes ☐ No ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

2.26 Attach a copy of all labels or notices that accompany the product being sold or given away.

☐ Check here to indicate that you have attached material.

☐ Check here once you have completed Items 2.17 to 2.26 (Part 2, Section 2), then ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

Land Application of Bulk Sewage Sludge

2.27 Is sewage sludge from your facility applied to the land?

☐ Yes ☐ No ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

2.28 Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: _____

2.29 Did you identify all land application sites in Part 2, Section 3 of this application?

☐ Yes ☐ No ➔ Submit a copy of the land application plan with your application.

2.30 Are any land application sites located in states other than the state where you generate sewage sludge or derive a material from sewage sludge?

☐ Yes ☐ No ➔ SKIP to Item 2.32 (Part 2, Section 2) below.

2.31 Describe how you notify the NPDES permitting authority for the states where the land application sites are located. Attach a copy of the notification.

☐ Check here if you have attached the explanation to the application package.

☐ Check here if you have attached the notification to the application package.

Surface Disposal

2.32 Is sewage sludge from your facility placed on a surface disposal site?

☑ Yes ☐ No ➔ SKIP to Item 2.39 (Part 2, Section 2) below.

2.33 Total dry metric tons of sewage sludge from your facility placed on all surface disposal sites per 365-day period: 400.25

2.34 Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?

☑ Yes ➔ SKIP to Item 2.39 (Part 2, Section 2) below. ☐ No

2.35 Indicate the total number of surface disposal sites to which you send your sewage sludge. _____

(Provide the information in Items 2.36 to 2.38 of Part 2, Section 2, for each facility.)

☐ Check here if you have attached additional sheets to the application package.

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

2.36	Site name or number of surface disposal site you do not own or operate			
	Mailing address (street or P.O. box)			
	City or Town		State	ZIP Code
	Contact Name (first and last)	Title	Phone Number	Email Address
2.37	Site Contact (Check all that apply.) ☐ Owner ☐ Operator			
2.38	Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period:			

Incineration

2.39	Is sewage sludge from your facility fired in a sewage sludge incinerator? ☐ Yes ☑ No ➔ SKIP to Item 2.46 (Part 2, Section 2) below.			
2.40	Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period:			
2.41	Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? ☐ Yes ➔ SKIP to Item 2.46 (Part 2, Section 2) below. ☐ No			
2.42	Indicate the total number of sewage sludge incinerators used that you do not own or operate. (Provide the information in Items 2.43 to 2.45 directly below for each facility.) ☐ Check here if you have attached additional sheets to the application package.			
2.43	Incinerator name or number			
	Mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
	Location address (street, route number, or other specific identifier)			☐ Same as mailing address
	City or town		State	ZIP code
2.44	Contact (check all that apply) ☐ Incinerator owner ☐ Incinerator operator			
2.45	Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period:			

Disposal in a Municipal Solid Waste Landfill

2.46	Is sewage sludge from your facility placed on a municipal solid waste landfill? ☐ Yes ☑ No ➔ SKIP to Part 2, Section 3.	
2.47	Indicate the total number of municipal solid waste landfills used. (Provide the information in Items 2.48 to 2.52 directly below for each facility.) ☐ Check here if you have attached additional sheets to the application package.	

Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge Continued

2.48	Name of landfill			
	Mailing address (street or P.O. box)			
	City or town		State	ZIP code
	Contact name (first and last)	Title	Phone number	Email address
	Location address (street, route number, or other specific identifier)			☐ Same as mailing address
	County	County code		☐ Not available
	City or town	State		ZIP code
2.49	Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period:			

2.50 List the numbers of all other federal, state, and local permits that regulate the operation of this municipal solid waste landfill.

Permit Number	Type of Permit

2.51 Attach to the application information to determine whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a municipal solid waste landfill (e.g., results of paint filter liquids test and TCLP test).

☐ Check here to indicate you have attached the requested information.

2.52 Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR 258?

☐ Yes ☐ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

PART 2, SECTION 3 LAND APPLICATION OF BULK SEWAGE SLUDGE (40 CFR 122.21(q)(9))

Land Application of Bulk Sewage Sludge

3.1 Does your facility apply sewage sludge to land?

☑ Yes ☐ No ➔ SKIP to Part 2, Section 4.

3.2 Do any of the following conditions apply?

- The sewage sludge meets the ceiling concentrations in Table 1 of 40 CFR 503.12, the pollutant concentrations in Table 3 of 40 CFR 503.13, Class A pathogen reduction requirements at 40 CFR 503.32(a), *and* one of the vector attraction reduction requirements at 40 CFR 503.33(b)(1)–(8);
- The sewage sludge is sold or given away in a bag or other container for application to the land; or
- You provide the sewage sludge to another facility for treatment or blending.

☐ Yes ➔ SKIP to Part 2, Section 4. ☑ No

3.3 Complete Section 3 for every site on which the sewage sludge is applied.

☐ Check here if you have attached sheets to the application package for one or more land application sites.

Identification of Land Application Site

3.4 Site name or number
Sludge Disposal Field

Location address (street, route number, or other specific identifier) ☐ Same as mailing address

County	County code	☐ Not available
Autauga		

City or town	State	ZIP code
Prattville	AL	36067

Latitude/Longitude of Land Application Site (see instructions)

Latitude	Longitude
32° 25′ 27.17″ N	86° 25′ 54.29″ W

Method of Determination

☐ USGS map ☐ Field survey ☐ Other (specify) _____

3.5 Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

☑ Check here to indicate you have attached a topographic map for this site.

Owner Information

3.6 Are you the owner of this land application site?

☑ Yes ➔ SKIP to Item 3.8 (Part 2, Section 3) below. ☐ No

3.7 Owner name

Mailing address (street or P.O. box)

City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

Applier Information

3.8 Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site?

☑ Yes ➔ SKIP to Item 3.10 (Part 2, Section 3) below. ☐ No

3.9 Applier's name

Mailing address (street or P.O. box)

City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

Land Application of Bulk Sewage Sludge Continued

Site Type

3.10 Type of land application:

☑ Agricultural land ☐ Forest

☐ Reclamation site ☐ Public contact site

☐ Other (describe)

Crop or Other Vegetation Grown on Site

3.11 What type of crop or other vegetation is grown on this site?

hay

3.12 What is the nitrogen requirement for this crop or vegetation?

Vector Attraction Reduction

3.13 Are the vector attraction reduction requirements at 40 CFR 503.33(b)(9) and (b)(10) met when sewage sludge is applied to the land application site?

☑ Yes ☐ No ➔ SKIP to Item 3.16 (Part 2, Section 3) below.

3.14 Indicate which vector attraction reduction option is met. (Check only one response.)

☐ Option 9 (injection below land surface) ☑ Option 10 (incorporation into soil within 6 hours)

3.15 Describe any treatment processes used at the land application site to reduce vector attraction properties of sewage sludge.

☐ Check here if you have attached your description to the application package.

Cumulative Loadings and Remaining Allotments

3.16 Is the sewage sludge applied to this site since July 20, 1993, subject to the cumulative pollutant loading rates (CPLRs) in 40 CFR 503.13(b)(2)?

☐ Yes ☑ No ➔ SKIP to Part 2, Section 4.

3.17 Have you contacted the NPDES permitting authority in the state where the bulk sewage sludge subject to CPLRs will be applied to ascertain whether bulk sewage sludge subject to CPLRs has been applied to this site on or since July 20, 1993?

☐ Yes ☐ No ➔ Sewage sludge subject to CPLRs may not be applied to this site. SKIP to Part 2, Section 4.

3.18 Provide the following information about your NPDES permitting authority:

NPDES permitting authority name	
Contact person	
Telephone number	
Email address	

3.19 Based on your inquiry, has bulk sewage sludge subject to CPLRs been applied to this site since July 20, 1993?

☐ Yes ☐ No ➔ SKIP to Part 2, Section 4.

3.20 Provide the following information for every facility other than yours that is sending, or has sent, bulk sewage sludge subject to CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.

☐ Check here to indicate that additional pages are attached.

Facility name			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

PART 2, SECTION 4 SURFACE DISPOSAL (40 CFR 122.21(q)(10))

Surface Disposal

4.1 Do you own or operate a surface disposal site?

☐ Yes ☑ No ➔ SKIP to Part 2, Section 5.

4.2 Complete all items in Section 4 for each active sewage sludge unit that you own or operate.

☐ Check here to indicate that you have attached material to the application package for one or more active sewage sludge units.

Information on Active Sewage Sludge Units

4.3

Unit name or number			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address
Location address (street, route number, or other specific identifier)		☐ Same as mailing address	
County		County code ☐ Not available	
City or town		State	ZIP code

Latitude/Longitude of Active Sewage Sludge Unit (see instructions)

Latitude	Longitude
° ′ ″	° ′ ″

Method of Determination

☐ USGS map ☐ Field survey ☐ Other (specify) _____

4.4 Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

☐ Check here to indicate that you have completed and attached a topographic map.

4.5	Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:	
4.6	Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit:	

4.7 Does the active sewage sludge unit have a liner with a maximum permeability of 1×10^{-7} centimeters per second (cm/sec)?

☐ Yes ☐ No ➔ SKIP to Item 4.9 (Part 2, Section 4) below.

4.8 Describe the liner.

☐ Check here to indicate that you have attached a description to the application package.

4.9 Does the active sewage sludge unit have a leachate collection system?

☐ Yes ☐ No ➔ SKIP to Item 4.11 (Part 2, Section 4) below.

4.10 Describe the leachate collection system and the method used for leachate disposal and provide the numbers of any federal, state, or local permit(s) for leachate disposal.

☐ Check here to indicate that you have attached the description to the application package.

Surface Disposal Continued

4.11	Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? ☐ Yes ☐ No ➔ SKIP to Item 4.13 (Part 2, Section 4) below.	
4.12	Provide the actual distance in meters:	meters
4.13	Remaining capacity of active sewage sludge unit in dry metric tons:	dry metric tons
4.14	Anticipated closure date for active sewage sludge unit, if known (MM/DD/YYYY):	
4.15	Attach a copy of any closure plan that has been developed for this active sewage sludge unit. ☐ Check here to indicate that you have attached a copy of the closure plan to the application package.	

Sewage Sludge from Other Facilities

4.16	Is sewage sludge sent to this active sewage sludge unit from any facilities other than your facility? ☐ Yes ☐ No ➔ SKIP to Item 4.21 (Part 2, Section 4) below.	
4.17	Indicate the total number of facilities (other than your facility) that send sewage sludge to this active sewage sludge unit. (Complete Items 4.18 to 4.20 directly below for each such facility.) ☐ Check here to indicate that you have attached responses for each facility to the application package.	

4.18

Facility name			
Mailing address (street or P.O. box)			
City or town		State	ZIP code
Contact name (first and last)	Title	Phone number	Email address

4.19 Indicate the pathogen class and reduction alternative and the vector attraction reduction option met for the sewage sludge before leaving the other facility.

Pathogen Class and Reduction Alternative	Vector Attraction Reduction Option
☐ Not applicable	☐ Not applicable
☐ Class A, Alternative 1	☐ Option 1
☐ Class A, Alternative 2	☐ Option 2
☐ Class A, Alternative 3	☐ Option 3
☐ Class A, Alternative 4	☐ Option 4
☐ Class A, Alternative 5	☐ Option 5
☐ Class A, Alternative 6	☐ Option 6
☐ Class B, Alternative 1	☐ Option 7
☐ Class B, Alternative 2	☐ Option 8
☐ Class B, Alternative 3	☐ Option 9
☐ Class B, Alternative 4	☐ Option 10
☐ Domestic septage, pH adjustment	☐ Option 11

4.20 Which treatment process(es) are used at the other facility to reduce pathogens in sewage sludge or reduce the vector attraction properties of sewage sludge before leaving the other facility? (Check all that apply.)

☐ Preliminary operations (e.g., sludge grinding and degritting)	☐ Thickening (concentration)
☐ Stabilization	☐ Anaerobic digestion
☐ Composting	☐ Conditioning
☐ Disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization)	☐ Dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons)
☐ Heat drying	☐ Thermal reduction
☐ Methane or biogas capture and recovery	☐ Other (specify) _____

Surface Disposal Continued

Vector Attraction Reduction

4.21 Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?

☐ Option 9 (Injection below and surface)

☐ Option 10 (Incorporation into soil within 6 hours)

☐ Option 11 (Covering active sewage sludge unit daily)

☐ None

4.22 Describe any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge.

☐ Check here if you have attached your description to the application package.

Groundwater Monitoring

4.23 Is groundwater monitoring currently conducted at this active sewage sludge unit, or are groundwater monitoring data otherwise available for this active sewage sludge unit?

☐ Yes

☐ No → SKIP to Item 4.26 (Part 2, Section 4) below.

4.24 Provide a copy of available groundwater monitoring data.

☐ Check here to indicate you have attached the monitoring data.

4.25 Describe the well locations, the approximate depth to groundwater, and the groundwater monitoring procedures used to obtain these data.

☐ Check here if you have attached your description to the application package.

4.26 Has a groundwater monitoring program been prepared for this active sewage sludge unit?

☐ Yes

☐ No → SKIP to Item 4.28 (Part 2, Section 4) below.

4.27 Submit a copy of the groundwater monitoring program with this permit application.

☐ Check here to indicate you have attached the monitoring program.

4.28 Have you obtained a certification from a qualified groundwater scientist that the aquifer below the active sewage sludge unit has not been contaminated?

☐ Yes

☐ No → SKIP to Item 4.30 (Part 2, Section 4) below.

4.29 Submit a copy of the certification with this permit application.

☐ Check here to indicate you have attached the certification to the application package.

Site-Specific Limits

4.30 Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?

☐ Yes

☐ No → SKIP to Part 2, Section 5.

4.31 Submit information to support the request for site-specific pollutant limits with this application.

☐ Check here to indicate you have attached the requested information.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0027723	Pine Creek CWF	

PART 2, SECTION 5 INCINERATION (40 CFR 122.21(q)(11))

Incineration

Incinerator Information

5.1 Do you fire sewage sludge in a sewage sludge incinerator?

☐ Yes ☑ No ➔ SKIP to END.

5.2 Indicate the total number of incinerators used at your facility. (Complete the remainder of Section 5 for each such incinerator.)

☐ Check here to indicate that you have attached information for one or more incinerators.

5.3 Incinerator name or number

Location address (street, route number, or other specific identifier)

County	County code	☐ Not available
City or town	State	ZIP code

Latitude/Longitude of Incinerator (see instructions)

Latitude	Longitude
° ' "	° ' "

Method of Determination

☐ USGS map ☐ Field survey ☐ Other (specify) _____

Amount Fired

5.4 Dry metric tons per 365-day period of sewage sludge fired in the sewage sludge incinerator:

Beryllium NESHAP

5.5 Submit information, test data, and a description of measures taken that demonstrate whether the sewage sludge incinerated is beryllium-containing waste and will continue to remain as such.

☐ Check here to indicate that you have attached this material to the application package.

5.6 Is the sewage sludge fired in this incinerator "beryllium-containing waste" as defined at 40 CFR 61.31?

☐ Yes ☐ No ➔ SKIP to Item 5.8 (Part 2, Section 5) below.

5.7 Submit with this application a complete report of the latest beryllium emission rate testing *and* documentation of ongoing incinerator operating parameters indicating that the NESHAP emission rate limit for beryllium has been and will continue to be met.

☐ Check here to indicate that you have attached this information.

Mercury NESHAP

5.8 Is compliance with the mercury NESHAP being demonstrated via stack testing?

☐ Yes ☐ No ➔ SKIP to Item 5.11 (Part 2, Section 5) below.

5.9 Submit a complete report of stack testing and documentation of ongoing incinerator operating parameters indicating that the incinerator has met and will continue to meet the mercury NESHAP emission rate limit.

☐ Check here to indicate that you have attached this information.

5.10 Provide copies of mercury emission rate tests for the two most recent years in which testing was conducted.

☐ Check here to indicate that you have attached this information.

5.11 Do you demonstrate compliance with the mercury NESHAP by sewage sludge sampling?

☐ Yes ☐ No ➔ SKIP to Item 5.13 (Part 2, Section 5) below.

5.12 Submit a complete report of sewage sludge sampling and documentation of ongoing incinerator operating parameters indicating that the incinerator has met and will continue to meet the mercury NESHAP emission rate limit.

☐ Check here to indicate that you have attached this information.

Incineration Continued

Dispersion Factor

5.13	Dispersion factor in micrograms/cubic meter per gram/second:	
5.14	Name and type of dispersion model:	
5.15	Submit a copy of the modeling results and supporting documentation. ☐ Check here to indicate that you have attached this information.	

Control Efficiency

5.16 Provide the control efficiency, in hundredths, for each of the pollutants listed below.

Pollutant	Control Efficiency, in Hundredths
Arsenic	
Cadmium	
Chromium	
Lead	
Nickel	

5.17 Attach a copy of the results or performance testing and supporting documentation (including testing dates).
☐ Check here to indicate that you have attached this information.

Risk-Specific Concentration for Chromium

5.18	Provide the risk-specific concentration (RSC) used for chromium in micrograms per cubic meter:	
5.19	Was the RSC determined via Table 2 in 40 CFR 503.43? ☐ Yes ☐ No ➔ SKIP to Item 5.21 (Part 2, Section 5) below.	
5.20	Identify the type of incinerator used as the basis. ☐ Fluidized bed with wet scrubber ☐ Other types with wet scrubber ☐ Fluidized bed with wet scrubber and wet electrostatic precipitator ☐ Other types with wet scrubber and wet electrostatic precipitator	
5.21	Was the RSC determined via Table 6 in 40 CFR 503.43 (site-specific determination)? ☐ Yes ☐ No ➔ SKIP to Item 5.23 (Part 2, Section 5) below.	
5.22	Provide the decimal fraction of hexavalent chromium concentration to total chromium concentration in stack exit gas:	
5.23	Attach the results of incinerator stack tests for hexavalent and total chromium concentrations, including the date(s) of any test(s), with this application. ☐ Check here to indicate that you have attached this information. ☐ Not applicable	

Incinerator Parameters

5.24	Do you monitor total hydrocarbons (THC) in the exit gas of the sewage sludge incinerator? ☐ Yes ☐ No	
5.25	Do you monitor carbon monoxide (CO) in the exit gas of the sewage sludge incinerator? ☐ Yes ☐ No	
5.26	Indicate the type of sewage sludge incinerator.	
5.27	Incinerator stack height in meters:	
5.28	Indicate whether the value submitted in Item 5.27 is (check only one response): ☐ Actual stack height ☐ Creditable stack height	

Incineration Continued

Performance Test Operating Parameters

5.29	Maximum performance test combustion temperature:	
5.30	Performance test sewage sludge feed rate, in dry metric tons/day	
5.31	Indicate whether value submitted in Item 5.30 is (check only one response): ☐ Average use ☐ Maximum design	
5.32	Attach supporting documents describing how the feed rate was calculated. ☐ Check here to indicate that you have attached this information.	
5.33	Submit information documenting the performance test operating parameters for the air pollution control device(s) used for this sewage sludge incinerator. ☐ Check here to indicate that you have attached this information.	

Monitoring Equipment

5.34 List the equipment in place to monitor the listed parameters.

Parameter	Equipment in Place for Monitoring
Total hydrocarbons or carbon monoxide	
Percent oxygen	
Percent moisture	
Combustion temperature	
Other (describe)	

Air Pollution Control Equipment

5.35 List all air pollution control equipment used with this sewage sludge incinerator.

☐ Check here if you have attached the list to the application package for the noted incinerator.

END of PART 2

Submit completed application package to your NPDES permitting authority.

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

September 18, 2019

Mr. Rick Teague
Prattville Wastewater
101 W. Main Street
Prattville, AL 36067

RE: Project: Pine Creek WWTP Acute Biotox
Pace Project No.: 20120588

Dear Mr. Teague:
Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 2019. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY

1. GENERAL:

NPDES PERMIT NO.: AL0027723 DSN: 001 COUNTY: Elmore County
Permitee: City of Prattville Wastewater Department
Facility Name: Pine Creek Wastewater Treatment Plant
Agent submitting Report: City of Prattville Wastewater Department, 101 West Main St., Prattville, AL 36067
Lab Conducting Toxicity Test(s): Pace Analytical, 808 West McKay, Frontenac KS 66762
Months To Test: Quarterly
This Report for Toxicity Test(s) Required for the Month of:
Scheduled Test(s): Yes X No ____ Accelerated Test(s): Yes ____ No X
Accelerated Test Number ____ of ____ For Failed Scheduled Test Date: ____
Test Type Required: 48-Hr Acute Screening: X -Hr Acute Definitive: ____
Short-term Chronic Screening: ____ Short-term Chronic Definitive: ____

	Test Organism: *Pimephales promelas*			Test Organism: *Ceriodaphnia dubia*		
Sam No.	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid
1	9/10/19 15:30	9/12/19 16:00	Yes	9/10/19 15:30	9/12/19 16:00	Yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number (1) Sur	(1) Rep	(1) Gro	(2) Sur	(2) Rep	(2) Gro	(3) Sur	(3) Rep	(3) Gro	(4) Sur	(4) Rep	(4) Gro
C.d.	6%	Pass											
P.p.	6%	Pass											

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test Organism	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	pH s.u.	Alk mg/L	Hard mg/L	Spec Cond umhos/cm	Fe mg/L	Mn mg/L	BOD mg/L	Chloride mg/L	
1	7.75	88	100	403					

Municipal Facilities Only

Sample ID	Arsenic (g/L)	Cadium (g/L)	Chromium (g/L)	Copper (g/L)	Lead (g/L)	Hexavalent Chromium (g/L)
Sample ID	Mercury (g/L)	Nickel (g/L)	Silver (g/L)	Zinc (g/L)	Total Cyanide (g/L)	Other(s) (g/L)

Chemical Analysis Performed By (LAB): Pace Analytical

Instantaneous Flow: (1) ____ GPM
Total 24-Hour Flow: (1) ____ MGD (2) ____ MGD (3) ____ MGD

Comments:

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: ____ DATE: ____

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

September 18, 2019

Mr. Rick Teague
Prattville Wastewater
101 W. Main Street
Prattville, AL 36067

RE: Project: Pine Creek WWTP Acute Biotox
Pace Project No.: 20120588

Dear Mr. Teague:
Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 2019. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

CERTIFICATIONS

Project: Pine Creek WWTP Acute Biotox
Pace Project No.: 20120588

Southeast Kansas Certification IDs
808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 18-016-0
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 03055
Oklahoma Certification #: 9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

SAMPLE ANALYTE COUNT

Project: Pine Creek WWTP Acute Biotox
Pace Project No.: 20120588

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20120588001	**Pine Creek WWTP Effluent**	EPA 821/R-02/012	TDH	1	PASI-SEKS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

ANALYTICAL RESULTS

Project: Pine Creek WWTP Acute Biotox
Pace Project No.: 20120588

Sample: Pine Creek WWTP Effluent **Lab ID: 20120588001** Collected: 09/09/19 07:00

Parameters	Results	Units	Report Limit	DF	Qualifiers
Toxicity, Acute	**Complete**		1.0	1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

QUALIFIERS

Project: Pine Creek WWTP Acute Biotox
Pace Project No.: 20120588

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

LABORATORIES

PASI-SEK Pace Analytical Services - SE Kansas

TTL LIMS Chain of Custody Form

WO# : 20120588

Client: Prattville Utilities dba Department

Contact: Mr. Rick Teague

Mailing Address: [illegible] Main Street

City, State, Zip: Prattville AL 36067

Phone No.: (334) 361-3828

Sampled By: Chen

Project ID: PUD-Pratt-PC

Project Name: Pine Creek WWTP Route 3 Mix

Composite Sample Info

Sample PC WWTP Effluent

Start 9-8-19 / 7:00am (DATE/TIME)

End 9-9-19 / 7:00am (DATE/TIME)

Sample _____

Start _____ (DATE/TIME)

End _____ (DATE/TIME)

1. Cond

2. Seal 20120588

3. Initial Contents Temp.:_____ C Seal Applied Yes_____ No_____

4. Custody Seal Intact Upon Receipt by Laboratory: Yes_____ No_____

5. Condition of Contents: ~~Good~~ - Ice

6. Comments: 0.1 °C at Tuscaloosa [illegible]

7. Reporting Status: Routine; _____ ; Rush By* _____ *SURCHARGES MAY APPLY

8. Client P.O. #

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
9/9/19	7:00 am	PC WWTP Effluent	[illegible]	[illegible]	[illegible]	[illegible]
9/9/19	7:00 am	PC WWTP Effluent	[illegible]	[illegible]	[illegible]	[illegible]
9/9/19	7:00 am	PC WWTP Effluent	[illegible]	[illegible]	[illegible]	[illegible]
9/9/19	7:00 am	PC WWTP Effluent	[illegible]	[illegible]	[illegible]	[illegible]

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 [signature] 9-9-19 / 7:03am

2 EC Tanner 9/9/19 8:00am

3 Delano Williams 9/9/19 2:10

4 _____

Received by (signed) Date/Time

1 EC Tanner 9/9/19 7:11am

2 Delano Williams 9/9/19 8:00

3 _____

4 _____

SHIPPING DETAILS

Air Bill #: _____

Method of Shipment: Hand

Received By Lab: [signature]

Date/Time 9-9-19 14:10

Face Analytical

Pace Analytical Services, LLC - Tuscaloosa, AL
Pace Analytical Services, LLC - Montgomery, AL

Sample Condition Upon Re

Proje

WO#: 20120588

PM: CRS Due Date: 09/30/19

CLIENT: TU-Prattvill

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] Custody Seals intact: ☐Yes ☐No

Therometer Used:	181 T83496

Type of Ice: Wet Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: SH 9/9/19

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☐No	☒N/A	1
Chain of Custody Present:	☒Yes	☐No	☐N/A	2
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6
Sufficient Volume:	☒Yes	☐No	☐N/A	7
Correct Containers Used:	☒Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9
Sample Labels match COC:	☒Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒Yes	☐No	☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	14
Trip Blank Present:	☐Yes	☒No		15

Client Notification/,Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

September 17, 2019

Cindy Simpson
Pace NOLA

,

RE: Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

Dear Cindy Simpson:
Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nolie Wood
nolie.wood@pacelabs.com
1(913)563-1401
Project Manager

Enclosures

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

Southeast Kansas Certification IDs

808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 18-016-0
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 03055
Oklahoma Certification #: 9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20120588001	PINE CREEK WWTP EFFLUENT	Water	09/09/19 07:00	09/10/19 10:45

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20120588001	PINE CREEK WWTP EFFLUENT	EPA 821/R-02/012	TDH	1	PASI-SE

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Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

Method: EPA 821/R-02/012
Description: Acute Toxicity
Client: PASI New Orleans
Date: September 17, 2019

General Information:
1 sample was analyzed for EPA 821/R-02/012. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

Sample: PINE CREEK WWTP EFFLUENT **Lab ID: 20120588001** Collected: 09/09/19 07:00 Received: 09/10/19 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Acute Toxicity	Analytical Method: EPA 821/R-02/012							
Toxicity, Acute	**Complete**		1.0	1		09/10/19 15:30		

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-SE Pace Analytical Services - SE Kansas

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20120588 PINE CREEK WWTP ACUTE
Pace Project No.: 60314257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20120588001	PINE CREEK WWTP EFFLUENT	EPA 821/R-02/012	609672		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

Pine Creek
Acute

WO#: 60314257

60314257

Client Name: Pasi AL

Courier: FedEx [X] UPS [ ] VIA [ ] Clay [ ] PEX [ ] ECI [ ] Pace [ ] Xroads [ ] Client [ ] Other [ ]

Tracking #: _____ Pace Shipping Label Used? Yes [ ] No [X]

Custody Seal on Cooler/Box Present: Yes [X] No [ ] Seals intact: Yes [X] No [ ]

Packing Material: Bubble Wrap [ ] Bubble Bags [ ] Foam [ ] None [X] Other [ ]

Thermometer Used: T-193 Type of Ice: (Wet) Blue None

Cooler Temperature (°C): As-read 4.1 Corr. Factor -1.1 Corrected 3.0

Date and initials of person examining contents: 9/10/19 EO 16:45

Temperature should be above freezing to 6°C

Chain of Custody present	[X]Yes [ ]No [ ]N/A	
Chain of Custody relinquished	[X]Yes [ ]No [ ]N/A	
Samples arrived within holding time	[ ]Yes [ ]No [ ]N/A	
Short Hold Time analyses (<72hr):	[X]Yes [ ]No [ ]N/A	
Rush Turn Around Time requested:	[ ]Yes [X]No [ ]N/A	
Sufficient volume	[X]Yes [ ]No [ ]N/A	
Correct containers used	[X]Yes [ ]No [ ]N/A	
Pace containers used	[X]Yes [ ]No [ ]N/A	
Containers intact.	[X]Yes [ ]No [ ]N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	[ ]Yes [ ]No [X]N/A	
Filtered volume received for dissolved tests?	[ ]Yes [ ]No [X]N/A	
Sample labels match COC Date / time / ID / analyses	[X]Yes [ ]No [ ]N/A	
Samples contain multiple phases? Matrix	[ ]Yes [X]No [ ]N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2, NaOH>9 Sulfide, NaOH>10 Cyanide) Exceptions VOA, Micro, O&G, KS TPH, OK-DRO)	[ ]Yes [ ]No [X]N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added
Cyanide water sample checks		
Lead acetate strip turns dark? (Record only)	[ ]Yes [ ]No	
Potassium iodide test strip turns blue/purple? (Preserve)	[ ]Yes [ ]No	
Trip Blank present	[ ]Yes [ ]No [X]N/A	
Headspace in VOA vials (>6mm)	[ ]Yes [ ]No [X]N/A	
Samples from USDA Regulated Area State	[ ]Yes [ ]No [X]N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	[ ]Yes [ ]No [X]N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted _____ Date/Time _____

Comments/ Resolution _____

Project Manager Review _____ Date _____

Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Workorder: 20120588 **Workorder Name:** Pine Creek WWTP Acute Biotox **Owner Received Date:** 9/9/2019 **Results Requested By:** 9/30/2019

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)614-6630	Pace Analytical Kansas 9608 Loiret Blvd Kansas, KS 66219 Phone (913)599-5665

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	Requested Analysis: Acute Toxicity	LAB USE ONLY
1	Pine Creek WWTP Effluent	PS	9/9/2019 07:00	20120588001	Water	1	X	00314257
2								
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	Sierra Savage	9/9/19 3:31 pm	Ethan Hopkins FedEx	9/10/19 10:45
2				
3				

Comments

Cooler Temperature on Receipt 3.0 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical Services, Inc.

808 West McKay, Frontenac, KS 66763

LABORATORY REPORT:

CLIENT: Paul Spears City of Prattville (Pine Creek) 101 West Main Street Prattville, AL 36067	**Date Reported:** 9-16-19 **Date Initiated:** 9-10-19 **Time Set:** 15:30 **Date Terminated:** 9-12-19

BIOMONITORING STUDY

ACUTE TOXICITY

Permit # AL0027723

FINDING AND CONCLUSIONS:

Acute toxicity testing was performed on duplicate samples of effluent collected from the City of Prattville (Pine Creek) effluent discharge. **Acute toxicity**, as defined by significant mortality for at least one of two aquatic test species during a 48 hour period of exposure, was not **detected in Ceriodaphnia exposed to the 6% effluent (AEC), and was not detected in fathead minnows exposed to the 6% effluent. The LC50 for the Ceriodaphnia was >6% and >6% for the Pimephales.** The test species utilized in this test were the water flea, Ceriodaphnia dubia and the fathead minnow, Pimephales promelas. Detailed results of the toxicity testing are provided in the Acute Toxicity Reports. In addition to the acute toxicity testing, water temperature, pH, dissolved oxygen, total hardness, total alkalinity, conductivity, and chlorine determinations were performed on the effluent and control samples.

SAMPLING PROCEDURES:

City of Prattville (Pine Creek) personnel collected a sample at the City of Prattville (Pine Creek) effluent discharge. The sample was preserved with ice and transported to Pace Analytical by commercial carrier.

INTRODUCTION:

The purpose of this test was to determine the acute toxicity of the City of Prattville (Pine Creek) effluent on the freshwater invertebrate, Ceriodaphnia dubia and the fathead minnow, Pimephalas promelas. These tests were conducted at Pace Analytical Services, Inc., Frontenac, KS.

TEST ORGANISMS:

Ceriodaphnia dubia - The genetic stock of Ceriodaphnia dubia used in this acute toxicity Test were originally obtained from a private breeder. Ceriodaphnia are cultured in house at Pace Analytical Services, Inc. Culture methods of Ceriodaphnia were obtained from EPA821-C-02-006 November 2002.

Pimephales promelas - The fathead minnows used in this acute toxicity test were cultured in-house at Pace Analytical Services, Inc., Frontenac, KS and/or were obtained from a private breeder. Fathead minnows are maintained at Pace Analytical Services until use for acute toxicity between the ages of 1 and 14 days. Information for culturing fathead minnows was taken from EPA821-C-02-006 November 2002.

MATERIALS AND METHODS:

Procedures used in the acute toxicity tests are described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (USEPA, 2002).

City of Prattville (Pine Creek) collected the effluent tested from the City of Prattville(Pine Creek) discharge. Testing was performed using a 6% effluent, and a synthetic control. **The toxicity test was initiated within 36 hours of sample collection.**

Effluent and synthetic control test solutions were not aerated during the testing period.

Ceriodaphnia *ACUTE METHODS:*

This static test was ran using 40 ml glass vials containing 25 ml of test solution. Food was administered before the test. Five Ceriodaphnia neonates (<24 hr old) were randomly selected and placed in each of 4 replicates of test solution. A total of 20 organisms per concentration were tested. Observations of mortality were made at 24 and 48 hours of exposure.

Pimephales *ACUTE METHODS:*

This static toxicity test was conducted using 500 ml polypropylene container as test chambers containing 250 ml of test solution. Food was administered prior to test initiation, but not during the testing period. Ten Pimephales, 1 – 14 days old, from a single spawn, were randomly selected and placed in each of 4 test chambers. A total of 40 organisms were exposed to each test concentration. Observations of mortality were made at 24 and 48 hours of exposure.

WATER QUALITY METHODS:

Prior to test initiation, temperature, dissolved oxygen, pH, total alkalinity, total hardness, and total residual chlorine were measured in the effluent and in the controls. At 24 and 48 hours of exposure, temperature, dissolved oxygen, pH, and conductance were measured in the effluent sample and the controls.

DATA ANALYSIS:

Statistically significant ($p<0.05$) mortality is determined by Dunnet's procedure using average percent survival of each test concentration versus the average survival of the controls. If significant mortality occurs, median lethal concentrations (LC50) are calculated using effluent concentrations and their corresponding percent mortality data. The LC50's and the 95% confidence intervals are calculated where appropriate by the Spearman-Karber method. Statistical analysis is accomplished by following steps in EPA/600/4-90/027F, August 1993 and by use of Toxstat version 3.4.

RESULTS:

THE Ceriodaphnia MORTALITY RESULTS - There was no significant mortality observed of the freshwater invertebrate, Ceriodaphnia dubia, during the 48 hour exposure period to the 6% effluent concentrations. There was no significant mortality in the synthetic control. The LC50 value of the sample to Ceriodaphnia is approximately >6%.

Ceriodaphnia MORTALITY DATA

 # ALIVE

CONC.	REP #	O HOURS	24 HOURS	48 HOURS	% MORT.
SYNTHETIC	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0
6%	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0

AVG. MORTALITY @ AEC (6% EFFLUENT) =0.0%

THE Pimephales RESULTS - Minnows exposed to effluent collected at the City of Prattville(Pine Creek) effluent discharge exhibited no significant mortality in the 6% effluent concentration during the 48 hr exposure period. The synthetic control showed no significant mortality during the testing period. The LC50 value of the effluent to fathead minnows is estimated to be >6%.

CONC.	REP #	0 HOURS	24 HOURS	48 HOURS	% MORTALITY
SYNTHETIC	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0
6%	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0

AVG. MORTALITY @ AEC (6% EFFLUENT) =0.0%

WATER CHEMISTRY RESULTS:

Total residual chlorine (Cl2) - The effluent sample from the City of Prattville (Pine Creek) discharge had <0.1 mg/l detectable level of total residual chlorine upon receipt in the laboratory.

Dissolved Oxygen (D.O.) - Dissolved oxygen reading of the 100% effluent sample was 8.90 mg/l after being raised to the test temperature of 25° C. At termination D.O. was 7.90 mg/l in the 6% effluent, which falls into acceptable limits. Aeration was not required in this test.

pH - The pH of the 100% effluent was 7.75 upon receipt in the laboratory and the synthetic control had a 7.59. At termination the pH measurement in the 6% effluent sample was 7.81.

Conductance - The conductance of the effluent sample was 403 umhos and the synthetic control was 316 umhos.

INITIAL WATER QUALITY:

Initial Measurements Synthetic Water

pH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.59	8.20	316	<0.1	25.0	90	62

Initial Measurements of 100% Effluent

PH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.75	8.90	403	<0.1	25.0	100	88

TEST WATER QUALITY:

24-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.68	8.00	25.1	329
6%	7.73	8.10	25.1	402

48-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.74	7.70	24.9	336
6%	7.81	7.90	24.9	412

QUALITY ASSURANCE:

The absence of control mortality during this test indicated the health of the organisms and indicated that any significant mortality in the test concentrations is not due to contaminants or variations in test conditions. Reference toxicity tests are routinely performed by staff members of our Toxicology Department.

REFERENCE TOXICANT (NaCl)
Ceriodaphnia

 # OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
3.0 g/l	20	2	0
2.5 g/l	20	15	7
2.0 g/l	20	19	18
1.5 g/l	20	20	20
1.0 g/l	20	20	20

LC50 = 2.36 g/l NaCl

REFERENCE TOXICANT (NaCl)
Pimephales
 # OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
10.0 g/l	40	6	0
8.0 g/l	40	40	27
6.0 g/l	40	39	37
4.0 g/l	40	39	39
2.0 g/l	40	40	40

LC50 = 8.36g/l NaCl

Submitted By: Tim Harrell

Timothy Harrell
Technical Director

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY

1. GENERAL:

NPDES PERMIT NO.: AL0027723 DSN: 001 COUNTY: Elmore County
Permitee: City of Prattville Wastewater Department
Facility Name: Pine Creek Wastewater Treatment Plant
Agent submitting Report: City of Prattville Wastewater Department, 101 West Main St., Prattville, AL 36067
Lab Conducting Toxicity Test(s): Pace Analytical, 808 West McKay, Frontenac KS 66762
Months To Test: Quarterly
This Report for Toxicity Test(s) Required for the Month of:
Scheduled Test(s): Yes X No ____ Accelerated Test(s): Yes ____ No X
Accelerated Test Number ____ of ____ For Failed Scheduled Test Date: ____
Test Type Required: 48-Hr Acute Screening: X -Hr Acute Definitive: ____
Short-term Chronic Screening: ____ Short-term Chronic Definitive: ____

	Test Organism: *Pimephales promelas*			Test Organism: *Ceriodaphnia dubia*			
Sam No.	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid
1	9/10/19 15:30	9/12/19 16:00	Yes	9/10/19 15:30	9/12/19 16:00	Yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number (1) Sur	(1) Rep	(1) Gro	(2) Sur	(2) Rep	(2) Gro	(3) Sur	(3) Rep	(3) Gro	(4) Sur	(4) Rep	(4) Gro
C.d.	6%	Pass											
P.p.	6%	Pass											

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test Organism	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	pH s.u.	Alk mg/L	Hard mg/L	Spec Cond umhos/cm	Fe mg/L	Mn mg/L	BOD mg/L	Chloride mg/L	
1	7.75	88	100	403					

Municipal Facilities Only

Sample ID	Arsenic (g/L)	Cadium (g/L)	Chromium (g/L)	Copper (g/L)	Lead (g/L)	Hexavalent Chromium (g/L)
Sample ID	Mercury (g/L)	Nickel (g/L)	Silver (g/L)	Zinc (g/L)	Total Cyanide (g/L)	Other(s) (g/L)

Chemical Analysis Performed By (LAB): Pace Analytical

Instantaneous Flow: (1) ____ GPM
Total 24-Hour Flow: (1) ____ MGD (2) ____ MGD (3) ____ MGD

Comments:

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: ____ DATE: ____

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/16/19

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes _____ (explain) _____

Samples Collected as Specified in the NPDES Permit: Yes X No (explain) _____

Receiving Water: Alabama River Design Flow: 2.0 (MGD)

Sample ID	Sample(s) Collected MM/DD/YY HHMM - MM/DD/YY HHMM	Arrival Temp (C)	Used in Test(s) MM/DD/YY - MM/DD/YY
1	9/9/19 7:00	3.0	9/10/19 15:30

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
MHSW	9/9/19	9/10/19	90	62	7.59	316	25.0

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)					
Pp	2 Days	AquaTox	00	6				
Cd	<24 hrs	In-house Culture	00	6				

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Plastic Beakers	500	250	10	4
Cd	Plastic Beakers	30	15	5	4

Test Species	Temp. Range (C)	D.O. Range (mg/L)	pH Range (s.u.)	Light Intensity Avg. (ft-c)
Pp	24.9-25.1	7.90-8.90	7.73-7.81	71.9
Cd	24.9-25.1	7.90-8.90	7.73-7.81	71.9

7. FEEDING:

Not Fed: X* Fed Daily: _____ Fed Irregular: _____ (Explain in comments below)

Brine Shrimp: Fed _____ mL Suspension of Newly Hatched Larvae _____ Times Daily.

YCT: Fed _____ mL Suspension Containing _____ mg/L TSS Daily.

Algae: Fed _____ mL Suspension Containing _____ Algal Cells/mL Daily.

COMMENTS: *Pimephales promelas were fed twice daily until test start. They were not fed during test period.

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/16/19

8. REFERENCE TOXICANT TESTS:

Toxicant: Sodium Chloride, NaCL Source: Fisher Lot 176877 CAS#: 7647-14-5

Solution concentration unit: mg/L X g/L ___ % ___ other (specify): ___

Test Org.	Test Date MM/DD - MM/DD	Control Water	Reference Test Solution Concentrations (Cont. to Highest Conc.)						
Pp	8/26/19 15:00	MHSW	00	2	4	6	8	10	
Cd	8/28/19 14:50	MHSW	00	.5	1.0	1.5	2.0	2.5	

Test Org.	Results	95% Confidence Interval	Upper and Lower CUSUM Chart Control Limit (This Test)	Number (N)
Pp	8.36	7.300425-8.139701	0--+ Infinity	40
Cd	2.36	2.102228-2.438602	2.29073-2.481782	20

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:
None.

9.B. Test Solution Manipulations or Test Modifications:
Effluent IWC of 6 % is specified in the NPDES permit.

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/16/19

11.A. ACUTE SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Pimephale promelas*
ACUTE TOXICITY INDICATED: YES _____ NO X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

SOLUTION CONC.(%)	00	6	-
MORTALITY (%)	00	00	-

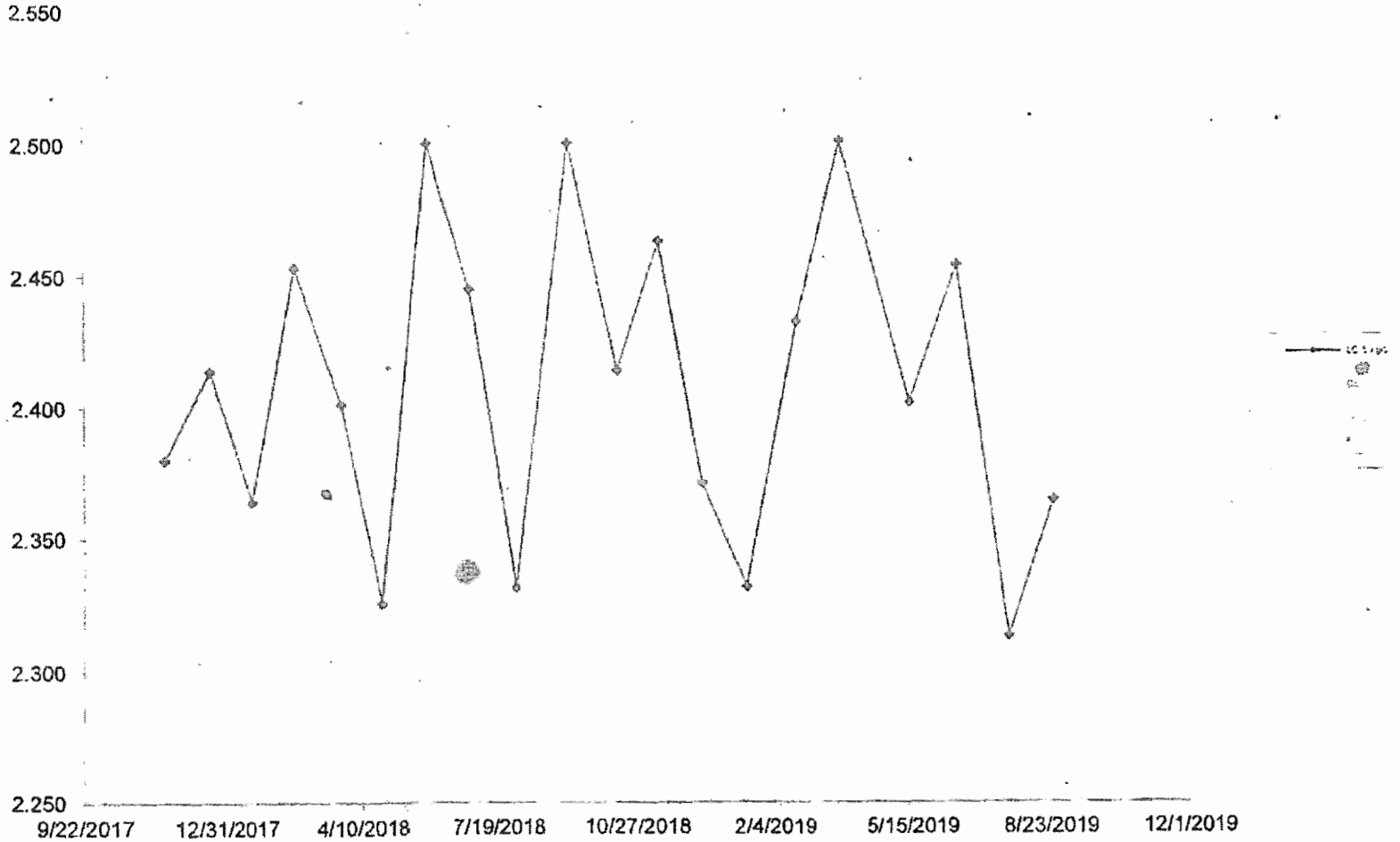
PERMITTED MORTALITY RATE (%): 10%
Normally Distributed: YES -------- NO X
Test Statistic: ----- Critical Value: ---- (Parametric)
Equal variance: ---------- Unequal variance: ---------
F Statistic: ---------- Critical F: ----------
t - Test Statistic: ---------- t - Test Critical Value: ----------
Sample Rank Sum: -------- # Reps.: ------ Critical Rank Sum: -------- (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

TEST ORGANISM: *Ceriodaphnia dubia*
ACUTE TOXICITY INDICATED: YES _____ NO X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

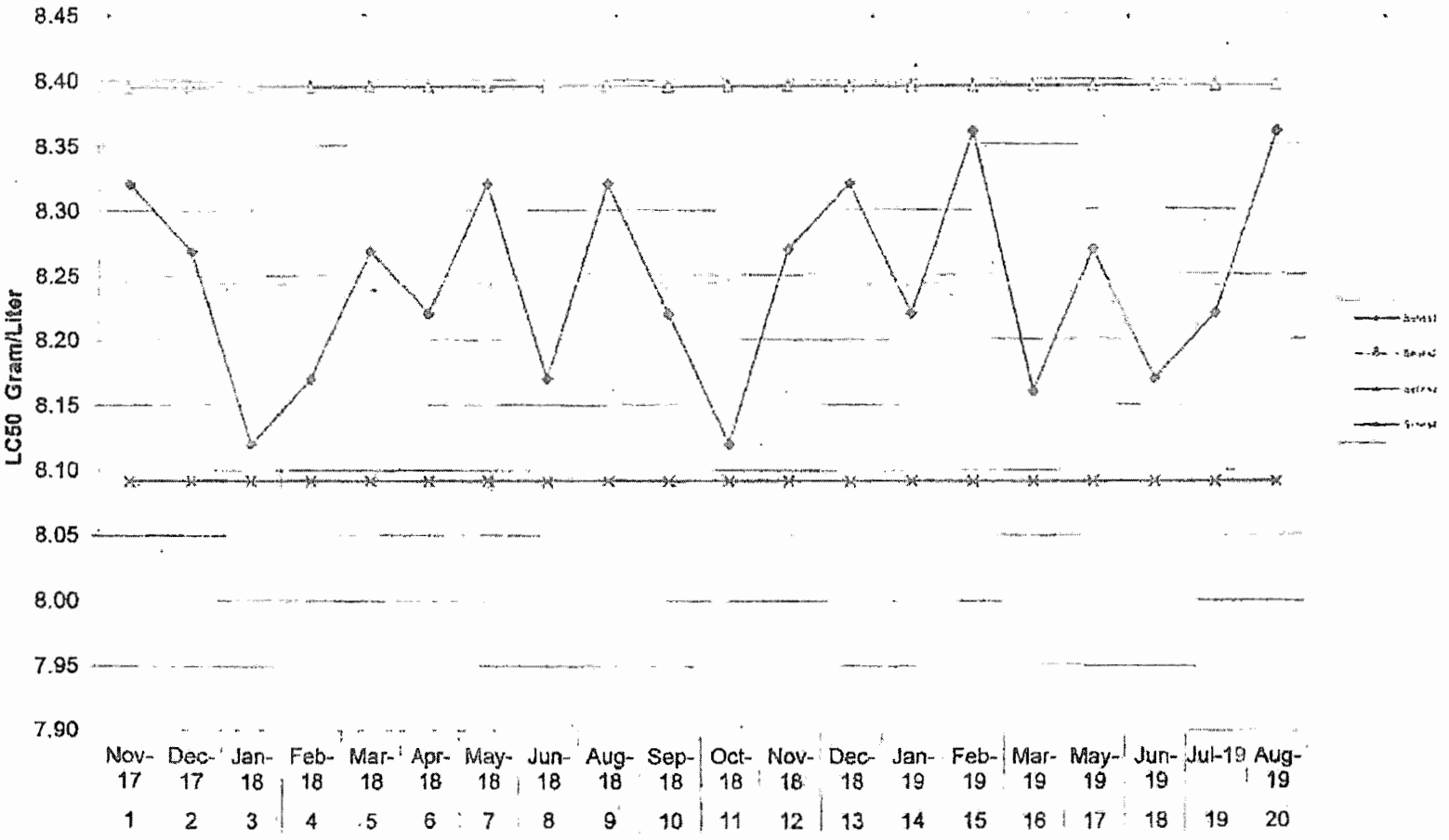
SOLUTION CONC.(%)	00	6	-
MORTALITY (%)	00	00	-

PERMITTED MORTALITY RATE (%): 10%
Normally Distributed: YES ------- NO --------
Test Statistic: ---------- Critical Value: ---------- (Parametric)
Equal variance: ---------- Unequal variance: ---------
F Statistic: ---------- Critical F: ----------
t - Test Statistic: ---------- t - Test Critical Value: ----------
Sample Rank Sum: -------- # Reps.: ------ Critical Rank Sum: -------- (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

Ceriodaphnia dubia Reference Toxicant Test (NaCl, 48-hour)



Sodium Chloride Reference Toxicity for Fathead Minnows
Pace Analytical Frontenac, KS



Acute Toxicity

Pace Analytical
www.pacelabs.com

Project Number: R.T.

Date and Time Arrived: NA

Date and Time Used: 2/26/19 1500

Age of Fish: 6 days

Age of Water Fleas: <24 hours old

Analyst: MG, TV, [illegible]

Synthetic Number: F-7-270

Dilution water used: Synthetic____ Upstream____

NaCl F-1082		SYN	[illegible]						
pH (S.U.)		7.49	7.63						
D.O (mg/L)		8.22	8.40						
Temperature (°C)		25.0	25.0						
Alkalinity[1]	mL titrant	3.1	4.2						
	mg $CaCO_3$/L	62	84						
Hardness[2]	mL titrant	4.7	5.7						
	mg $CaCO_3$/L	94	114						
Conductance (µmhos/cm)		322	14,87[illegible]						
Chlorine (mg/L)		<.1	<.1						

Comments:

[1] Section 17, ENV-SOP-0097, *Bioassay Chemical Tests.*
[2] Section 18, ENV-SOP-0097, *Bioassay Chemical Tests.*

Acute Toxicity

Project Number: R.T.

Ceriodaphnia dubia or Daphnia pulex Survival

	0 Hours	24 hours	48 hours		0	24	48
Synthetic	5	5	5	S1,N	5	5	5
2							
3							5
4							
1.0	5	5	5	1.5	5	5	5
2							
3							5
4							
1.5	5	5	5	2.0	5	5	5
2							
3							
4							
2.0	5			2.5	5	5	5
2							
3							
4			5				
2.5	5	5	5	3.0	5	5	5
2							
3		3	1			2	
4			2			1	
3.0	5			3.5	5	5	5
2							
3							
4							
2							
3							
4							
2							
3							
4							
2							
3							
4							

Acute Toxicity

Project Number: RT

Fathead Minnows Survival

	0 Hours	24 hours	48 hours
Synthetic	10	6	
2			
3			
4			
7.0			
2			
3			
4			
11.0			
2			
3			
4			
6.0			
2			
3			
4			
8.0			
2			
3			
4			
10.0			
2			
3			
4			
2			
3			
4			
2			
3			
4			
2			
3			
4			

Acute Toxicity

Pace Analytical
www.pacelabs.com

Project Number: KT

MB 8/27/14 1440

Wet Chemistry at 24 hours

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)
Synthetic	7.68	7.40	24.2	344
Upstream	7.86	7.30	24.7	14,990

MB 8/28/14 1450

Wet Chemistry at 48 hours (End Time: 1450)

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)
Synthetic	7.82	7.30	24.9	396
Upstream	7.94	7.10	24.9	15,735

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)
Synthetic				
Upstream				

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)
Synthetic				
Upstream				

Pasi AL
Pine Creek

Acute Toxicity

Project Number: 60314257

Date and Time Arrived 9/10/19 10:45

Date and Time Used 9/10/19 ~~15:30~~ 15:30 09/10/19

Age of Fish 2 Days

Age of Water Fleas <24 hours old

Analyst ~~TD~~, TH

Synthetic Number F-7-270

Dilution water used: Synthetic X Upstream ____ pH Purposes

		SYN	6	100%				
pH (S.U.)		7.59		7.75				
D.O. (mg/L)		8.20		8.90				
Temperature (°C)		25.0	25.0	25.0				
Alkalinity[1]	mL titrant	3.1		4.4				
	mg $CaCO_3$/L	62		88				
Hardness[2]	mL titrant	4.5		5				
	mg $CaCO_3$/L	90		100				
Conductance (µmhos/cm)		316		403				
Chlorine (mg/L)		<0.1		<0.1				

Comments: Light int - 71.9

[1] Section 17, ENV-SOP-0097, *Bioassay Chemical Tests.*
[2] Section 18, ENV-SOP-0097, *Bioassay Chemical Tests.*

Acute Toxicity

Project Number: 60314257

Ceriodaphnia dubia or Daphnia pulex Survival

	0 Hours	24 hours	48 hours	
Synthetic	5	5	5	
2	↓	↓	↓	
3				
4				
6%	5	5	5	
2	↓	↓	↓	
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
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4				
2				
3				
4				
2				
3				
4				
2				
3				
4				

Acute Toxicity

Project Number: 60314257

Fathead Minnows Survival

	0 Hours	24 hours	48 hours	
Synthetic	10	10	10	
2	↓	↓	↓	
3				
4				
6	10	10	10	
2	↓	↓	↓	
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				

Pine Creek

Acute Toxicity

Project Number: 10G314257

Pace Analytical
www.pacelabs.com

Wet Chemistry at 24 hours

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.68	8.00	25.1	329	
~~Upstream~~ 6	7.73	8.10	25.1	402	

Wet Chemistry at 48 hours (End Time: 16:00)

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.74	7.70	24.9	336	
~~Upstream~~ 6	7.81	7.90	24.9	412	

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

Chain of Custody

Pace Analytical
www.pacelabs.com

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Workorder: 20120588 Workorder Name: Pine Creek WWTP Acute Biotox

Owner Received Date: 9/9/2019 Results Requested By: 9/30/2019

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)614-6630	Pace Analytical Kansas 9608 Loiret Blvd Kansas, KS 66219 Phone (913)599-5665

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	Requested Analysis: Acute Toxicity	LAB USE ONLY
1	Pine Creek WWTP Effluent	PS	9/9/2019 07:00	20120588001	Water	1	X	Cab-001
2								
3								
4								
5								

(00314257

Transfers	Released By	Date/Time	Received By	Date/Time
1	Sierra Sowell	9/9/19	Ethan Pace	9/9/19 10:45
2		3:31 pm		
3	Sample			

Comments

Cooler Temperature on Receipt 3.0 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

October 05, 2020

Mr. Rick Teague
Prattville Wastewater
101 W. Main Street
Prattville, AL 36067

RE: Project: Pine Creek WWTP Acute Tox
Pace Project No.: 20171335

Dear Mr. Teague:
Enclosed are the analytical results for sample(s) received by the laboratory on September 14, 2020. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-8630

CERTIFICATIONS

Project: Pine Creek WWTP Acute Tox
Pace Project No.: 20171335

Pace Analytical Services Southeast Kansas
808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 18-016-0
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 03055
Oklahoma Certification #: 9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

SAMPLE ANALYTE COUNT

Project: Pine Creek WWTP Acute Tox
Pace Project No.: 20171335

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20171335001	PC WWTP Effluent Acute Toxicit	EPA 821/R-02/012	MEB	1	PASI-SEKS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

ANALYTICAL RESULTS

Project: Pine Creek WWTP Acute Tox
Pace Project No.: 20171335

Sample: PC WWTP Effluent Acute Toxicit **Lab ID: 20171335001** Collected: 09/14/20 06:00

Parameters	Results	Units	Report Limit	DF	Qualifiers
Toxicity, Acute	**Complete**		1.0	1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

QUALIFIERS

Project: Pine Creek WWTP Acute Tox
Pace Project No.: 20171335

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

LABORATORIES

PASI-SEK Pace Analytical Services - SE Kansas

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of 1

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company:	Prattville Wastewater - WW	Report To:	Rick Teague	Attention:	
Address:	101 W. Main Street	Copy To:		Company Name:	
	Prattville, AL 36067			Address:	
Email:	rick.teague@prattvilleal.gov	Purchase Order #:		Pace Quote:	
Phone:	(334)361-3626 Fax	Project Name:	Pine Creek WWTP Acute Tox 5% AL0027723	Pace Project Manager:	cindy.simpson@pacelabs.com,
Requested Due Date:		Order #:	889231	Pace Profile #:	13721

Regulatory Agency: —

State / Location: AL

WO#: 20171335

20171335

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Acute Toxicity	Residual Chlorine (Y/N)
1	Outfall 001T Composite 24 5%	WT	C24	9/14/20	6:30				1	1									X	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Matrix codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		9/14/20	3:20		9/14/20	3:32	
		9/14/20	5:13		9/14/20	17:13	
							5.6

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
5.6	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dana Smedley

SIGNATURE of SAMPLER:

DATE Signed: 9-14-2020

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 03, 2020

Cindy Simpson
Pace NOLA

RE: Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

Dear Cindy Simpson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 15, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - SE Kansas

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nolie Wood
nolie.wood@pacelabs.com
1(913)563-1401
Project Manager

Enclosures

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

Pace Analytical Services Southeast Kansas
808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 18-016-0
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 03055
Oklahoma Certification #: 9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20171335001	PC WWTP EFFLUENT ACUTE TOXICIT	Water	09/14/20 17:30	09/15/20 11:30

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20171335001	PC WWTP EFFLUENT ACUTE TOXICIT	EPA 821/R-02/012	MEB	1	PASI-SE

PASI-SE = Pace Analytical Services - SE Kansas

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

Method: **EPA 821/R-02/012**
Description: Acute Toxicity
Client: PASI New Orleans
Date: October 03, 2020

General Information:
1 sample was analyzed for EPA 821/R-02/012 by Pace Analytical Services SE Kansas. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

Sample: PC WWTP EFFLUENT ACUTE TOXICIT **Lab ID: 20171335001** Collected: 09/14/20 17:30 Received: 09/15/20 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Acute Toxicity	Analytical Method: EPA 821/R-02/012 Pace Analytical Services - SE Kansas							
Toxicity, Acute	**Complete**		1.0	1		09/15/20 14:00		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20171335 AUTAUGA CREEK ACUTE
Pace Project No.: 60348297

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20171335001	PC WWTP EFFLUENT ACUTE TOXICIT	EPA 821/R-02/012	679713		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60348297

60348297

Client Name: PASI - NOLA

Courier: FedEx UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No X

Custody Seal on Cooler/Box Present: Yes X No ☐ Seals intact: Yes X No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None X Other ☐

Thermometer Used: T-111 Type of Ice: (Wet) Blue None

Cooler Temperature (°C): As-read 6.0 Corr. Factor -1.2 Corrected 4.8

Date and initials of person examining contents:

Temperature should be above freezing to 6°C

Chain of Custody present:	XYes ☐No ☐N/A	9-15-20 11:30
Chain of Custody relinquished:	XYes ☐No ☐N/A	MSP
Samples arrived within holding time:	XYes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	XYes ☐No ☐N/A	
Rush Turn Around Time requested:	☐Yes XNo ☐N/A	
Sufficient volume:	XYes ☐No ☐N/A	
Correct containers used:	XYes ☐No ☐N/A	
Pace containers used:	XYes ☐No ☐N/A	
Containers intact:	XYes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No XN/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☐x/A	
Sample labels match COC: Date / time / ID / analyses	XYes ☐No ☐N/A	
Samples contain multiple phases? Matrix:	☐Yes XNo ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☐Yes ☐No XN/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No XN/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No XN/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No XN/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No Xx/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Internal Transfer Chain of Custody

☐ Samples Pre-Logged into eCOC.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Pace Analytical
www.pacelabs.com

Workorder: 20171335 Workorder Name: Autauga Creek WWTP Acute Tox Owner Received Date: 9/14/2020 Results Requested By: 9/29/2020

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)614-6630	Pace Analytical SE Kansas 808 West McKay Frontenac, KS 66763 Phone (620)235-0003

60348257

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						Requested Analysis: Acute Toxicity												LAB USE ONLY
1	PC WWTP Effluent Acute Toxicit	PS	9/14/2020 06:00	20171335001	Water	1						X												
2																								
3																								
4																								
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	9/14/20 17:30	[illegible]/PACE	9-15-20 1133
2				
3				

Comments

Cooler Temperature on Receipt 4.8 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical Services, Inc.

808 West McKay, Frontenac, KS 66763

LABORATORY REPORT:

CLIENT: Paul Spears City of Prattville (Pine Creek) 101 West Main Street Prattville, AL 36067	**Date Reported:** 9-21-20 **Date Initiated:** 9-15-20 **Time Set:** 14:00 **Date Terminated:** 9-17-20

BIOMONITORING STUDY

ACUTE TOXICITY

Permit # AL0027723

FINDING AND CONCLUSIONS:

Acute toxicity testing was performed on duplicate samples of effluent collected from the City of Prattville (Pine Creek) effluent discharge. Acute toxicity, as defined by significant mortality for at least one of two aquatic test species during a 48 hour period of exposure, was not detected in Ceriodaphnia exposed to the 6% effluent (AEC), and was not detected in fathead minnows exposed to the 6% effluent. The LC50 for the Ceriodaphnia was >6% and >6% for the Pimephales. The test species utilized in this test were the water flea, Ceriodaphnia dubia and the fathead minnow, Pimephales promelas. Detailed results of the toxicity testing are provided in the Acute Toxicity Reports. In addition to the acute toxicity testing, water temperature, pH, dissolved oxygen, total hardness, total alkalinity, conductivity, and chlorine determinations were performed on the effluent and control samples.

SAMPLING PROCEDURES:

City of Prattville (Pine Creek) personnel collected a sample at the City of Prattville (Pine Creek) effluent discharge. The sample was preserved with ice and transported to Pace Analytical by commercial carrier.

INTRODUCTION:

The purpose of this test was to determine the acute toxicity of the City of Prattville (Pine Creek) effluent on the freshwater invertebrate, Ceriodaphnia dubia and the fathead minnow, Pimephalas promelas. These tests were conducted at Pace Analytical Services, Inc., Frontenac, KS.

TEST ORGANISMS:

Ceriodaphnia dubia - The genetic stock of Ceriodaphnia dubia used in this acute toxicity Test were originally obtained from a private breeder. Ceriodaphnia are cultured in house at Pace Analytical Services, Inc. Culture methods of Ceriodaphnia were obtained from EPA821-C-02-006 November 2002.

Pimephales promelas - The fathead minnows used in this acute toxicity test were cultured in-house at Pace Analytical Services, Inc., Frontenac, KS and/or were obtained from a private breeder. Fathead minnows are maintained at Pace Analytical Services until use for acute toxicity between the ages of 1 and 14 days. Information for culturing fathead minnows was taken from EPA821-C-02-006 November 2002.

MATERIALS AND METHODS:

Procedures used in the acute toxicity tests are described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (USEPA, 2002).

City of Prattville (Pine Creek) collected the effluent tested from the City of Prattville (Pine Creek) discharge. Testing was performed using a 6% effluent, and a synthetic control. **The toxicity test was initiated within 36 hours of sample collection.** Effluent and synthetic control test solutions were not aerated during the testing period.

Ceriodaphnia *ACUTE METHODS:*

This static test was ran using 40 ml glass vials containing 25 ml of test solution. Food was administered before the test. Five Ceriodaphnia neonates (<24 hr old) were randomly selected and placed in each of 4 replicates of test solution. A total of 20 organisms per concentration were tested. Observations of mortality were made at 24 and 48 hours of exposure.

Pimephales *ACUTE METHODS:*

This static toxicity test was conducted using 500 ml polypropylene container as test chambers containing 250 ml of test solution. Food was administered prior to test initiation, but not during the testing period. Ten Pimephales, 1 – 14 days old, from a single spawn, were randomly selected and placed in each of 4 test chambers. A total of 40 organisms were exposed to each test concentration. Observations of mortality were made at 24 and 48 hours of exposure.

WATER QUALITY METHODS:

Prior to test initiation, temperature, dissolved oxygen, pH, total alkalinity, total hardness, and total residual chlorine were measured in the effluent and in the controls. At 24 and 48 hours of exposure, temperature, dissolved oxygen, pH, and conductance were measured in the effluent sample and the controls.

DATA ANALYSIS:

Statistically significant ($p<0.05$) mortality is determined by Dunnet's procedure using average percent survival of each test concentration versus the average survival of the controls. If significant mortality occurs, median lethal concentrations (LC50) are calculated using effluent concentrations and their corresponding percent mortality data. The LC50's and the 95% confidence intervals are calculated where appropriate by the Spearman-Karber method. Statistical analysis is accomplished by following steps in EPA/600/4-90/027F, August 1993 and by use of Toxstat version 3.4.

RESULTS:

THE Ceriodaphnia MORTALITY RESULTS - There was no significant mortality observed of the freshwater invertebrate, Ceriodaphnia dubia, during the 48 hour exposure period to the 6% effluent concentrations. There was no significant mortality in the synthetic control. The LC50 value of the sample to Ceriodaphnia is approximately >6%.

Ceriodaphnia MORTALITY DATA

 # ALIVE

CONC.	REP #	O HOURS	24 HOURS	48 HOURS	% MORT.
SYNTHETIC	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0
6%	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0

AVG. MORTALITY @ AEC (6% EFFLUENT) =0.0%

THE Pimephales RESULTS - Minnows exposed to effluent collected at the City of Prattville (Pine Creek) effluent discharge exhibited no significant mortality in the 6% effluent concentration during the 48 hr exposure period. The synthetic control showed no significant mortality during the testing period. The LC50 value of the effluent to fathead minnows is estimated to be >6%.

CONC.	REP #	0 HOURS	24 HOURS	48 HOURS	% MORTALITY
SYNTHETIC	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0
6%	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0

AVG. MORTALITY @ AEC (6% EFFLUENT) =0.0%

INITIAL WATER QUALITY:

Initial Measurements Synthetic Water

pH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.53	8.10	352	<0.1	25.0	96	62

Initial Measurements of 100% Effluent

PH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.34	8.60	410	<0.1	25.0	86	58

TEST WATER QUALITY:

24-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.94	7.60	24.7	435
6%	8.01	7.80	24.7	422

48-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.82	7.20	24.9	465
6%	8.00	7.50	24.9	432

QUALITY ASSURANCE:

The absence of control mortality during this test indicated the health of the organisms and indicated that any significant mortality in the test concentrations is not due to contaminants or variations in test conditions. Reference toxicity tests are routinely performed by staff members of our Toxicology Department.

REFERENCE TOXICANT (NaCl)
Ceriodaphnia
 # OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
3.0 g/l	20	0	0
2.5 g/l	20	9	4
2.0 g/l	20	19	17
1.5 g/l	20	20	20
1.0 g/l	20	20	20

LC50 = 2.26g/l NaCl

REFERENCE TOXICANT (NaCl)
Pimephales
 # OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
10.0 g/l	40	6	0
8.0 g/l	40	37	25
6.0 g/l	40	39	37
4.0 g/l	40	40	40
2.0 g/l	40	40	40

LC50 = 8.27g/l NaCl

Submitted By: Tim Harrell

Timothy Harrell
Technical Director

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY

1. GENERAL:

NPDES PERMIT NO.: AL0027723 DSN: 001 COUNTY: Elmore County
Permitee: City of Prattville Wastewater Department
Facility Name: Pine Creek Wastewater Treatment Plant
Agent submitting Report: City of Prattville Wastewater Department, 101 West Main St., Prattville, AL 36067
Lab Conducting Toxicity Test(s): Pace Analytical, 808 West McKay, Frontenac KS 66763
Months To Test:
This Report for Toxicity Test(s) Required for the Month of:
Scheduled Test(s): Yes X No ____ Accelerated Test(s): Yes ____ No X
Accelerated Test Number ____ of ____ For Failed Scheduled Test Date: ____
Test Type Required: 48-Hr Acute Screening: X -Hr Acute Definitive: ____
Short-term Chronic Screening: ____ Short-term Chronic Definitive: ____

Sam No.	Test Organism: *Pimephales promelas* Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid	Test Organism: *Ceriodaphnia dubia* Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid
1	9/15/20 14:00	9/17/20 13:45	Yes	9/15/20 14:00	9/17/20 13:45	Yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number (1) Sur	(1) Rep	(1) Gro	(2) Sur	(2) Rep	(2) Gro	(3) Sur	(3) Rep	(3) Gro	(4) Sur	(4) Rep	(4) Gro
C.d.	6.0%	Pass											
P.p.	6.0%	Pass											

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test Organism	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	pH s.u.	Alk mg/L	Hard mg/L	Spec Cond umhos/cm	Fe mg/L	Mn mg/L	BOD mg/L	Chloride mg/L	
1	7.34	58	86	410					

Municipal Facilities Only

Sample ID	Arsenic (g/L)	Cadium (g/L)	Chromium (g/L)	Copper (g/L)	Lead (g/L)	Hexavalent Chromium (g/L)
Sample ID	Mercury (g/L)	Nickel (g/L)	Silver (g/L)	Zinc (g/L)	Total Cyanide (g/L)	Other(s) (g/L)

Chemical Analysis Performed By (LAB): Pace Analytical

Instantaneous Flow: (1) ____ GPM
Total 24-Hour Flow: (1) ____ MGD (2) ____ MGD (3) ____ MGD

Comments:

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 rewponsible 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 sifnificant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OF RESPONSIBLE OFFICIAL: ____ DATE: ____.

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/21/20

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes _____ (explain) _____

Samples Collected as Specified in the NPDES Permit: Yes X No (explain) _____

Receiving Water: Alabama River Design Flow: 2.0 (MGD)

Sample ID	Sample(s) Collected MM/DD/YY HHMM - MM/DD/YY HHMM	Arrival Temp (C)	Used in Test(s) MM/DD/YY - MM/DD/YY
1	9/14/20 6:00	4.8	9/15/20-9/17/20

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
MHSW	9/13/20	9/15/20	96	62	7.53	352	25.0

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)					
Pp	5 Days	AquaTox	00	8.0				
Cd	<24 hrs	In-house Culture	00	8.0				

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Plastic Beakers	500	250	10	4
Cd	Plastic Beakers	30	15	5	4

Test Species	Temp. Range (C)	D.O. Range (mg/L)	pH Range (s.u.)	Light Intensity Avg. (ft-c)
Pp	24.7-25.0	7.50-8.60	7.34-8.01	79.4
Cd	24.7-25.0	7.50-8.60	7.34-8.01	79.4

7. FEEDING:

Not Fed: X* Fed Daily: _____ Fed Irregular: _____ (Explain in comments below)

Brine Shrimp: Fed _____ mL Suspension of Newly Hatched Larvae _____ Times Daily.

YCT: Fed _____ mL Suspension Containing _____ mg/L TSS Daily.

Algae: Fed _____ mL Suspension Containing _____ Algal Cells/mL Daily.

COMMENTS: *Pimephales promelas were fed twice daily until test start. They were not fed during test period.

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/21/20

8. REFERENCE TOXICANT TESTS:

Toxicant: Sodium Chloride, NaCL Source: Fisher Lot 176877 CAS#: 7647-14-5

Solution concentration unit: mg/L ___ g/L X % ___ other (specify): ___

Test Org.	Test Date MM/DD - MM/DD	Control Water	Reference Test Solution Concentrations (Cont. to Highest Conc.)						
Pp	8/21/20-8/23/20	MHSW	00	2	4	6	8	10	
Cd	8/21/20-8/23/20	MHSW	00	.5	1.0	1.5	2.0	2.5	

Test Org.	Results	95% Confidence Interval	Upper and Lower CUSUM Chart Control Limit (This Test)	Number (N)
Pp	8.27	7.265578-8.043651	8.08-8.41	40
Cd	2.26	2.013587-2.335087	2.24-2.52	20

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:
None.

9.B. Test Solution Manipulations or Test Modifications:
Effluent IWC of 6.0 % is specified in the NPDES permit.

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/21/20

11.A. ACUTE SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Pimephale promelas*
ACUTE TOXICITY INDICATED: YES _____ NO X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

SOLUTION CONC.(%)	00	6.0	-
MORTALITY (%)	00	00	-

PERMITTED MORTALITY RATE (%): _____
Normally Distributed: YES _____ NO X
Test Statistic: _____ Critical Value: _____ (Parametric)
Equal variance: _____ Unequal variance: _____
F Statistic: _____ Critical F: _____
t - Test Statistic: _____ t - Test Critical Value: _____
Sample Rank Sum: _____ # Reps.: _____ Critical Rank Sum: _____ (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

TEST ORGANISM: *Ceriodaphnia dubia*
ACUTE TOXICITY INDICATED: YES _____ NO X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

SOLUTION CONC.(%)	00	6.0	-
MORTALITY (%)	00	00	-

PERMITTED MORTALITY RATE (%): _____
Normally Distributed: YES _____ NO _____
Test Statistic: _____ Critical Value: _____ (Parametric)
Equal variance: _____ Unequal variance: _____
F Statistic: _____ Critical F: _____
t - Test Statistic: _____ t - Test Critical Value: _____
Sample Rank Sum: _____ # Reps.: _____ Critical Rank Sum: _____ (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

Overman, Carolyn

Subject: FW: 2020 Summary Tox pages Pine Creek
Attachments: 2020 Tox summary.pdf

From: Wilks, Napoleon <Napoleon.Wilks@prattvilleal.gov>
Sent: Wednesday, July 21, 2021 8:37 AM
To: Lee, Sandra <SLee@adem.alabama.gov>
Subject: 2020 Summary Tox pages Pine Creek

Attached are the pages you requested. If you need anything else please give me a call.

Thanks,
Napoleon Wilks IV
Waste Water Plant Supervisor
City of Prattville
334-595-0651
334-296-1851
napoleon.wilks@prattvilleal.gov
www.prattvilleal.gov

Internal Transfer Chain of Custody

Pace Analytical
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Workorder: 20171335 Workorder Name: Autauga Creek WWTP Acute Tox Owner Received Date: 9/14/2020 Results Requested By: 9/29/2020

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)614-6630	Pace Analytical SE Kansas 808 West McKay Frontenac, KS 66763 Phone (620)235-0003

60348257

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: Acute Toxicity	LAB USE ONLY
1	PC WWTP Effluent Acute Toxicit	PS	9/14/2020 08:00	20171335001	Water	1	X	
2								
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	9/14/20 17:30	MASTER/PACE	9-15-20 1130
2				
3				

Comments

Cooler Temperature on Receipt 4.8 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Acute Toxicity

Project Number: Lab Tox

Date and Time Arrived	——
Date and Time Used	8/21/20 13:50
Age of Fish	10 day
Age of Water Fleas	<24 hours old
Analyst	TH MB
Synthetic Number	F.5-4

Dilution water used: Synthetic X Upstream

		SYN	100% 8/20						
pH (S.U.)		7.22	7.85						
D.O. (mg/L)		8.46	8.20						
Temperature (°C)		25.0	25.0						
Alkalinity[1]	mL titrant	3.1	3.6						
	mg $CaCO_3$/L	62	72						
Hardness[2]	mL titrant	4.4	6.9						
	mg $CaCO_3$/L	[illegible]	138						
Conductance (µmhos/cm)		566	[illegible]						
Chlorine (mg/L)		[illegible]	[illegible]						

Comments: L.I. 75.6

[1] Section 17, ENV-SOP-0097, *Bioassay Chemical Tests.*
[2] Section 18, ENV-SOP-0097, *Bioassay Chemical Tests.*

Acute Toxicity

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ect Number: Ref-TO-

Ceriodaphnia dubia or Daphnia pulex Survival

	0 Hours	24 hours	48 hours			
Synthetic	C	C	C	5	5	5
2						
3						
4						
1.0	5	5	5	1.5 C	5	5
2						
3						
4						
1.5	5	5	5 5	2.0 5	5	5
2						
3						
4						
2.0	5	4	4	2.5 C	5	4
2		5	5		4	3
3		5	3		4	2
4		5	5		5	4
2.5	5		1	3.0 5	1	2
2		4	2		3	1
3		5	1		2	0
4			0		3	2
5.0	5	4	4	5	5	5
2						
3						
4						
2						
3						
4						
2						
3						
4						
2						
3						
4						

Acute Toxicity

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Project Number: 1 / 10

Fathead Minnows Survival

	0 Hours	24 hours	48 hours
Synthetic	1	10	10
2	1	10	10
3	1	10	10
4	1	10	10
2.0	1	10	10
2	1	10	10
3	1	10	10
4	1	10	10
1/10	1	10	10
2	1	10	10
3	1	10	10
4	1	10	10
1/10	1	10	10
2	1	10	9
3	1	9	9
4	1	10	9
1.0	1	9	9
2	1	9	9
3	1	9	9
4	1	10	10
	1	9	9
2	1	10	10
3	1	10	10
4	1	10	10
2			
3			
4			
2			
3			
4			
2			
3			
4			

Acute Toxicity

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Project Number: Kut Tb

Wet Chemistry at 24 hours

MB 1335	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.78	7.30	25.1	355	
Upstream	7.92	7.40	25.1	15,900	

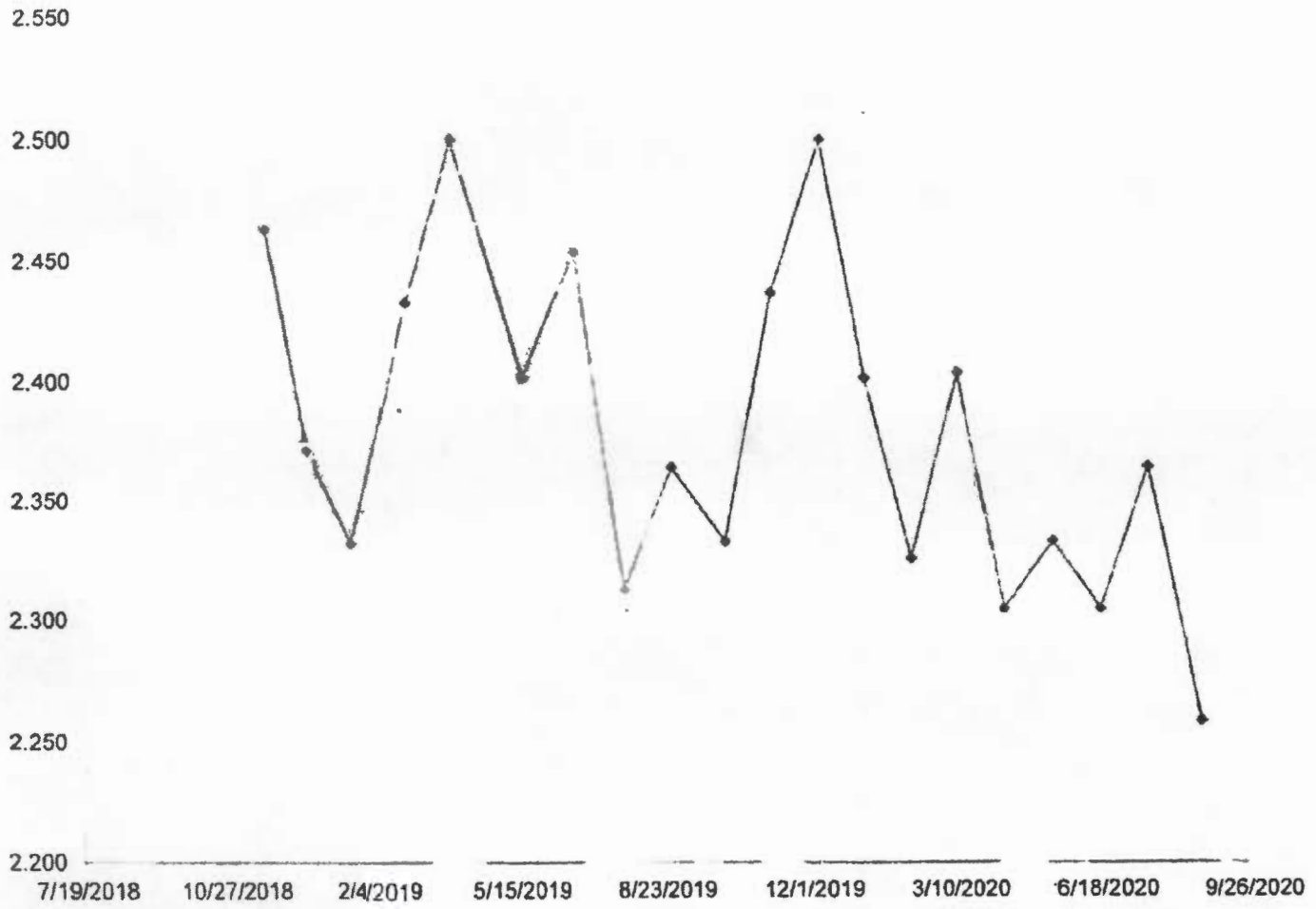
Wet Chemistry at 48 hours (End Time: 1340)

MB	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.80	7.40	24.9	397	
Upstream	7.96	7.30	24.9	16,100	

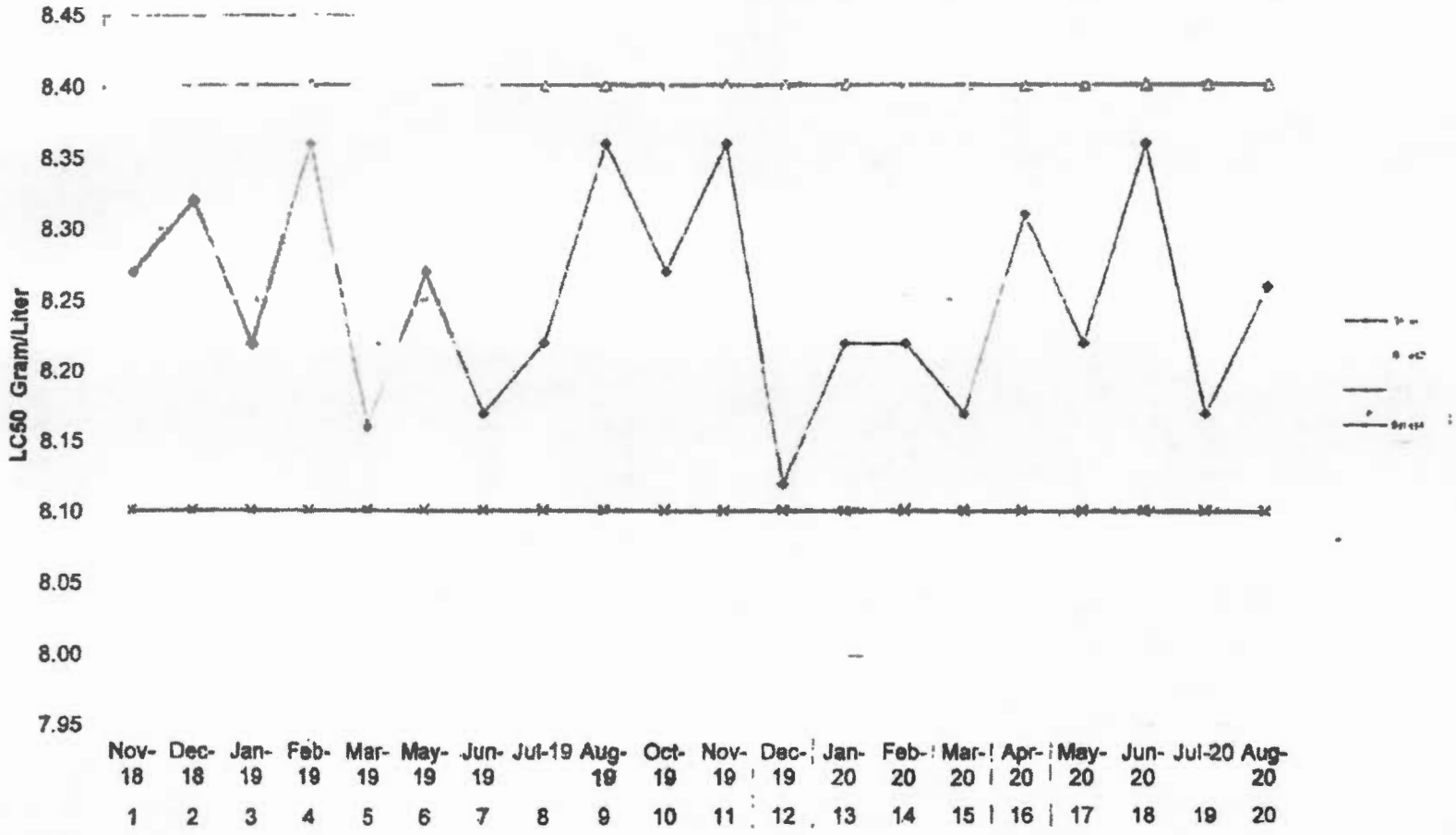
	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

Ceriodaphnia dubia Reference Toxicant Test (NaCl, 48-hour)



Sodium Chloride Reference Toxicity for Fathead Minnows
Pace Analytical Frontenac, KS



Acute Toxicity

Project Number: 60348297 Pinecreek - prod

Date and Time Arrived: 11:30 9/15/20

Date and Time Used: 9/15/20 14:00

Age of Fish: 5 day

Age of Water Fleas: <24 hours old

Analyst: TH MP

Synthetic Number: F-5-4

Dilution water used: Synthetic X Upstream____

		SYN	100						
pH (S.U.)		7.53	7.34						
D.O. (mg/L)		8.10	8.60						
Temperature (°C)		25.0	25.0						
Alkalinity[1]	mL titrant	3.1	2.9						
	mg $CaCO_3$/L	62	58						
Hardness[2]	mL titrant	4.8	4.3						
	mg $CaCO_3$/L	96	86						
Conductance (µmhos/cm)		352	410						
Chlorine (mg/L)		<.1	<.1						

Comments: Cig 29 79.4

[1] Section 17, ENV-SOP-0097, *Bioassay Chemical Tests.*
[2] Section 18, ENV-SOP-0097, *Bioassay Chemical Tests.*

Acute Toxicity

Project Number: 60348297

Ceriodaphnia dubia or Daphnia pulex Survival

	0 Hours	24 hours	48 hours	
Synthetic	5	5	5	
2				
3				
4				
6%	5	5	5	
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				

Acute Toxicity

Project Number: 60348297

Fathead Minnows Survival

	0 Hours	24 hours	48 hours
Synthetic	1✓	1✓	1✓
2			
3			
4			
6%	1✓	1✓	1✓
2			
3			
4			
2			
3			
4			
2			
3			
4			
2			
3			
4			
2			
3			
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2			
3			
4			

Acute Toxicity

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Project Number: 60348297

TH 13:30

Wet Chemistry at 24 hours

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.94	7.60	24.7	435	
~~Upstream~~ 60%	8.01	7.50	24.7	422	

Wet Chemistry at 48 hours (End Time: TH 13:45)

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.82	7.20	24.9	465	
~~Upstream~~ 60%	8.00	7.50	24.9	432	

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

Brine Shrimp Feeding Log

Pace Analytical Services, Inc.
808 West McKay
Frontenac, KS 66763
Phone: 620.235.0003
Fax: 620.235.0106

Month: September
Year: 2020

Fish observation	
Tanks	# Dead or sick

Monitor when using fish for reproduction.

Date	Glass Chamber	8:00AM Feed	4:00PM Feed	Initials	
1	B	✓	✓	MJP	
2	A	✓	✓	AB	
3		✓	✓	TH	
4	B	✓	✓	TH	
5	A	✓	✓	MJP	
6	B	✓	✓	MB	
7		✓	✓	MB	
8	A	✓	✓	TH	
9		✓	✓	MP	
10	B	✓	✓	TH	
11		✓	✓	TH	
12	A	✓	✓	TH	
13		✓	✓	TH	
14	B	✓	✓	TH	
15		✓	✓	TH	
16	A	✓	✓	TH	
17		✓	✓	TH	
18	B	✓	✓	TH	
19		✓	✓	MP	
20	A	✓	✓	MP	
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

F-KS-MB-105-rev.0
Revised 6/23/2015

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

October 05, 2021

RECEIVED
OCT 28 2021
MUNICIPAL SECTION

Mr. Rick Teague
Prattville Wastewater
101 W. Main Street
Prattville, AL 36067

RE: Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20220571

Dear Mr. Teague:

Enclosed are the analytical results for sample(s) received by the laboratory on September 22, 2021. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - SE Kansas

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

cc: Mr. Napoleon Wilks IV, City of Prattville

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

CERTIFICATIONS

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20220571

Pace Analytical Services Southeast Kansas
808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 18-016-0
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 03055
Oklahoma Certification #: 9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-5630

SAMPLE ANALYTE COUNT

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20220571

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20220571001	PC WWTP Effluent Acute Toxicit	EPA 821/R-02/012	TNS1	1	PASI-SEKS

PASI-SEKS = Pace Analytical Services - SE Kansas

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-5630

ANALYTICAL RESULTS

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20220571

Sample: PC WWTP Effluent Acute Toxicit **Lab ID: 20220571001** Collected: 09/22/21 07:00

Parameters	Results	Units	Report Limit	DF	Qualifiers
Toxicity, Acute	Complete		1.0	1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-8630

QUALIFIERS

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20220571

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Prattville Wastewater - WW	Report To: Rick Teague	Attention:
Address: 101 W. Main Street	Copy To:	Company Name:
Prattville, AL 36067		Address:
Email: rick.teague@prattvilleal.gov	Purchase Order #:	Pace Quote:
Phone: (334)361-3626 Fax:	Project Name: Pine Creek WWTP Acute Tox 5% AL0027723	Pace Project Manager: cindy.simpson@pacelabs.com
Requested Due Date:	Order #: 689231	Pace Profile #: 13721

Regulatory Agency: State / Location: AL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): Acute Toxicity	Residual Chlorine (Y/N)
1	Outfall 001T Composite 24 5%	WT	C24	9/21	700	9/22	700		1	1									X	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

WO#: 20220571

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		9-22-21	10:20		9/22/21	10:20	
		9/22/21	3:30		9-22-21	1530	

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
01	Y	Y	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Colby Smith

SIGNATURE of SAMPLER:

DATE Signed: 9-22-21

WO#: 20220571

PM: CRS Due Date: 10/06/21

CLIENT: TU-Prattvill

Sample Condition Upon Receipt

Pace Analytical

1000 Riverbend Blvd., Suite F
St. Rose, LA 70087

Project #:

Carrier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] Custody Seals intact: ☐Yes ☐No

Thermometer Used: ☐ Therm Fisher IR 7 ☐ Therm Fisher IR 10

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: BC 9-30-21

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present?	☐Yes ☐No	☑N/A	1
Chain of Custody Present:	☑Yes ☐No	☐N/A	2
Chain of Custody Complete:	☑Yes ☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes ☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes ☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes ☐No	☐N/A	6
Sufficient Volume:	☑Yes ☐No	☐N/A	7
Correct Containers Used:	☑Yes ☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes ☐No	☑N/A	9
Sample Labels match COC:	☑Yes ☐No	☐N/A	10
All containers received within manufacture's precautionary and/or expiration dates.	☑Yes ☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes ☐No	☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes ☐No	☐N/A	13 If No, was preservative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☐No	☑N/A	14
Trip Blank Present:	☐Yes ☑No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

WO#: 20220571

PM: CRS Due Date: 10/06/21

CLIENT: TU-Prattvill

JAMES HARDEE

Pace Analytical® Field

Analyst: Glenn Kuntz Date: 9/22/21

pH CALIBRATION - Initial Time: 8:00 ☑ AM ☐ PM

Make: HACH Model: HQ11D Serial #: 160400021642

Probe Model #: PHC101 Serial #: 201952563784 Placed Into Service: 09/11/2020

4 Buffer: pH 4.00 MV 160.6 Lot #/expiration 201DC31 9/22

7 Buffer: pH 7.01 MV 14.6 Lot #/expiration 3510712 5/22

10 Buffer: pH 9.92 MV -155.0 Lot #/expiration 2908E08 4/22

Slope: 89.9%

NIST Temp, C: 21.9 Meter Temp, C: 22.4 Temperature Acceptance Criteria: +/- 4 C

pH 6 VERIFICATION Acceptance Criteria: +/- 0.10

Initial: pH 6.08 Time: 8:05 ☑ AM ☐ PM

After 4 hrs: pH _____ Time: _____ ☐ AM ☐ PM

End of Day: pH 6.10 Time: 10:45 ☑ AM ☐ PM

DO CALIBRATION Time: _____ ☐ AM ☐ PM

Make: YSI Model: 550A Serial #: 17B101819

Probe Model #: PHC101 Serial #: 16E100614 Placed Into Service: 04/04/2017

DO of Saturation: 99% DO of Saturation Reading (%): ___ Acceptance Criteria: 97-101%

Cl_2 CALIBRATION Time: _____ ☐ AM ☐ PM

Make: HACH Model: DR300 Serial #: 19110A004297

Standard Lot #: A0197 Standard Exp: Jul 2022

Standard 0 mg/L: _____

Standard 0.25 mg/L: _____ Acceptance Criteria: +/- 0.09

Standard 0.94 mg/L: _____ Acceptance Criteria: +/- 0.10

Standard 1.72 mg/L: _____ Acceptance Criteria: +/- 0.14

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 05, 2021

Cindy Simpson
Pace NOLA

RE: Project: 20220571 PINE CREEK
Pace Project No.: 60381024

Dear Cindy Simpson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2021. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - SE Kansas

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nolie Wood
nolie.wood@pacelabs.com
1(913)563-1401
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: 20220571 PINE CREEK
Pace Project No.: 60381024

Pace Analytical Services Southeast Kansas
808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 18-016-0
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 03055
Oklahoma Certification #: 9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: 20220571 PINE CREEK
Pace Project No.: 60381024

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20220571001	PC WWTP Effluent Acute Toxicit	EPA 821/R-02/012	TNS1	1	PASI-SE

PASI-SE = Pace Analytical Services - SE Kansas

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: 20220571 PINE CREEK
Pace Project No.: 60381024

Sample: PC WWTP Effluent Acute Toxicit **Lab ID: 20220571001** Collected: 09/22/21 07:00

Parameters	Results	Units	Report Limit	DF	Qualifiers
Toxicity, Acute	Complete		1.0	1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: 20220571 PINE CREEK
Pace Project No.: 60381024

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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U - Indicates the compound was analyzed for, but not detected.

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Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60381024

60381024

Client Name: Cindy Simpson / Pine Creek

Courier: FedEx ☐ UPS ☒ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No X

Custody Seal on Cooler/Box Present: Yes X No ☐ Seals Intact: Yes X No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None X Other ☐

Thermometer Used: T-111 Type of Ice: Wet Blue None

Cooler Temperature (°C): As-read 3.4 Corr. Factor -.8 Corrected 2.6

Temperature should be above freezing to 6°C

Date and initials of person examining contents: WB 9/23/21 9:50

Chain of Custody present:	X Yes ☐ No ☐ N/A	
Chain of Custody relinquished:	☐ Yes ☐ No ☐ N/A	
Samples arrived within holding time:	☐ Yes ☐ No ☐ N/A	
Short Hold Time analyses (<72hr):	X Yes ☐ No ☐ N/A	
Rush Turn Around Time requested:	☐ Yes X No ☐ N/A	
Sufficient volume:	X Yes ☐ No ☐ N/A	
Correct containers used:	X Yes ☐ No ☐ N/A	
Pace containers used:	X Yes ☐ No ☐ N/A	
Containers intact:	X Yes ☐ No ☐ N/A	
Unpreserved 5035A / TX1005/1006 solls frozen in 48hrs?	☐ Yes ☐ No X N/A	
Filtered volume received for dissolved tests?	☐ Yes ☐ No X N/A	
Sample labels match COC: Date / time / ID / analyses	X Yes ☐ No ☐ N/A	
Samples contain multiple phases? Matrix:	☐ Yes X No ☐ N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☐ Yes ☐ No X N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐ Yes ☐ No	
Potassium Iodide test strip turns blue/purple? (Preserve)	☐ Yes ☐ No	
Trip Blank present:	☐ Yes ☐ No X N/A	
Headspace in VOA vials (>6mm):	☐ Yes ☐ No X N/A	
Samples from USDA Regulated Area: State:	☐ Yes ☐ No X N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐ Yes ☐ No X N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Workorder: 20220571 Workorder Name: Pine Creek WWTP Acute Tox 5% A Owner Received Date: 9/22/2021 Results Requested By: 10/6/2021

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)814-6630	Pace Analytical SE Kansas 808 West McKay Frontenac, KS 66763 Phone (620)235-0003

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Acute Toxicity	LAB USE ONLY
1	PC WWTP Effluent Acute Toxicit	PS	9/22/2021 07:00	20220571001	Water	1	X	5 Oct-21
2								
3								
4								
5								

60381024
9/23

Transfers	Released By	Date/Time	Received By	Date/Time
1	B Gray 9.22.21	1650		9/23/21 950
2				
3				

Comments

Sample Cooler Temperature on Receipt 2-6 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

PACE # 60381024

Pace Analytical Services, Inc.

808 West McKay, Frontenac, KS 66763

LABORATORY REPORT:

CLIENT: Paul Spears City of Prattville (Pine Creek) 101 West Main Street Prattville, AL 36067	Date Reported: 9-28-21 Date Initiated: 9-23-21 Time Set: 10:30 Date Terminated: 9-25-21

BIOMONITORING STUDY

ACUTE TOXICITY

Permit # AL0027723

FINDING AND CONCLUSIONS:

Acute toxicity testing was performed on duplicate samples of effluent collected from the City of Prattville (Pine Creek) effluent discharge. **Acute toxicity, as defined by significant mortality for at least one of two aquatic test species during a 48 hour period of exposure, was not detected in Ceriodaphnia exposed to the 5% effluent (AEC), and was not detected in fathead minnows exposed to the 5% effluent. The LC50 for the Ceriodaphnia was >5% and >5% for the Pimephales.** The test species utilized in this test were the water flea, Ceriodaphnia dubia and the fathead minnow, Pimephales promelas. Detailed results of the toxicity testing are provided in the Acute Toxicity Reports. In addition to the acute toxicity testing, water temperature, pH, dissolved oxygen, total hardness, total alkalinity, conductivity, and chlorine determinations were performed on the effluent and control samples.

SAMPLING PROCEDURES:

City of Prattville (Pine Creek) personnel collected a sample at the City of Prattville (Pine Creek) effluent discharge. The sample was preserved with ice and transported to Pace Analytical by commercial carrier.

INTRODUCTION:

The purpose of this test was to determine the acute toxicity of the City of Prattville (Pine Creek) effluent on the freshwater invertebrate, Ceriodaphnia dubia and the fathead minnow, Pimephalas promelas. These tests were conducted at Pace Analytical Services, Inc., Frontenac, KS.

TEST ORGANISMS:

Ceriodaphnia dubia - The genetic stock of Ceriodaphnia dubia used in this acute toxicity Test were originally obtained from a private breeder. Ceriodaphnia are cultured in house at Pace Analytical Services, Inc. Culture methods of Ceriodaphnia were obtained from EPA821-C-02-006 November 2002.

Pimephales promelas - The fathead minnows used in this acute toxicity test were cultured in-house at Pace Analytical Services, Inc., Frontenac, KS and/or were obtained from a private breeder. Fathead minnows are maintained at Pace Analytical Services until use for acute toxicity between the ages of 1 and 14 days. Information for culturing fathead minnows was taken from EPA821-C-02-006 November 2002.

MATERIALS AND METHODS:

Procedures used in the acute toxicity tests are described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (USEPA, 2002).

City of Prattville (Pine Creek) collected the effluent tested from the City of Prattville (Pine Creek) discharge. Testing was performed using a 5% effluent, and a synthetic control. **The toxicity test was initiated within 36 hours of sample collection.** Effluent and synthetic control test solutions were not aerated during the testing period.

Ceriodaphnia *ACUTE METHODS:*

This static test was ran using 40 ml glass vials containing 25 ml of test solution. Food was administered before the test. Five Ceriodaphnia neonates (<24 hr old) were randomly selected and placed in each of 4 replicates of test solution. A total of 20 organisms per concentration were tested. Observations of mortality were made at 24 and 48 hours of exposure.

Pimephales *ACUTE METHODS:*

This static toxicity test was conducted using 500 ml polypropylene container as test chambers containing 250 ml of test solution. Food was administered prior to test initiation, but not during the testing period. Ten Pimephales, 1 – 14 days old, from a single spawn, were randomly selected and placed in each of 4 test chambers. A total of 40 organisms were exposed to each test concentration. Observations of mortality were made at 24 and 48 hours of exposure.

WATER QUALITY METHODS:

Prior to test initiation, temperature, dissolved oxygen, pH, total alkalinity, total hardness, and total residual chlorine were measured in the effluent and in the controls. At 24 and 48 hours of exposure, temperature, dissolved oxygen, pH, and conductance were measured in the effluent sample and the controls.

DATA ANALYSIS:

Statistically significant ($p<0.05$) mortality is determined by Dunnet's procedure using average percent survival of each test concentration versus the average survival of the controls. If significant mortality occurs, median lethal concentrations (LC50) are calculated using effluent concentrations and their corresponding percent mortality data. The LC50's and the 95% confidence intervals are calculated where appropriate by the Spearman-Karber method. Statistical analysis is accomplished by following steps in EPA/600/4-90/027F, August 1993 and by use of Toxstat version 3.4.

RESULTS:

THE Ceriodaphnia MORTALITY RESULTS - There was no significant mortality observed of the freshwater invertebrate, Ceriodaphnia dubia, during the 48 hour exposure period to the 5% effluent concentrations. There was no significant mortality in the synthetic control. The LC50 value of the sample to Ceriodaphnia is approximately >5%.

Ceriodaphnia MORTALITY DATA

 # ALIVE

CONC.	REP #	O HOURS	24 HOURS	48 HOURS	% MORT.
SYNTHETIC	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0
5%	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0

AVG. MORTALITY @ AEC (5% EFFLUENT) =0.0%

THE Pimephales RESULTS - Minnows exposed to effluent collected at the City of Prattville (Pine Creek) effluent discharge exhibited no significant mortality in the 5% effluent concentration during the 48 hr exposure period. The synthetic control showed no significant mortality during the testing period. The LC50 value of the effluent to fathead minnows is estimated to be >5%.

CONC.	REP #	0 HOURS	24 HOURS	48 HOURS	% MORTALITY
SYNTHETIC	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0
5%	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0

AVG. MORTALITY @ AEC (5% EFFLUENT) =0.0%

INITIAL WATER QUALITY:

Initial Measurements Synthetic Water

pH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.6	8.0	338	<0.1	25.0	88	62

Initial Measurements of 100% Effluent

PH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.4	8.2	438	<0.1	25.0	88	44

TEST WATER QUALITY:

24-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.5	7.8	24.7	356
5%	7.9	7.5	24.7	339

48-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.6	7.3	24.7	386
5%	8.1	7.1	24.7	492

QUALITY ASSURANCE:

The absence of control mortality during this test indicated the health of the organisms and indicated that any significant mortality in the test concentrations is not due to contaminants or variations in test conditions. Reference toxicity tests are routinely performed by staff members of our Toxicology Department.

Start: 9/14/21 10:00 End: 9/16/21 10:10

REFERENCE TOXICANT (NaCl)
Ceriodaphnia
OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
3.0 g/l	20	5	0
2.5 g/l	20	17	5
2.0 g/l	20	20	18
1.5 g/l	20	20	20
1.0 g/l	20	20	20

LC50 = 2.31g/l NaCl

REFERENCE TOXICANT (NaCl)
Pimephales
OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
10.0 g/l	40	4	0
8.0 g/l	40	36	27
6.0 g/l	40	40	38
4.0 g/l	40	40	40
2.0 g/l	40	39	38

LC50 = 8.36g/l NaCl

Submitted By: Tim Harrell

Timothy Harrell
Technical Director

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Workorder: 20220571 **Workorder Name:** Pine Creek WWTP Acute Tox 5% A **Owner Received Date:** 9/22/2021 **Results Requested By:** 10/6/2021

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)814-6630	Pace Analytical SE Kansas 808 West McKay Frontenac, KS 66763 Phone (620)235-0003

Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	Preserved Containers					Acute Toxicity												LAB USE ONLY 60381024 600 MB 9/23
1	PC WWTP Effluent Acute Toxicit	PS	9/22/2021 07:00	20220571001	Water	1						X												5tibr01
2																								
3																								
4																								
5																								

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	B Gray 9-22-21	1650	[signature]	9/23/21 950	
2					
3					

~~Cooler~~ Sample Temperature on Receipt 2.6 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Acute Toxicity

Pace Analytical
www.pacelabs.com

Project Number: 60381024 LAB ID 20220571

Pine Creek

Date and Time Arrived 9/23/21 950

Date and Time Used 9/23/21 1030

Age of Fish 2 days old

Age of Water Fleas <24 hours old

Analyst TH MB

Synthetic Number F-9-34

Dilution water used: Synthetic X 9/23/21 Upstream Pine Creek Festonty

		SYN	100						
pH (S.U.)		7.6	7.4						
D.O. (mg/L)		8.0	8.2						
Temperature (°C)		25.0	25.0						
Alkalinity[1]	mL titrant	3.1	2.2						
	mg $CaCO_3$/L	62	44						
Hardness[2]	mL titrant	4.4	4.4						
	mg $CaCO_3$/L	88	88						
Conductance (µmhos/cm)		338	438						
Chlorine (mg/L)		<.1	<.1						

Comments: LI 64.2

[1] Section 17, ENV-SOP-0097, *Bioassay Chemical Tests.*
[2] Section 18, ENV-SOP-0097, *Bioassay Chemical Tests.*

Acute Toxicity

Pace Analytical®
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Project Number: 60381024

Ceriodaphnia dubia or Daphnia pulex Survival

	0 Hours	24 hours	48 hours	
Synthetic	5	5	5	
2	↓	↓	↓	
3	↓	↓	↓	
4	↓	↓	↓	
5	5	5	5	
2	↓	↓	↓	
3	↓	↓	↓	
4	↓	↓	↓	
2				
3				
4				
2				
3				
4				
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3				
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4				
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4				
2				
3				
4				

Acute Toxicity

Pace Analytical
www.pacelabs.com

Project Number: 60396024

Fathead Minnows Survival

	0 Hours	24 hours	48 hours	
Synthetic	10	10	10	
2				
3				
4				
5	10	10	10	
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
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4				
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3				
4				
2				
3				
4				
2				
3				
4				

Acute Toxicity

Pace Analytical
www.pacelabs.com

Project Number: Ref Tox

Date and Time Arrived: NC

Date and Time Used: 9/14/21 13:00

Age of Fish: [illegible]

Age of Water Fleas: hours old

Analyst: H, MB, BP, EP, TS

Synthetic Number: F-13-3C

Dilution water used: Synthetic X Upstream

NACl F-1305
YTC F-1397
Algae F-1395

		SYN	10GM						
pH (S.U.)		7.5	7.7						
D.O. (mg/L)		8.5	8.2						
Temperature (°C)		25.3	25.0						
Alkalinity[1]	mL titrant	3.0	3.5						
	mg $CaCO_3$/L	60	70						
Hardness[2]	mL titrant	4.9	5.2						
	mg $CaCO_3$/L	98	104						
Conductance (µmhos/cm)		365	16,500						
Chlorine (mg/L)		0.1	0.1						

Comments: Light 65.9

[1] Section 17, ENV-SOP-0097, *Bioassay Chemical Tests.*
[2] Section 18, ENV-SOP-0097, *Bioassay Chemical Tests.*

Acute Toxicity

Project Number: RT

Pulsey 24 48

Pubic 24 Ceriodaphnia dubia or Daphnia pulex Su...

	0 Hours			24 Hours			48 Hours			72 Hours		
Synthetic	5	5	5	5yr	5	5	5	5yr				
2												
3												
4												
1.0	5	5	5	1.5	5	5	5	1.0	5	5	5	
2												
3												
4												
1.5	5	5	5	2.0	5	5	5	2.5	5	5	5	
2											5	
3											4	
4											4	
2.0	5	5	5	2.5	5	5	5	5.0	5	4	2	
2			4				3			3	2	
3			5				3			4	3	
4			4				4			3	3	
2.5	5	5	1	3.0	5		1	7.5	5	0	0	
2		3	2			3	2					
3		5	1				1					
4		4	1			3	0					
3.0	5	2	0	3.5	5		0	10	5	0	0	
2		1				8						
3		1				1						
4		1				8						
2												
3												
4												
2												
3												
4												
2												
3												
4												

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Acute Toxicity

Project Number: Ref 704

Fathead Minnows Survival

Synthetic	0 Hours	24 hours	48 hours
2			
3			
4			
2, D		10	10
2		9	8
3		10	10
4		10	10
4, D		10	10
2			
3			
4			
6, D		10	9
2			10
3			9
4			10
8, D		9	7
2		8	8
3		9	5
4		10	7
10		2	0
2		1	
3		0	
4		1	
2			
3			
4			
2			
3			
4			
2			
3			
4			

Acute Toxicity

Project Number: Rel 8[illegible]

Wet Chemistry at 24 hours

T [illegible] 1000	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.5	8.1	[illegible]	386	
Upstream	7.6	7.6	[illegible]	16000	

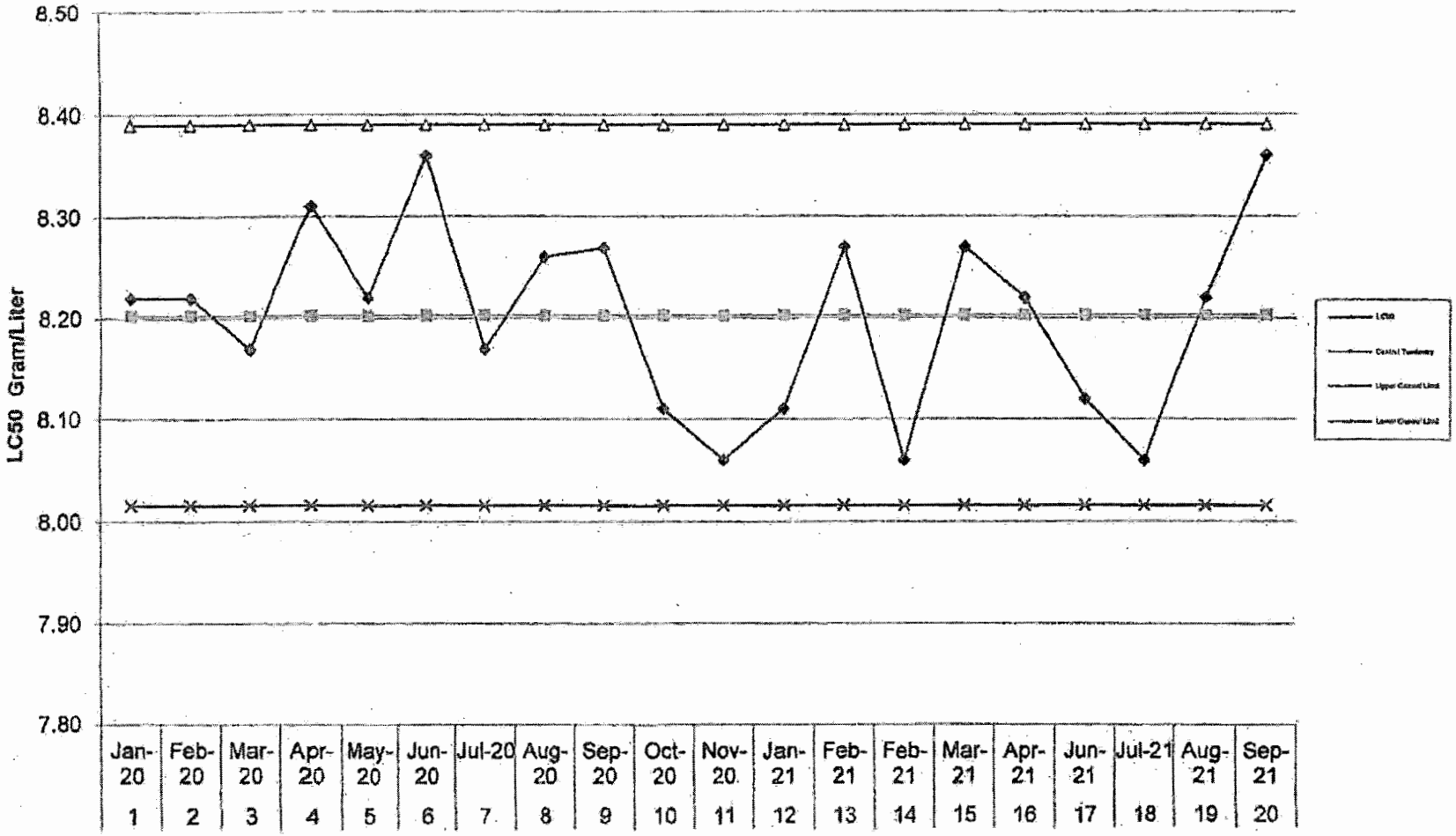
Wet Chemistry at 48 hours (End Time: TH 10:10)

	pH (S.U) TH [illegible]	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	~~7.5~~ 7.6	7.4	24.6	[illegible]2	
~~Upstream~~ 10%	7.6	7.1	24.6	[illegible]00	

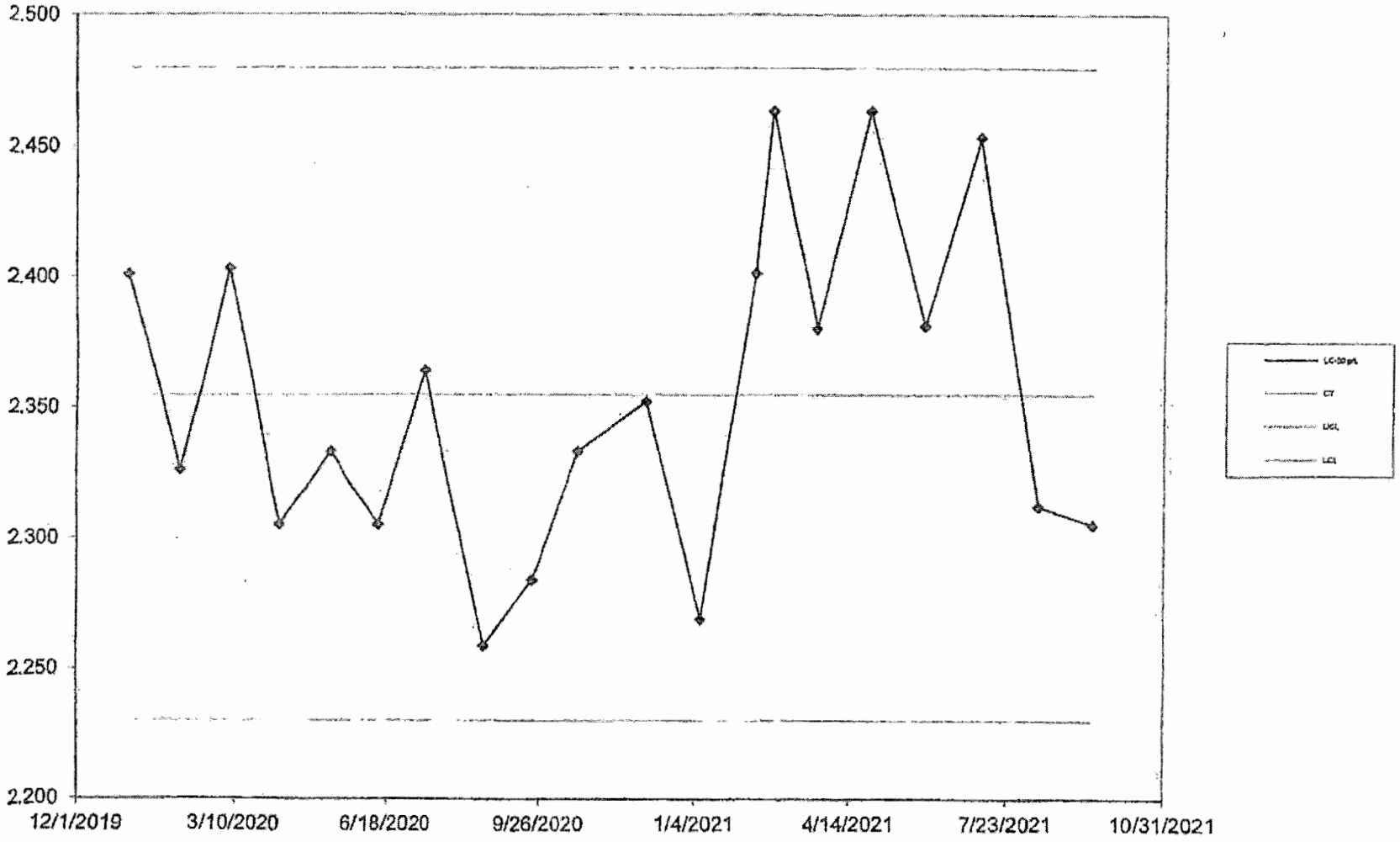
	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

Sodium Chloride Reference Toxicity for Fathead Minnows
Pace Analytical Frontenac, KS



Ceriodaphnia dubia Reference Toxicant Test (NaCl, 48-hour)



Brine Shrimp Feeding Log

Pace Analytical Services, Inc.
808 West McKay
Frontenac, KS 66763
Phone: 620.235.0003
Fax: 620.235.0106

Month: September
Year: 2021

Fish observation	
Tanks	# Dead or sick

Monitor when using fish for reproduction.

Date	Glass Chamber	8:00AM Feed	4:00PM Feed	Initials	
1	B	✓	✓	TS	
2		✓	✓	TS	
3	A	✓	✓	BP	
4		✓	✓	TS	
5	B	✓	✓	TH	
6		✓	✓	EP	
7	A	✓	✓	TS	
8		✓	✓	EP	
9	B	✓	✓	TS	
10		✓	✓	D	
11	A	✓	✓	TH	
12		✓	✓	TH	
13	B	✓	✓	BP	
14	A	✓	✓	EP	
15	A	✓	✓	TS	
16	B	✓	✓	TH	
17		✓	✓	TH	
18	A	✓	✓	TS	
19		✓	✓	TH	
20	B	✓	✓	BP	
21		✓	✓	BP	
22	A	✓	✓	TS	
23		✓	✓	BP	
24	B	✓	✓	TS	
25		✓	✓	TS	
26	A	✓	✓	MB	
27		✓	✓	EP	
28	B	✓	✓	BP	
29		✓	✓		
30					
31					

F-KS-MB-105-rev.0
Revised 6/23/2015

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY

1. GENERAL:

NPDES PERMIT NO.: AL0027723 DSN: 001 COUNTY: Elmore County
Permitee: City of Prattville Wastewater Department
Facility Name: Pine Creek Wastewater Treatment Plant
Agent submitting Report: City of Prattville Wastewater Department, 101 West Main St., Prattville, AL 36067
Lab Conducting Toxicity Test(s): Pace Analytical, 808 West McKay, Frontenac KS 66763
Months To Test:
This Report for Toxicity Test(s) Required for the Month of:
Scheduled Test(s): Yes X No Accelerated Test(s): Yes No X
Accelerated Test Number of For Failed Scheduled Test Date:
Test Type Required: 48-Hr Acute Screening: X -Hr Acute Definitive:
Short-term Chronic Screening: Short-term Chronic Definitive:

Test Organism: *Pimephales promelas* Test Organism: *Ceriodaphnia dubia*

Sam No.	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid
1	9/23/21 10:30	9/25/21 10:40	Yes	9/23/21 10:30	9/25/21 10:40	Yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number (1) Sur	(1) Rep	(1) Gro	(2) Sur	(2) Rep	(2) Gro	(3) Sur	(3) Rep	(3) Gro	(4) Sur	(4) Rep	(4) Gro
C.d.	5.0%	Pass											
P.p.	5.0%	Pass											

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test Organism	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	pH s.u.	Alk mg/L	Hard mg/L	Spec Cond umhos/cm	Fe mg/L	Mn mg/L	BOD mg/L	Chloride mg/L	
1	7.4	44	88	438					

Municipal Facilities Only

Sample ID	Arsenic (g/L)	Cadium (g/L)	Chromium (g/L)	Copper (g/L)	Lead (g/L)	Hexavalent Chromium (g/L)
Sample ID	Mercury (g/L)	Nickel (g/L)	Silver (g/L)	Zinc (g/L)	Total Cyanide (g/L)	Other(s) (g/L)

Chemical Analysis Performed By (LAB): Pace Analytical

Instantaneous Flow: (1) _____ GPM
Total 24-Hour Flow: (1) _____ MGD (2) _____ MGD (3) _____ MGD

Comments:

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: _____ DATE: 10-28-21

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/28/21

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes _____ (explain) _____

Samples Collected as Specified in the NPDES Permit: Yes X No (explain) _____

Receiving Water: Alabama River Design Flow: 2.0 (MGD)

Sample ID	Sample(s) Collected MM/DD/YY HHMM - MM/DD/YY HHMM	Arrival Temp (C)	Used in Test(s) MM/DD/YY - MM/DD/YY
1	9/22/21 7:00	2.6	9/23/21-9/25/21

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
MHSW	9/20/21	9/23/21	88	62	7.6	338	25.0

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)					
Pp	2 Days	AquaTox	00	5.0				
Cd	<24 hrs	In-house Culture	00	5.0				

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Plastic Beakers	500	250	10	4
Cd	Plastic Beakers	30	15	5	4

Test Species	Temp. Range (C)	D.O. Range (mg/L)	pH Range (s.u.)	Light Intensity Avg. (ft-c)
Pp	24.7-25.0	7.1-8.2	7.4-8.1	64.2
Cd	24.7-25.0	7.1-8.2	7.4-8.1	64.2

7. FEEDING:

Not Fed: X* Fed Daily: _____ Fed Irregular: _____ (Explain in comments below)

Brine Shrimp: Fed _____ mL Suspension of Newly Hatched Larvae _____ Times Daily.

YCT: Fed _____ mL Suspension Containing _____ mg/L TSS Daily.

Algae: Fed _____ mL Suspension Containing _____ Algal Cells/mL Daily.

COMMENTS: *Pimephales promelas were fed twice daily until test start. They were not fed during test period.

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/28/21

8. REFERENCE TOXICANT TESTS:

Toxicant: Sodium Chloride, NaCL Source: Fisher Lot 202332 CAS#: 7647-14-5

Solution concentration unit: mg/L ___ g/L X % ___ other (specify): ___

Test Org.	Test Date MM/DD - MM/DD	Control Water	Reference Test Solution Concentrations (Cont. to Highest Conc.)						
Pp	9/14/21-9/16/21	MHSW	00	2	4	6	8	10	
Cd	9/14/21-9/16/21	MHSW	00	.5	1.0	1.5	2.0	2.5	

Test Org.	Results	95% Confidence Interval	Upper and Lower CUSUM Chart Control Limit (This Test)	Number (N)
Pp	8.36	7.401691-8.345287	8.02-8.39	40
Cd	2.31	2.060913-2.462547	2.23-2.48	20

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:
None.

9.B. Test Solution Manipulations or Test Modifications:
Effluent IWC of 5.0 % is specified in the NPDES permit.

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/28/21

11.A. ACUTE SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Pimephale promelas*
ACUTE TOXICITY INDICATED: YES _____ NO X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

SOLUTION CONC.(%)	00	5.0	-
MORTALITY (%)	00	00	-

PERMITTED MORTALITY RATE (%): _____
Normally Distributed: YES _____ NO _____
Test Statistic: _____ Critical Value: _____ (Parametric)
Equal variance: _____ Unequal variance: _____
F Statistic: _____ Critical F: _____
t - Test Statistic: _____ t - Test Critical Value: _____
Sample Rank Sum: _____ # Reps.: _____ Critical Rank Sum: _____ (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

TEST ORGANISM: *Ceriodaphnia dubia*
ACUTE TOXICITY INDICATED: YES _____ NO X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

SOLUTION CONC.(%)	00	5.0	-
MORTALITY (%)	00	00	-

PERMITTED MORTALITY RATE (%): _____
Normally Distributed: YES _____ NO _____
Test Statistic: _____ Critical Value: _____ (Parametric)
Equal variance: _____ Unequal variance: _____
F Statistic: _____ Critical F: _____
t - Test Statistic: _____ t - Test Critical Value: _____
Sample Rank Sum: _____ # Reps.: _____ Critical Rank Sum: _____ (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

Toxicity Test Report - Scheduled Test

version 1.6

(Submission #: HPP-D9TP-Y3BRW, version 1)

Details

Submission ID HPP-D9TP-Y3BRW

Form Input

Permit Information

Permit Number
AL0027723

Permittee

Permittee Name
City Of Prattville

Facility/Site Information

Facility/Site Name
Prattville Pine Creek Clean Water Facility

Facility/Site Physical Location Address
100 Pine Creek Drive
Prattville, AL 36066

Facility/Site County
Elmore

Processing Information

Do you have a valid toxicity test report to submit?
Yes

Before you begin, please confirm that your toxicity test report contains ALL of the following sections/information as required by the permit:
ADEM Form 465
Chain of Custody
Raw Chemistry Data
Raw Test Data
Method Reference Tests (Quality Assurance)

Basic Test Information

Schedule Name
Toxicity Test Report - Scheduled Test

Outfall/DSN Number(s) Sampled
001

Earliest Start Date of Scheduled Test
09/18/2022

Test Type(s)
Acute

Comments (Optional)
NONE PROVIDED

Do you have the ADEM Toxicity Test Report Summary Form (ADEM Form 465) available as a separate document from the lab report?
No

Toxicity Test Report with Toxicity Test Report Summary Form (ADEM Form 465)
PineCreek tox. 2022.pdf - 11/23/2022 06:45 AM
Comment
NONE PROVIDED

ALERT: If this toxicity report contains a failed test, do NOT attach a Non-compliance Report Form to this report. Please go to the As Needed section of the site Dashboard in AEPACS to find the correct schedule for submitting the Non-compliance Report Form

ALERT: The reports for any Accelerated Tests required to follow a failed test must be submitted using the "Toxicity Test Report - Accelerated Test" schedule from the As Needed section of the site Dashboard in AEPACS

Acute Toxicity Test Report Summary Information

Summary of Results for Screening Test

Outfall Number	Test Organism	Effluent Concentration (IWC) (%)	Survival Result
001	Pimephales promelas (fathead minnow)	5.0	Pass
001	Ceriodaphnia dubia (daphnid)	5.0	Pass

Agreements and Signature(s)

SUBMISSION AGREEMENTS

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

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

Signed By Napoleon Wilks IV on 11/23/2022 at 6:47 AM

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

September 26, 2022

Mr. Rick Teague
Prattville Wastewater
101 W. Main Street
Prattville, AL 36067

RE: Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20256069

Dear Mr. Teague:

Enclosed are the analytical results for sample(s) received by the laboratory on September 19, 2022. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - SE Kansas

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

cc: Mr. Napoleon Wilks IV, City of Prattville

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

CERTIFICATIONS

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20256069

Pace Analytical Services Southeast Kansas
808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 22-031-0
Iowa Certification #: 431
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 05115
Oklahoma Certification #: 9935
Texas Certification #: T104704558-21-3
Utah Certification #: KS00021

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

SAMPLE ANALYTE COUNT

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20256069

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20256069001	**PC WWTP Effluent Acute Toxicit**	EPA 821/R-02/012	GKP	1	PASI-SEKS

PASI-SEKS = Pace Analytical Services - SE Kansas

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

ANALYTICAL RESULTS

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20256069

Sample: PC WWTP Effluent Acute Toxicit **Lab ID: 20256069001** Collected: 09/19/22 07:30

Parameters	Results	Units	Report Limit	DF	Qualifiers
Toxicity, Acute	**Complete**		1.0	1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

QUALIFIERS

Project: Pine Creek WWTP Acute Tox 5% A
Pace Project No.: 20256069

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical
WWW.PACELABS.COM

CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

WO#: 20256069

20256069

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Prattville Wastewater - WW	Report To: Rick Teague	Attention:	
Address: 101 W. Main Street	Copy To:	Company Name:	Regulatory Agency
Prattville, AL 36067		Address:	
Email: rick.teague@prattvilleal.gov	Purchase Order #:	Pace Quote:	
Phone: (334)361-3626 Fax:	Project Name: Pine Creek WWTP Acute Tox 5% AL0027723	Pace Project Manager: cindy.simpson@pacelabs.com,	State / Location
Requested Due Date:	Order #: 669231	Pace Profile #: 13721	AL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N): Y/N	Analyses Test: Acute Toxicity	Residual Chlorine (Y/N)
1	Outfall 001T Composite 24 5%	WT	C24	9-18-22	7:30 AM				1	1								X		
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Eff. Flow 2.394mgd	E C Teague	9-19-22	1:00 pm	D. Coleman	9-19-22	1300				
	D. Coleman	9-19-22	1617	RDCole	9-19	1617	0.9	Y	N	Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	
SIGNATURE of SAMPLER:	DATE Signed:

DC#_Title: ENV-FRM-SROS-0009 v02_NOLA SCUR Form
Effective Date: 3/23/2022

Pace

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Project #

WO#: 20256069

PM: CRS Due Date: 10/03/22
CLIENT: TU-Prattvill

Courier: ☑ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: ☐ YES ☑ NO Custody Seals intact: ☐ YES ☑ NO

Samples on ice: ☑ YES ☐ NO Type of Ice: Wet Blue None

Date and Initials of person examining contents: MT 9-19

Temp should be ≤6°C *Temp must be measured from Temperature blank when present

Cooler #1 Thermometer Used: IR#40 Cooler Temp °C: (Observed) 0.9 (CF) 0.4 (Actual) 1.3
Cooler #2 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #3 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #4 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____

Tracking #:_____

Temperature Blank Present"?	☐Yes ☐No ☑N/A	
Chain of Custody Present:	☑Yes ☐No ☐N/A	
Chain of Custody Complete.	☐Yes ☑No ☐N/A	
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	Sampler did not sign the chain.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	
Sufficient Volume:	☑Yes ☐No ☐N/A	
Correct Containers Used:	☑Yes ☐No ☐N/A	
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☑N/A	
Sample Labels match COC:	☑Yes ☐No ☐N/A	
All containers received within manufacture's precautionary and/or expiration dates.	☑Yes ☐No ☑N/A	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes ☐No ☑N/A	If No, was preserative added? ☐Yes ☐No If added record lot #.: HNO3 _____ H2SO4 _____ Date:_____ Time:_____
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A*	
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	
Trip Blank Present:	☐Yes ☑No	

Client Notification/ Resolution:

Person Contacted:_____ Date/Time:_____

Comments/ Resolution:_____

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

September 26, 2022

Cindy Simpson
Pace NOLA
1000 Riverbend Blvd.
Suite F
Saint Rose, LA 70087

RE: Project: PINE CREEK WWTP ACUTE TOX
Pace Project No.: 60410698

Dear Cindy Simpson:

Enclosed are the analytical results for sample(s) received by the laboratory on September 20, 2022. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - SE Kansas

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jennifer Haley

Jennifer Haley
jennifer.haley@pacelabs.com
(913)599-5665
PM Lab Management

Enclosures

cc: William "Randy" Shackelford, Pace Analytical New Orleans

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: PINE CREEK WWTP ACUTE TOX
Pace Project No.: 60410698

Pace Analytical Services Southeast Kansas
808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 22-031-0
Iowa Certification #: 431
Kansas/NELAP Certification #: E-10426
Louisiana Certification #: 05115
Oklahoma Certification #: 9935
Texas Certification #: T104704558-21-3
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: PINE CREEK WWTP ACUTE TOX
Pace Project No.: 60410698

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
20256069001	**PC WWTP Effluent Acute Toxicit**	EPA 821/R-02/012	GKP	1	PASI-SE

PASI-SE = Pace Analytical Services - SE Kansas

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Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: PINE CREEK WWTP ACUTE TOX
Pace Project No.: 60410698

Sample: PC WWTP Effluent Acute Toxicit **Lab ID: 20256069001** Collected: 09/19/22 07:00

Parameters	Results	Units	Report Limit	DF	Qualifiers
Toxicity, Acute	**Complete**		1.0	1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: PINE CREEK WWTP ACUTE TOX
Pace Project No.: 60410698

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

WO#: 60410698

Pace	DC#_Title: ENV-FRM-LENE-0009_Sampl	WO#: 60410698
	Revision: 2	Effective Date: 01/12/20

Client Name: Pine Creek Prattville wastewater

Courier: FedEx ☐ UPS ☒ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☒ Other ☐

Thermometer Used: T-243 Type of Ice: Wet Blue None

Cooler Temperature (°C): As-read 4.8 Corr. Factor -1.8 Corrected 3.0

Date and initials of person examining contents: GJP 9/20/22 09:40

Temperature should be above freezing to 6°C

Chain of Custody present:	X Yes ☐ No ☐ N/A	
Chain of Custody relinquished:	☐ Yes ☒ No ☐ N/A	
Samples arrived within holding time:	☒ Yes ☐ No ☐ N/A	
Short Hold Time analyses (<72hr):	X Yes ☐ No ☐ N/A	
Rush Turn Around Time requested:	☐ Yes X No ☐ N/A	
Sufficient volume:	X Yes ☐ No ☐ N/A	
Correct containers used:	X Yes ☐ No ☐ N/A	
Pace containers used:	X Yes ☐ No ☐ N/A	
Containers intact:	X Yes ☐ No ☐ N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐ Yes ☐ No X N/A	
Filtered volume received for dissolved tests?	☐ Yes ☐ No X N/A	
Sample labels match COC: Date / time / ID / analyses	X Yes ☐ No ☐ N/A	
Samples contain multiple phases? Matrix:	☐ Yes X No ☐ N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	☐ Yes ☐ No X N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐ Yes ☐ No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐ Yes ☐ No	
Trip Blank present:	☐ Yes ☐ No X N/A	
Headspace in VOA vials (>6mm):	☐ Yes ☐ No X N/A	
Samples from USDA Regulated Area: State:	☐ Yes ☐ No X N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐ Yes ☐ No X N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Internal Transfer Chain of Custody

60410698

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www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Workorder: 20256069 Workorder Name: Pine Creek WWTP Acute Tox 5% A Owner Received Date: 9/19/2022 Results Requested By: 10/3/2022

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)614-6630	Pace Analytical SE Kansas 808 West McKay Frontenac, KS 66763 Phone (620)235-0003

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						Requested Analysis: Acute Toxicity											LAB USE ONLY
1	PC WWTP Effluent Acute Toxicit	PS	9/19/2022 07:00	20256069001	Water	1						X											Acub-001
2																							
3																							
4																							
5																							

Transfers	Released By	Date/Time	Received By	Date/Time
1			Garrett Peterson	9/20/22 0940
2				
3				

Comments

Cooler Temperature on Receipt 3.0 °C | **Custody Seal** (Y) or N | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical Services, Inc.

808 West McKay, Frontenac, KS 66763

LABORATORY REPORT:

CLIENT: Paul Spears City of Prattville (Pine Creek) 101 West Main Street Prattville, AL 36067	Date Reported: 9-23-22 Date Initiated: 9-20-22 Time Set: 10:30 Date Terminated: 9-22-22

BIOMONITORING STUDY

ACUTE TOXICITY

Permit # AL0027723

FINDING AND CONCLUSIONS:

Acute toxicity testing was performed on duplicate samples of effluent collected from the City of Prattville (Pine Creek) effluent discharge. **Acute toxicity**, as defined by significant mortality for at least one of two aquatic test species during a 48 hour period of exposure, was not detected in Ceriodaphnia exposed to the 5% effluent (AEC), and was not detected in fathead minnows exposed to the 5% effluent. The LC50 for the Ceriodaphnia was >5% and >5% for the Pimephales. The test species utilized in this test were the water flea, Ceriodaphnia dubia and the fathead minnow, Pimephales promelas. Detailed results of the toxicity testing are provided in the Acute Toxicity Reports. In addition to the acute toxicity testing, water temperature, pH, dissolved oxygen, total hardness, total alkalinity, conductivity, and chlorine determinations were performed on the effluent and control samples.

SAMPLING PROCEDURES:

City of Prattville (Pine Creek) personnel collected a sample at the City of Prattville (Pine Creek) effluent discharge. The sample was preserved with ice and transported to Pace Analytical by commercial carrier.

INTRODUCTION:

The purpose of this test was to determine the acute toxicity of the City of Prattville (Pine Creek) effluent on the freshwater invertebrate, Ceriodaphnia dubia and the fathead minnow, Pimephalas promelas. These tests were conducted at Pace Analytical Services, Inc., Frontenac, KS.

TEST ORGANISMS:

Ceriodaphnia dubia - The genetic stock of Ceriodaphnia dubia used in this acute toxicity Test were originally obtained from a private breeder. Ceriodaphnia are cultured in house at Pace Analytical Services, Inc. Culture methods of Ceriodaphnia were obtained from EPA821-C-02-006 November 2002.

Pimephales promelas - The fathead minnows used in this acute toxicity test were cultured in-house at Pace Analytical Services, Inc., Frontenac, KS and/or were obtained from a private breeder. Fathead minnows are maintained at Pace Analytical Services until use for acute toxicity between the ages of 1 and 14 days. Information for culturing fathead minnows was taken from EPA821-C-02-006 November 2002.

MATERIALS AND METHODS:

Procedures used in the acute toxicity tests are described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (USEPA, 2002).

City of Prattville (Pine Creek) collected the effluent tested from the City of Prattville (Pine Creek) discharge. Testing was performed using a 5% effluent, and a synthetic control. **The toxicity test was initiated within 36 hours of sample collection.** Effluent and synthetic control test solutions were not acrated during the testing period.

Ceriodaphnia *ACUTE METHODS:*

This static test was ran using 40 ml glass vials containing 25 ml of test solution. Food was administered before the test. Five Ceriodaphnia neonates (<24 hr old) were randomly selected and placed in each of 4 replicates of test solution. A total of 20 organisms per concentration were tested. Observations of mortality were made at 24 and 48 hours of exposure.

Pimephales *ACUTE METHODS:*

This static toxicity test was conducted using 500 ml polypropylene container as test chambers containing 250 ml of test solution. Food was administered prior to test initiation, but not during the testing period. Ten Pimephales, 1 – 14 days old, from a single spawn, were randomly selected and placed in each of 4 test chambers. A total of 40 organisms were exposed to each test concentration. Observations of mortality were made at 24 and 48 hours of exposure.

WATER QUALITY METHODS:

Prior to test initiation, temperature, dissolved oxygen, pH, total alkalinity, total hardness, and total residual chlorine were measured in the effluent and in the controls. At 24 and 48 hours of exposure, temperature, dissolved oxygen, pH, and conductance were measured in the effluent sample and the controls.

DATA ANALYSIS:

Statistically significant ($p<0.05$) mortality is determined by Dunnet's procedure using average percent survival of each test concentration versus the average survival of the controls. If significant mortality occurs, median lethal concentrations (LC50) are calculated using effluent concentrations and their corresponding percent mortality data. The LC50's and the 95% confidence intervals are calculated where appropriate by the Spearman-Karber method. Statistical analysis is accomplished by following steps in EPA/600/4-90/027F, August 1993 and by use of Toxstat version 3.4.

RESULTS:

THE Ceriodaphnia MORTALITY RESULTS - There was no significant mortality observed of the freshwater invertebrate, Ceriodaphnia dubia, during the 48 hour exposure period to the 5% effluent concentrations. There was no significant mortality in the synthetic control. The LC50 value of the sample to Ceriodaphnia is approximately >5%.

Ceriodaphnia MORTALITY DATA

 # ALIVE

CONC.	REP #	O HOURS	24 HOURS	48 HOURS	% MORT.
SYNTHETIC	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0
5%	1	5	5	5	0
"	2	5	5	5	0
"	3	5	5	5	0
"	4	5	5	5	0

AVG. MORTALITY @ AEC (5% EFFLUENT) =0.0%

THE Pimephales RESULTS - Minnows exposed to effluent collected at the City of Prattville (Pine Creek) effluent discharge exhibited no significant mortality in the 5% effluent concentration during the 48 hr exposure period. The synthetic control showed no significant mortality during the testing period. The LC50 value of the effluent to fathead minnows is estimated to be >5%.

CONC.	REP #	0 HOURS	24 HOURS	48 HOURS	% MORTALITY
SYNTHETIC	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0
5%	1	10	10	10	0
"	2	10	10	10	0
"	3	10	10	10	0
"	4	10	10	10	0

AVG. MORTALITY @ AEC (5% EFFLUENT) =0.0%

INITIAL WATER QUALITY:

Initial Measurements Synthetic Water

pH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.6	8.1	337	<0.1	25.0	90	64

Initial Measurements of 100% Effluent

PH	D.O. (mg/l)	Cond. (umhos)	Cl2 (mg/l)	Temp (C)	Hard (mg/l)	Alk (mg/l)
7.3	9.2	449	<0.1	25.0	102	64

TEST WATER QUALITY:

24-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.7	7.5	25.2	384
5%	7.7	7.5	25.2	396

48-hour Water Quality Measurements

EFFLUENT CONC (%)	PH	D.O. (mg/l)	TEMP (C)	COND. (umhos)
Synthetic	7.8	7.2	25.2	427
5%	7.8	7.2	25.2	439

QUALITY ASSURANCE:

The absence of control mortality during this test indicated the health of the organisms and indicated that any significant mortality in the test concentrations is not due to contaminants or variations in test conditions. Reference toxicity tests are routinely performed by staff members of our Toxicology Department.

Start:9/14/22 End:9/16/22

REFERENCE TOXICANT (NaCl)
Ceriodaphnia
 # OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
3.0 g/l	20	0	0
2.5 g/l	20	15	9
2.0 g/l	20	20	18
1.5 g/l	20	20	20
1.0 g/l	20	20	20

LC50 = 2.40 g/l NaCl

REFERENCE TOXICANT (NaCl)
Pimephales
 # OF LIVE ORGANISMS

CONC OF TOXICANT	TEST INITIATION	24 HOUR EXPOSURE	48 HOUR EXPOSURE
10.0 g/l	40	3	0
8.0 g/l	40	37	23
6.0 g/l	40	40	37
4.0 g/l	40	40	40
2.0 g/l	40	40	38

LC50 = 8.17 g/l NaCl

Submitted By: Tim Harrell
Timothy Harrell
Technical Director

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY

1. GENERAL:

NPDES PERMIT NO.: AL0027723 DSN: 001 COUNTY: Elmore County
Permitee: City of Prattville Wastewater Department
Facility Name: Pine Creek Wastewater Treatment Plant
Agent submitting Report: City of Prattville Wastewater Department, 101 West Main St., Prattville, AL 36067
Lab Conducting Toxicity Test(s): Pace Analytical, 808 West McKay, Frontenac KS 66763
Months To Test:
This Report for Toxicity Test(s) Required for the Month of:
Scheduled Test(s): Yes X No ____ Accelerated Test(s): Yes ____ No X
Accelerated Test Number ____ of ____ For Failed Scheduled Test Date: ____
Test Type Required: 48-Hr Acute Screening: X -Hr Acute Definitive: ____
Short-term Chronic Screening: ____ Short-term Chronic Definitive: ____

	Test Organism: *Pimephales promelas*			Test Organism: *Ceriodaphnia dubia*		
Sam No.	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid	Date/Time Start MM/DD/YY HH:MM	Date/Time Ended MM/DD/YY HH:MM	Control Valid
1	9/20/22 10:30	9/22/22 10:50	Yes	9/20/22 10:30	9/22/22 10:50	Yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number (1) Sur	(1) Rep	(1) Gro	(2) Sur	(2) Rep	(2) Gro	(3) Sur	(3) Rep	(3) Gro	(4) Sur	(4) Rep	(4) Gro
C.d.	5.0%	Pass											
P.p.	5.0%	Pass											

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test Organism	Test Solution Concentration (%)							LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	pH s.u.	Alk mg/L	Hard mg/L	Spec Cond umhos/cm	Fe mg/L	Mn mg/L	BOD mg/L	Chloride mg/L	
1	7.3	64	102	449					

Municipal Facilities Only

Sample ID	Arsenic (g/L)	Cadium (g/L)	Chromium (g/L)	Copper (g/L)	Lead (g/L)	Hexavalent Chromium (g/L)
Sample ID	Mercury (g/L)	Nickel (g/L)	Silver (g/L)	Zinc (g/L)	Total Cyanide (g/L)	Other(s) (g/L)

Chemical Analysis Performed By (LAB): Pace Analytical

Instantaneous Flow: (1) ____ GPM
Total 24-Hour Flow: (1) 2.394 MGD (2) ____ MGD (3) ____ MGD

Comments:

I ceritify 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 rewponsible 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 sifnificant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OF RESPONSIBLE OFFICIAL: ____ DATE: ____

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/23/22

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes _____ (explain) _____

Samples Collected as Specified in the NPDES Permit: Yes X No (explain) _____

Receiving Water: Alabama River Design Flow: 2.0 (MGD)

Sample ID	Sample(s) Collected MM/DD/YY HHMM - MM/DD/YY HHMM	Arrival Temp (C)	Used in Test(s) MM/DD/YY - MM/DD/YY
1	9/19/22 7:00	3.0	9/20/22-9/22/22

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
MHSW	9/18/22	9/20/22	90	64	7.6	337	25.0

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)					
Pp	7 Days	AquaTox	00	5.0				
Cd	<24 hrs	In-house Culture	00	5.0				

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Plastic Beakers	500	250	10	4
Cd	Plastic Beakers	30	15	5	4

Test Species	Temp. Range (C)	D.O. Range (mg/L)	pH Range (s.u.)	Light Intensity Avg. (ft-c)
Pp	25.0-25.2	7.2-9.2	7.6-7.8	66.2
Cd	25.0-25.2	7.2-9.2	7.6-7.8	66.2

7. FEEDING:

Not Fed: X* Fed Daily: _____ Fed Irregular: _____ (Explain in comments below)

Brine Shrimp: Fed _____ mL Suspension of Newly Hatched Larvae _____ Times Daily.

YCT: Fed _____ mL Suspension Containing _____ mg/L TSS Daily.

Algae: Fed _____ mL Suspension Containing _____ Algal Cells/mL Daily.

COMMENTS: *Pimephales promelas were fed twice daily until test start. They were not fed during test period.

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/23/22

8. REFERENCE TOXICANT TESTS:

Toxicant: Sodium Chloride, NaCL Source: Fisher Lot 202332 CAS#: 7647-14-5

Solution concentration unit: mg/L ___ g/L X % ___ other (specify): ___

Test Org.	Test Date MM/DD - MM/DD	Control Water	Reference Test Solution Concentrations (Cont. to Highest Conc.)						
Pp	9/14/22-9/16/22	MHSW	00	2	4	6	8	10	
Cd	9/14/22-9/16/22	MHSW	00	.5	1.0	1.5	2.0	2.5	

Test Org.	Results	95% Confidence Interval	Upper and Lower CUSUM Chart Control Limit (This Test)	Number (N)
Pp	8.17	7.191648-7.959452	8.00-8.36	40
Cd	2.40	2.121588-2.461939	2.26-2.50	20

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:
None.

9.B. Test Solution Manipulations or Test Modifications:
Effluent IWC of 5.0 % is specified in the NPDES permit.

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

Facility Name: Prattville - Pine Creek WWTP NPDES #: AL0027723 DSN: 001 Date: 9/23/22

11.A. ACUTE SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Pimephale promelas*
ACUTE TOXICITY INDICATED: **YES** _____ **NO** X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

SOLUTION CONC.(%)	00	5.0	-
MORTALITY (%)	00	00	-

PERMITTED MORTALITY RATE (%): _____
Normally Distributed: YES ---------- NO _____
Test Statistic: ------ Critical Value: ----- (Parametric)
Equal variance: ---------- Unequal variance: ----------
F Statistic: ---------- Critical F: ----------
t - Test Statistic: ---------- t - Test Critical Value: ----------
Sample Rank Sum: ---------- # Reps.: ---------- Critical Rank Sum: ---------- (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

TEST ORGANISM: *Ceriodaphnia dubia*
ACUTE TOXICITY INDICATED: **YES** _____ **NO** X
NO ACUTE STATISTICAL ANALYSIS NECESSARY: X

SOLUTION CONC.(%)	00	5.0	-
MORTALITY (%)	00	00	-

PERMITTED MORTALITY RATE (%): _____
Normally Distributed: YES ---------- NO ----------
Test Statistic: ---------- Critical Value: ---------- (Parametric)
Equal variance: ---------- Unequal variance: ----------
F Statistic: ---------- Critical F: ----------
t - Test Statistic: ---------- t - Test Critical Value: ----------
Sample Rank Sum: ---------- # Reps.: ---------- Critical Rank Sum: ---------- (Non - Parametric)
COMMENTS: No statistical analysis was necessary since effluent mortality equaled control mortality.

Pace	DC#_Title: ENV-FRM-FRON-0002_Acute AquaticToxicity Log 20256069		
	Revision: 1	Effective Date: 07/19/2022	Issued By: Lenexa

Project Number 60410698

Date and Time Arrived 9/20/22 9:40

Date and Time Used 9/20/22 10:30

Age of Fish 7days old

Age of Water Fleas <24 hours old

Analyst THMB

Synthetic Number F-1163

Dilution water used: Synthetic X Upstream

Cindy Simpson
Pine Creek

WO#20256069

TS 9/20/22

		SYN	5%	100					
pH (S.U.)		7.6		7.3					
D.O. (mg/L)		8.1		9.2					
Temperature (°C)		25.0		25.0					
Alkalinity[1]	mL titrant	3.2		3.2					
	mg $CaCO_3$/L	64		64					
Hardness[1]	mL titrant	4.5		~~15.1~~ 5.1					
	mg $CaCO_3$/L	90		102					
Conductance (µmhos/cm)		337		449					
Chlorine (mg/L)		<0.1		<0.1					

TS 9/20/22

Comments: LL 10.2

[1] Section 17, ENV-SOP-FRON-0007, *Bioassay Chemical Tests.*

Ceriodaphnia dubia or Daphnia pulex Survival

	0 Hours	24 hours	48 hours	
Synthetic		5	5	
2				
3				
4				
5		5	5	
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				

Qualtrax ID: 89887

Fathead Minnows Survival

	0 Hours	24 hours	48 hours	
Synthetic	10	10	10	
2				
3				
4				
5	10	10	10	
35%	10			
3	2			
4	3			
	4			
2	5			
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				
2				
3				
4				

	DC#_Title: ENV-FRM-FRON-0002_Acute AquaticToxicity Log		
Pace ANALYTICAL SERVICES	Revision: 1	Effective Date: 07/19/2022	Issued By: Lenexa

Wet Chemistry at 24 hours

QR 1045

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.7	7.5	25.2	384	
~~Upstream~~ S	7.7	7.5	25.2	396	

Wet Chemistry at 48 hours (End Time: 1050)

QR

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.8	7.2	25.2	427	
~~Upstream~~ S	7.8	7.2	25.2	~~334~~ 439	
				QR 9/22/22	

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

Qualtrax ID: 89887

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-FRON-0002_Acute AquaticToxicity Lcg		
	Revision: 1	Effective Date: 07/19/2022	Issued By: Lenexa

Project Number REFTOX

Date and Time Arrived NA

Date and Time Used 9/14/22 11:00

Age of Fish 9Days old

Age of Water Fleas <24 hours old

Analyst GP

Synthetic Number F-11-63 GP 9/14/22

Dilution water used: Synthetic X Upstream ____

		SYN	10gm						
pH (S.U.)		7.7	7.6						
D.O. (mg/L)		8.2	8.3						
Temperature (°C)		25.0	25.6						
Alkalinity[1]	mL titrant	3.2	3.6						
	mg $CaCO_3$/L	64	72						
Hardness[1]	mL titrant	4.5	4.9						
	mg $CaCO_3$/L	90	98						
Conductance (µmhos/cm)		329	14,900						
Chlorine (mg/L)		<.1	<.1						

Comments: LI 99.6

[1] Section 17, ENV-SOP-FRON-0007, *Bioassay Chemical Tests.*

DUGIA Ceriodaphnia dubia or Daphnia pulex Survival

	0 Hours (24, 48)			24 hours (Pulex)			48 hours (Magna)			
Synthetic	5	5	5	5	5	5	5	5	5	
2										
3										
4										
1.0	5	5	5	1.5 5	5	5	1.0 5	5	5	
2										
3										
4										
1.5	5	5	5	2.0 5	5	5	2.5 5	5	5	
2										
3										
4										
2.0	5	5	5	2.5 5	4	2	3.0 5	5	3	
2			4		4	3		5	1	
3			5		5	3		4	2	
4			4		4	2		4	2	
2.5	5	4	3	3.0 5	2	0	7.5 5	0	0	
2		5	2		1					
3		2	1		0					
4		4	2		2					
3.0	5	0	0	3.5 5	0	0	~~3.5~~ 10 5	0	0	
2										
3										
4										
2										
3										
4										
2										
3										
4										
2										
3										
4										

ap 9/14/22

Fathead Minnows Survival

	0 Hours	24 hours	48 hours	
Synthetic	10	10	10	
2				
3				
4				
2.5	10	10	10	
2			9	
3			10	
4			9	
4.5	10 -4P 9/14/22	10	10	
2	10			
3				
4				
6.5	10	10	9	
2			10	
3			9	
4			9	
8.5	10	8	5	
2		10	7	
3		10	6	
4		9	5	
12.5	10	2	0	
2		0		
3		0		
4		1		
2				
3				
4				
2				
3				
4				
2				
3				
4				

Pace	DC#_Title: ENV-FRM-FRON-0002_Acute AquaticToxicity Log		
	Revision: 1	Effective Date: 07/19/2022	Issued By: Lenexa

GP 10:50

Wet Chemistry at 24 hours

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.7	7.5	25.0	351	
~~Upstream~~ 105	7.7	7.2	25.0	14,700	

GP

Wet Chemistry at 48 hours (End Time: 10:34)

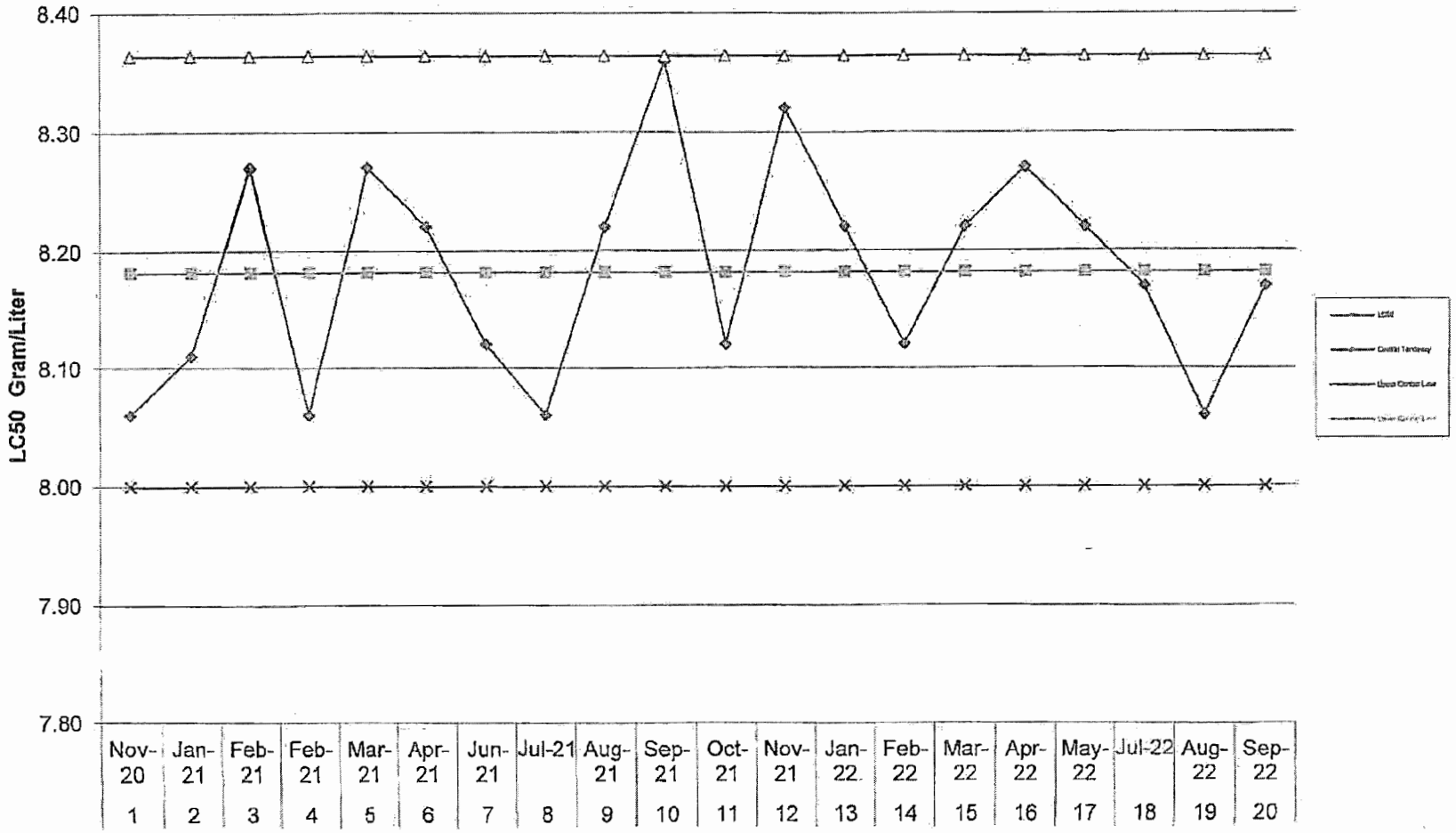
	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic	7.7	7.2	25.0	355	
~~Upstream~~ 105 ran	7.8	7.0	25.0	15,000	

	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

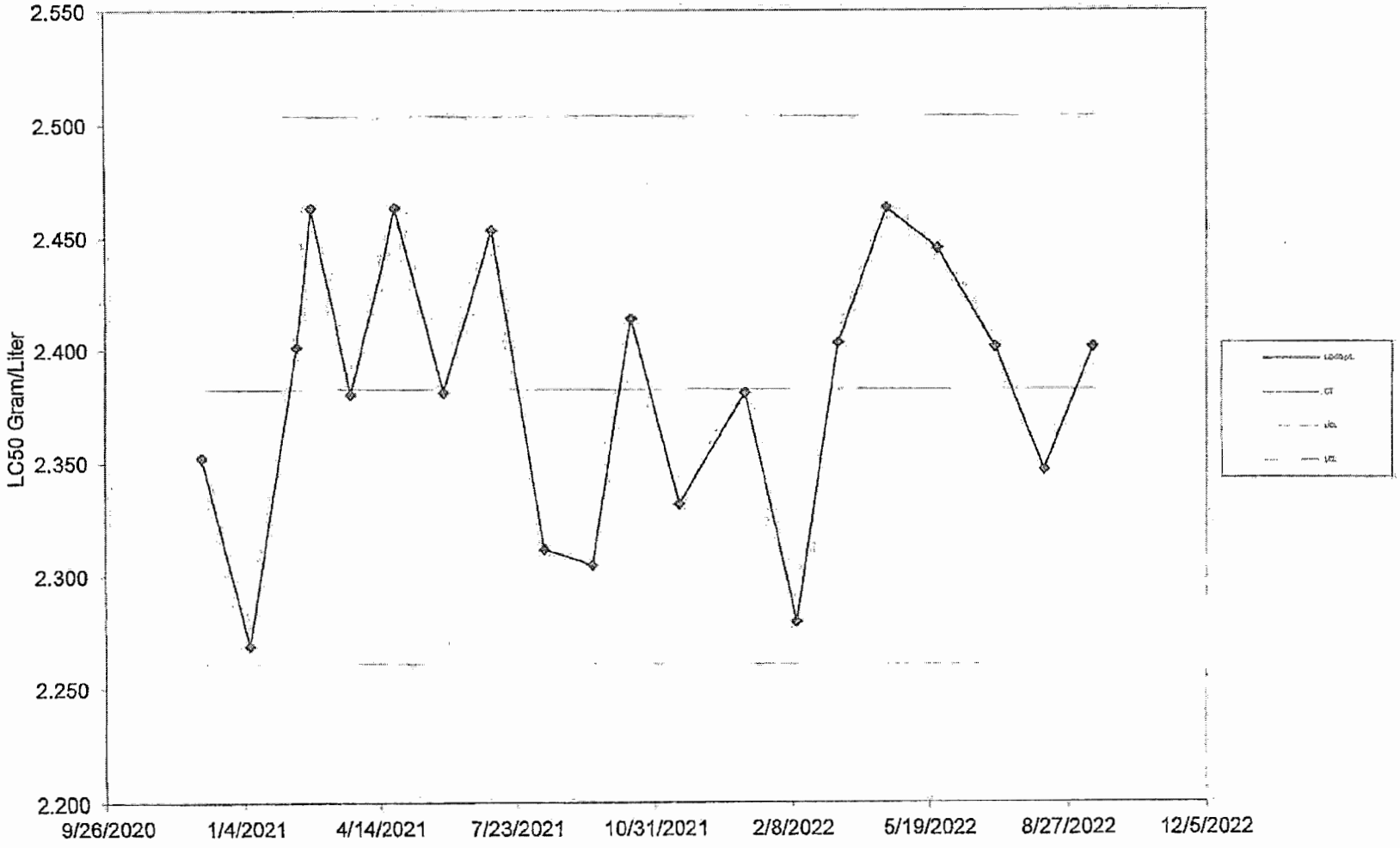
	pH (S.U)	D.O. (mg/L)	Temp (°C)	Conductivity (µmhos/cm)	
Synthetic					
Upstream					

Qualtrax ID: 89887

Sodium Chloride Reference Toxicity for Fathead Minnows
Pace Analytical Frontenac, KS



Ceriodaphnia dubia Reference Toxicant Test (NaCl, 48-hour)



Month: September
Year: 2022

Fish observation	
Tanks	# Dead or sick

Monitor when using fish for reproduction.

Date	Glass Chamber	AM Feed	PM Feed	Initials	
1	A	✓	✓	TS	
2	B	✓	✓	TS	
3		✓	✓	TS	
4	A	✓	✓	TS	
5		✓	✓	GP	
6	B	✓	✓	GP	
7		✓	✓	TS	
8	A	✓	✓	GP	
9	TS	✓	✓	TS	
10	9/10/22 B A			TS	
11	B	✓	✓	✓	
12		✓		GP	
13	A	✓	✓	GP	
14		✓	✓	TS	
15	B	✓	✓	GP	
16		✓	✓	TS	
17	A	✓	✓	TS	
18		✓	✓	TS	
19	B	✓	✓	GP	
20		✓	✓	GP	
21	A	✓	✓	MB	
22		✓	✓	MB	
23	B	✓	✓	MB	
24					
25					
26					
27					
28					
29					
30					
31					

Internal Transfer Chain of Custody

60410698

Pace Analytical
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: AL
Cert. Needed: ☐ Yes ☐ No

Workorder: 20256069 Workorder Name: Pine Creek WWTP Acute Tox 5% A Owner Received Date: 9/19/2022 Results Requested By: 10/3/2022

Report To	Subcontract To
Cindy Simpson Pace Analytical Tuscaloosa 3516 Greensboro Avenue Tuscaloosa, AL 35401 Phone (205)614-6630	Pace Analytical SE Kansas 808 West McKay Frontenac, KS 66763 Phone (620)235-0003

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: Acute Toxicity	LAB USE ONLY
1	PC WWTP Effluent Acute Toxicit	PS	9/19/2022 07:00	20256069001	Water	1	X	Acute-001
2								
3								
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time
1			Gwyneth Peterson	9/20/22 0940
2				
Samples				

Comments

Cooler Temperature on Receipt 3.0 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

January 06, 2022

Mr. Rick Teague
Prattville Wastewater
101 W. Main Street
Prattville, AL 36067

RE: Project: Stormwater permit renewal AC A
Pace Project No.: 20228071

Dear Mr. Teague:

Enclosed are the analytical results for sample(s) received by the laboratory between December 07, 2021 and December 20, 2021. This report is a summary of the results based upon our understanding of your data quality objectives. Please contact us if itemized quality control results are needed. These results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - New Orleans
- Pace Analytical Services - Tuscaloosa

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

cc: Mr. Napoleon Wilks IV, City of Prattville

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

CERTIFICATIONS

Project: Stormwater permit renewal AC A
Pace Project No.: 20228071

Pace Analytical Services New Orleans

Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

Pace Analytical Services Tuscaloosa

3516 Greensboro Ave, Tuscaloosa, AL 35401
Alabama Certification #: 40170

REPORT OF LABORATORY ANALYSIS

Pace Analytical
www.pacelabs.com

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

ANALYTICAL RESULTS

Project: Stormwater permit renewal AC A
Pace Project No.. 20228071

Sample: Pine Creek WTP 1st 20min Grab **Lab ID: 20228071001** Collected: 12/06/21 12:50

Parameters	Results	Units	Report Limit	DF	Qualifiers
Aluminum	**1580**	ug/L	200	1	
Antimony	ND	ug/L	60.0	1	
Arsenic	ND	ug/L	10.0	1	
Barium	ND	ug/L	200	1	
Beryllium	ND	ug/L	5.0	1	
Cadmium	ND	ug/L	5.0	1	
Calcium	**12600**	ug/L	1000	1	
Chromium	ND	ug/L	10.0	1	
Cobalt	ND	ug/L	10.0	1	
Copper	ND	ug/L	10.0	1	
Iron	**798**	ug/L	50.0	1	
Lead	ND	ug/L	5.0	1	
Magnesium	**1230**	ug/L	1000	1	
Manganese	**17.2**	ug/L	10.0	1	
Nickel	ND	ug/L	40.0	1	
Potassium	**2280**	ug/L	1000	1	
Selenium	ND	ug/L	20.0	1	
Silver	ND	ug/L	10.0	1	
Sodium	**3110**	ug/L	1000	1	
Thallium	ND	ug/L	10.0	1	
Vanadium	ND	ug/L	50.0	1	
Zinc	ND	ug/L	20.0	1	
Carbonaceous BOD, 5 day	**35.8**	mg/L	4.6	4.55	B1, H2, N2
BOD, 5 day	**40.9**	mg/L	6.0	6	N2
Collected By	**Client**			1	N2
Collected Date	**120621**			1	N2
Collected Time	**1250**			1	N2
Field pH	**8.83**	Std. Units		1	N2
Field Temperature	**20**	deg C		1	N2
Oxygen, Dissolved	**8.70**	mg/L		1	N2
Total Suspended Solids	**540**	mg/L	16.0	1	N2
Oil and Grease	ND	mg/L	5.0	1	
Nitrogen	**6.8**	mg/L	0.15	1	
Nitrogen, Kjeldahl, Total	**3.6**	mg/L	0.10	1	
Phosphorus	**0.43**	mg/L	0.10	1	
Nitrogen, Ammonia	**0.23**	mg/L	0.10	1	
Nitrogen, NO2 plus NO3	**3.2**	mg/L	1.0	20	
Chemical Oxygen Demand	**132**	mg/L	10.0	1	

Sample: Flow Wtd Composite **Lab ID: 20228071002** Collected: 12/06/21 08:00

Parameters	Results	Units	Report Limit	DF	Qualifiers
Nitrite as N	ND	mg/L	0.10	1	H3, N2
Carbonaceous BOD, 5 day	ND	mg/L	1.2	1.2	H3, N2
BOD, 5 day	**1.6**	mg/L	1.2	1.2	H3, N2
Total Suspended Solids	ND	mg/L	4.0	1	H3, N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-8630

ANALYTICAL RESULTS

Project: Stormwater permit renewal AC A
Pace Project No.: 20228071

Sample: Flow Wtd Composite **Lab ID: 20228071002** Collected: 12/06/21 08:00

Parameters	Results	Units	Report Limit	DF	Qualifiers
Nitrogen	**1.0**	mg/L	0.15	1	
Nitrogen, Kjeldahl, Total	**0.73**	mg/L	0.10	1	
Phosphorus	**0.15**	mg/L	0.10	1	
Nitrogen, Ammonia	ND	mg/L	0.10	1	
Nitrogen, NO2 plus NO3	**0.30**	mg/L	0.050	1	
Chemical Oxygen Demand	**20.0**	mg/L	10.0	1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
3516 Greensboro Avenue
Tuscaloosa, AL 35401
(205)614-6630

QUALIFIERS

Project: Stormwater permit renewal AC A
Pace Project No.: 20228071

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

ANALYTE QUALIFIERS

B1	Less than 1.0 mg/L DO remained for all dilutions set. The reported value is an estimated greater than value and is calculated for the dilution using the least amount of sample.
H2	Extraction or preparation conducted outside EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical™

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: City of Prattville	Billing Information: 101 West Main Street Prattville, Al. 36067
Address: 100 Pine Creek Drive	
Report To: Napoleon Wilks III	Email To: Napoleon.wilks@prattvilleal.gov
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: ADEM Form 2F	State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print):	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	COD	O&G	BOD	Metals	
Pine Creek WWTP			12/06	12:50								X	1:15pm
												X	1:40pm
												X	2:05pm

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

PH 8.83
Temp. 20°C
DO 8.70

WO# : 20228071

20228071

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HC...

Lab Tracking #: 2452165

Samples received via: FEDEX UPS Client Courier Pace Courier

Temperature Info:

Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: 5.3 oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: _____ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	12/07 10:12am	S. Cray	12-07-21 1017
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY

Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCl MeOH TSP Other

Non Conformance(s): YES / NO

Pace Analytical

Pace Analytical Services, LLC - Tuscaloosa, AL
Pace Analytical Services, LLC - Montgomery, AL

Sample Condition Upon Recei

Project:

WO#: 20228071

PM: CRS **Due Date: 12/21/21**
CLIENT: TU-Prattvill

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☐Yes ☐No

Therometer Used:	TUTMP

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Date and Initials of person examining contents: HC 12.13.21

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☐Yes ☐No	☑N/A	1
Chain of Custody Present:	☑Yes ☐No	☐N/A	2
Chain of Custody Complete:	☑Yes ☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes ☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes ☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes ☐No	☐N/A	6
Sufficient Volume:	☑Yes ☐No	☐N/A	7
Correct Containers Used:	☑Yes ☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes ☐No	☑N/A	9
Sample Labels match COC:	☑Yes ☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes ☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes ☐No	☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes ☐No	☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☐No	☑N/A	14
Trip Blank Present:	☐Yes ☑No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

September 28, 2023

Donna White
Prattville
101 West Main Street
Prattville, AL 36067

RE: Project: Permit requirements
Pace Project No.: 20289515

Dear Donna White:

Enclosed are the analytical results for sample(s) received by the laboratory on September 15, 2023. The results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Baton Rouge
- Pace Analytical Services - New Orleans

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

cc: Mr. Napoleon Wilks IV, City of Prattville
Mr. Rick Teague, Prattville Wastewater

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

CERTIFICATIONS

Project: Permit requirements
Pace Project No.: 20289515

Pace Analytical Services New Orleans

Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 2000662023-7
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Texas Commission on Env. Quality (NELAC): T104704405-23-18
U.S. Dept. of Agriculture Foreign Soil Import: 525-23-117-89728

Pace Analytical Services Baton Rouge

7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289515

Sample: Effluent Composite **Lab ID: 20289515001** Collected: 09/15/23 08:00 Received: 09/15/23 13:46 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
BR EPA 625.1 Water	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Baton Rouge							
Acenaphthene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	208-96-8	
Aniline	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	62-53-3	
Anthracene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	120-12-7	
Benzidine	ND	ug/L	50.0	1	09/18/23 03:40	09/18/23 12:56	92-87-5	
Benzo(a)anthracene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	207-08-9	
Benzoic acid	ND	ug/L	50.0	1	09/18/23 03:40	09/18/23 12:56	65-85-0	
Benzyl alcohol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	85-68-7	
Carbazole	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	59-50-7	
4-Chloroaniline	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	7005-72-3	
Chrysene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	91-94-1	L1,L3
2,4-Dichlorophenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	131-11-3	
Di-n-butylphthalate	ND	ug/L	20.0	1	09/18/23 03:40	09/18/23 12:56	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	50.0	1	09/18/23 03:40	09/18/23 12:56	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	1	09/18/23 03:40	09/18/23 12:56	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	117-81-7	
Fluoranthene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	206-44-0	
Fluorene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	77-47-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289515

Sample: Effluent Composite **Lab ID: 20289515001** Collected: 09/15/23 08:00 Received: 09/15/23 13:46 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
BR EPA 625.1 Water	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Baton Rouge							
Hexachloroethane	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	193-39-5	
Isophorone	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56		N2
Naphthalene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	91-20-3	
2-Nitroaniline	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	1	09/18/23 03:40	09/18/23 12:56	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	1	09/18/23 03:40	09/18/23 12:56	100-01-6	L1,L3
Nitrobenzene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	1	09/18/23 03:40	09/18/23 12:56	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	86-30-6	L1,L3
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	108-60-1	
Pentachlorophenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	87-86-5	L1,L3
Phenanthrene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	85-01-8	
Phenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	108-95-2	
Pyrene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	129-00-0	
Pyridine	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1	09/18/23 03:40	09/18/23 12:56	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	103	%.	46-219	1	09/18/23 03:40	09/18/23 12:56	4165-60-0	
2-Fluorobiphenyl (S)	88	%.	21-133	1	09/18/23 03:40	09/18/23 12:56	321-60-8	
Terphenyl-d14 (S)	101	%.	21-133	1	09/18/23 03:40	09/18/23 12:56	1718-51-0	
Phenol-d5 (S)	43	%.	8-424	1	09/18/23 03:40	09/18/23 12:56	4165-62-2	
2-Fluorophenol (S)	59	%.	21-133	1	09/18/23 03:40	09/18/23 12:56	367-12-4	
2,4,6-Tribromophenol (S)	102	%.	21-133	1	09/18/23 03:40	09/18/23 12:56	118-79-6	
200.8 Metals, Total	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - New Orleans							
Antimony	ND	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7440-36-0	
Arsenic	ND	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7440-38-2	
Beryllium	ND	mg/L	0.00050	1	09/18/23 06:35	09/19/23 12:56	7440-41-7	
Cadmium	ND	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7440-43-9	
Chromium	ND	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7440-47-3	
Copper	**0.0067**	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7440-50-8	
Lead	ND	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7439-92-1	
Nickel	**0.0011**	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7440-02-0	
Selenium	ND	mg/L	0.0010	1	09/18/23 06:35	09/19/23 12:56	7782-49-2	
Silver	ND	mg/L	0.00050	1	09/18/23 06:35	09/19/23 12:56	7440-22-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289515

Sample: Effluent Composite **Lab ID: 20289515001** Collected: 09/15/23 08:00 Received: 09/15/23 13:46 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 Metals, Total	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - New Orleans							
Thallium	ND	mg/L	0.00050	1	09/18/23 06:35	09/19/23 12:56	7440-28-0	
Total Hardness	**75.6**	mg/L	0.0050	1	09/18/23 06:35	09/19/23 12:56		
Zinc	**0.038**	mg/L	0.0050	1	09/18/23 06:35	09/19/23 12:56	7440-66-6	
245.2 Mercury	Analytical Method: EPA 245.2 Preparation Method: EPA 245.2 Pace Analytical Services - New Orleans							
Mercury	ND	ug/L	0.20	1	09/18/23 07:09	09/19/23 10:50	7439-97-6	

Sample: Effluent Grab **Lab ID: 20289515002** Collected: 09/15/23 11:40 Received: 09/15/23 13:46 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
Acrolein	ND	ug/L	20.0	1		09/19/23 12:27	107-02-8	Ac
Acrylonitrile	ND	ug/L	20.0	1		09/19/23 12:27	107-13-1	
Benzene	ND	ug/L	5.0	1		09/19/23 12:27	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		09/19/23 12:27	75-27-4	
Bromoform	ND	ug/L	5.0	1		09/19/23 12:27	75-25-2	
Bromomethane	ND	ug/L	5.0	1		09/19/23 12:27	74-83-9	
Carbon tetrachloride	ND	ug/L	5.0	1		09/19/23 12:27	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		09/19/23 12:27	108-90-7	
Chloroethane	ND	ug/L	5.0	1		09/19/23 12:27	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	20.0	1		09/19/23 12:27	110-75-8	
Chloroform	ND	ug/L	5.0	1		09/19/23 12:27	67-66-3	
Chloromethane	ND	ug/L	5.0	1		09/19/23 12:27	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		09/19/23 12:27	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1		09/19/23 12:27	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		09/19/23 12:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		09/19/23 12:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		09/19/23 12:27	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		09/19/23 12:27	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		09/19/23 12:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		09/19/23 12:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		09/19/23 12:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		09/19/23 12:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		09/19/23 12:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		09/19/23 12:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		09/19/23 12:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		09/19/23 12:27	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		09/19/23 12:27	100-41-4	
Methylene Chloride	ND	ug/L	5.0	1		09/19/23 12:27	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	5.0	1		09/19/23 12:27	1634-04-4	N2
Naphthalene	ND	ug/L	25.0	1		09/19/23 12:27	91-20-3	N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289515

Sample: Effluent Grab **Lab ID: 20289515002** Collected: 09/15/23 11:40 Received: 09/15/23 13:46 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		09/19/23 12:27	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		09/19/23 12:27	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		09/19/23 12:27	127-18-4	
Toluene	ND	ug/L	5.0	1		09/19/23 12:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		09/19/23 12:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		09/19/23 12:27	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		09/19/23 12:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		09/19/23 12:27	75-69-4	
Vinyl chloride	ND	ug/L	5.0	1		09/19/23 12:27	75-01-4	
Xylene (Total)	ND	ug/L	15.0	1		09/19/23 12:27	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	1		09/19/23 12:27	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		09/19/23 12:27	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%.	82-118	1		09/19/23 12:27	460-00-4	
Toluene-d8 (S)	99	%.	81-120	1		09/19/23 12:27	2037-26-5	
Dibromofluoromethane (S)	97	%.	77-123	1		09/19/23 12:27	1868-53-7	
420.1 Phenolics, Total	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - New Orleans							
Phenolics, Total Recoverable	**0.033**	mg/L	0.020	1	09/20/23 08:30	09/20/23 13:00	64743-03-9	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-C Pace Analytical Services - New Orleans							
Cyanide	ND	mg/L	0.020	1	09/21/23 09:28	09/21/23 10:33	57-12-5	

Sample: Trip Blank **Lab ID: 20289515003** Collected: 09/15/23 11:40 Received: 09/15/23 13:46 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
Benzene	ND	ug/L	5.0	1		09/19/23 11:35	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		09/19/23 11:35	75-27-4	
Bromoform	ND	ug/L	5.0	1		09/19/23 11:35	75-25-2	
Bromomethane	ND	ug/L	5.0	1		09/19/23 11:35	74-83-9	
Carbon tetrachloride	ND	ug/L	5.0	1		09/19/23 11:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		09/19/23 11:35	108-90-7	
Chloroethane	ND	ug/L	5.0	1		09/19/23 11:35	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	20.0	1		09/19/23 11:35	110-75-8	
Chloroform	ND	ug/L	5.0	1		09/19/23 11:35	67-66-3	
Chloromethane	ND	ug/L	5.0	1		09/19/23 11:35	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		09/19/23 11:35	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		09/19/23 11:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		09/19/23 11:35	541-73-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289515

Sample: Trip Blank **Lab ID: 20289515003** Collected: 09/15/23 11:40 Received: 09/15/23 13:46 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
1,4-Dichlorobenzene	ND	ug/L	5.0	1		09/19/23 11:35	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		09/19/23 11:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		09/19/23 11:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		09/19/23 11:35	75-35-4	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		09/19/23 11:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		09/19/23 11:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		09/19/23 11:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		09/19/23 11:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		09/19/23 11:35	100-41-4	
Methylene Chloride	ND	ug/L	5.0	1		09/19/23 11:35	75-09-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		09/19/23 11:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		09/19/23 11:35	127-18-4	
Toluene	ND	ug/L	5.0	1		09/19/23 11:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		09/19/23 11:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		09/19/23 11:35	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		09/19/23 11:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		09/19/23 11:35	75-69-4	
Vinyl chloride	ND	ug/L	5.0	1		09/19/23 11:35	75-01-4	
Surrogates								
4-Bromofluorobenzene (S)	99	%.	82-118	1		09/19/23 11:35	460-00-4	
Toluene-d8 (S)	97	%.	81-120	1		09/19/23 11:35	2037-26-5	
Dibromofluoromethane (S)	98	%.	77-123	1		09/19/23 11:35	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

QC Batch: 299357
QC Batch Method: EPA 625.1
Analysis Method: EPA 625.1
Analysis Description: BR EPA 625.1 Water
Laboratory: Pace Analytical Services - Baton Rouge

Associated Lab Samples: 20289515001

METHOD BLANK: 1433933 Matrix: Water
Associated Lab Samples: 20289515001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	09/18/23 10:09	
1,2-Dichlorobenzene	ug/L	ND	10.0	09/18/23 10:09	
1,2-Diphenylhydrazine	ug/L	ND	10.0	09/18/23 10:09	
1,3-Dichlorobenzene	ug/L	ND	10.0	09/18/23 10:09	
1,4-Dichlorobenzene	ug/L	ND	10.0	09/18/23 10:09	
1-Methylnaphthalene	ug/L	ND	10.0	09/18/23 10:09	N2
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	09/18/23 10:09	
2,4,5-Trichlorophenol	ug/L	ND	10.0	09/18/23 10:09	
2,4,6-Trichlorophenol	ug/L	ND	10.0	09/18/23 10:09	
2,4-Dichlorophenol	ug/L	ND	10.0	09/18/23 10:09	
2,4-Dimethylphenol	ug/L	ND	10.0	09/18/23 10:09	
2,4-Dinitrophenol	ug/L	ND	50.0	09/18/23 10:09	
2,4-Dinitrotoluene	ug/L	ND	10.0	09/18/23 10:09	
2,6-Dinitrotoluene	ug/L	ND	10.0	09/18/23 10:09	
2-Chloronaphthalene	ug/L	ND	10.0	09/18/23 10:09	
2-Chlorophenol	ug/L	ND	10.0	09/18/23 10:09	
2-Methylnaphthalene	ug/L	ND	10.0	09/18/23 10:09	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	09/18/23 10:09	
2-Nitroaniline	ug/L	ND	10.0	09/18/23 10:09	
2-Nitrophenol	ug/L	ND	10.0	09/18/23 10:09	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	09/18/23 10:09	N2
3,3'-Dichlorobenzidine	ug/L	ND	10.0	09/18/23 10:09	
3-Nitroaniline	ug/L	ND	50.0	09/18/23 10:09	
4,6-Dinitro-2-methylphenol	ug/L	ND	50.0	09/18/23 10:09	
4-Bromophenylphenyl ether	ug/L	ND	10.0	09/18/23 10:09	
4-Chloro-3-methylphenol	ug/L	ND	10.0	09/18/23 10:09	
4-Chloroaniline	ug/L	ND	10.0	09/18/23 10:09	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	09/18/23 10:09	
4-Nitroaniline	ug/L	ND	50.0	09/18/23 10:09	
4-Nitrophenol	ug/L	ND	50.0	09/18/23 10:09	
Acenaphthene	ug/L	ND	10.0	09/18/23 10:09	
Acenaphthylene	ug/L	ND	10.0	09/18/23 10:09	
Aniline	ug/L	ND	10.0	09/18/23 10:09	
Anthracene	ug/L	ND	10.0	09/18/23 10:09	
Benzidine	ug/L	ND	50.0	09/18/23 10:09	
Benzo(a)anthracene	ug/L	ND	10.0	09/18/23 10:09	
Benzo(a)pyrene	ug/L	ND	10.0	09/18/23 10:09	
Benzo(b)fluoranthene	ug/L	ND	10.0	09/18/23 10:09	
Benzo(g,h,i)perylene	ug/L	ND	10.0	09/18/23 10:09	
Benzo(k)fluoranthene	ug/L	ND	10.0	09/18/23 10:09	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

METHOD BLANK: 1433933 Matrix: Water
Associated Lab Samples: 20289515001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzoic acid	ug/L	ND	50.0	09/18/23 10:09	
Benzyl alcohol	ug/L	ND	10.0	09/18/23 10:09	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	09/18/23 10:09	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	09/18/23 10:09	
bis(2-Ethylhexyl)phthalate	ug/L	ND	10.0	09/18/23 10:09	
Butylbenzylphthalate	ug/L	ND	10.0	09/18/23 10:09	
Carbazole	ug/L	ND	10.0	09/18/23 10:09	
Chrysene	ug/L	ND	10.0	09/18/23 10:09	
Di-n-butylphthalate	ug/L	ND	20.0	09/18/23 10:09	
Di-n-octylphthalate	ug/L	ND	10.0	09/18/23 10:09	
Dibenz(a,h)anthracene	ug/L	ND	10.0	09/18/23 10:09	
Dibenzofuran	ug/L	ND	10.0	09/18/23 10:09	
Diethylphthalate	ug/L	ND	10.0	09/18/23 10:09	
Dimethylphthalate	ug/L	ND	10.0	09/18/23 10:09	
Fluoranthene	ug/L	ND	10.0	09/18/23 10:09	
Fluorene	ug/L	ND	10.0	09/18/23 10:09	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	09/18/23 10:09	
Hexachlorobenzene	ug/L	ND	10.0	09/18/23 10:09	
Hexachlorocyclopentadiene	ug/L	ND	10.0	09/18/23 10:09	
Hexachloroethane	ug/L	ND	10.0	09/18/23 10:09	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	09/18/23 10:09	
Isophorone	ug/L	ND	10.0	09/18/23 10:09	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	09/18/23 10:09	
N-Nitrosodimethylamine	ug/L	ND	10.0	09/18/23 10:09	
N-Nitrosodiphenylamine	ug/L	ND	10.0	09/18/23 10:09	
Naphthalene	ug/L	ND	10.0	09/18/23 10:09	
Nitrobenzene	ug/L	ND	10.0	09/18/23 10:09	
Pentachlorophenol	ug/L	ND	10.0	09/18/23 10:09	
Phenanthrene	ug/L	ND	10.0	09/18/23 10:09	
Phenol	ug/L	ND	10.0	09/18/23 10:09	
Pyrene	ug/L	ND	10.0	09/18/23 10:09	
Pyridine	ug/L	ND	10.0	09/18/23 10:09	
2,4,6-Tribromophenol (S)	%.	106	21-133	09/18/23 10:09	
2-Fluorobiphenyl (S)	%.	97	21-133	09/18/23 10:09	
2-Fluorophenol (S)	%.	73	21-133	09/18/23 10:09	
Nitrobenzene-d5 (S)	%.	113	46-219	09/18/23 10:09	
Phenol-d5 (S)	%.	52	8-424	09/18/23 10:09	
Terphenyl-d14 (S)	%.	107	21-133	09/18/23 10:09	

LABORATORY CONTROL SAMPLE & LCSD: 1433934 1433935

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	44.8	43.4	90	87	44-142	3	50	
1,2-Dichlorobenzene	ug/L	50	48.5	46.3	97	93	32-111	4	40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

LABORATORY CONTROL SAMPLE & LCSD: 1433934 1433935

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Diphenylhydrazine	ug/L	50	55.7	53.7	111	107	49-122	4	40	
1,3-Dichlorobenzene	ug/L	50	48.4	45.9	97	92	28-110	5	40	
1,4-Dichlorobenzene	ug/L	50	47.8	45.3	96	91	29-112	5	40	
1-Methylnaphthalene	ug/L	50	45.1	43.9	90	88	41-119	3	40	N2
2,2'-Oxybis(1-chloropropane)	ug/L	50	57.0	54.5	114	109	36-166	5	76	
2,4,5-Trichlorophenol	ug/L	50	52.7	50.5	105	101	53-123	4	40	
2,4,6-Trichlorophenol	ug/L	50	52.2	50.9	104	102	37-144	3	58	
2,4-Dichlorophenol	ug/L	100	102	100	102	100	39-135	2	50	
2,4-Dimethylphenol	ug/L	50	56.9	56.5	114	113	32-120	1	58	
2,4-Dinitrophenol	ug/L	50	63.1	60.9	126	122	20-191	4	132	
2,4-Dinitrotoluene	ug/L	50	50.0	48.4	100	97	39-139	3	42	
2,6-Dinitrotoluene	ug/L	50	53.9	52.7	108	105	20-191	2	48	
2-Chloronaphthalene	ug/L	50	49.0	47.6	98	95	60-120	3	24	
2-Chlorophenol	ug/L	50	47.0	45.6	94	91	23-134	3	61	
2-Methylnaphthalene	ug/L	50	48.2	47.3	96	95	40-121	2	40	
2-Methylphenol(o-Cresol)	ug/L	50	44.8	44.5	90	89	30-117	1	40	
2-Nitroaniline	ug/L	50	56.9	55.2	114	110	55-127	3	40	
2-Nitrophenol	ug/L	50	50.5	49.7	101	99	44-123	2	55	
3&4-Methylphenol(m&p Cresol)	ug/L	50	42.4	41.9	85	84	29-110	1	40	N2
3,3'-Dichlorobenzidine	ug/L	50	75.4	72.6	151	145	27-129	4	108	L1,L3
3-Nitroaniline	ug/L	50	55.2	55.2	110	110	41-128	0	40	
4,6-Dinitro-2-methylphenol	ug/L	50	57.2	54.9	114	110	20-181	4	203	
4-Bromophenylphenyl ether	ug/L	50	50.1	48.6	100	97	53-127	3	43	
4-Chloro-3-methylphenol	ug/L	50	54.3	52.5	109	105	22-147	3	73	
4-Chloroaniline	ug/L	50	48.9	48.3	98	97	33-117	1	40	
4-Chlorophenylphenyl ether	ug/L	50	51.2	49.6	102	99	25-158	3	61	
4-Nitroaniline	ug/L	50	62.1	62.4	124	125	38-120	0	40	L1,L3
4-Nitrophenol	ug/L	50	45.9J	45.1J	92	90	20-132		131	
Acenaphthene	ug/L	50	49.3	47.9	99	96	47-122	3	40	
Acenaphthylene	ug/L	50	47.4	45.8	95	92	41-130	3	40	
Aniline	ug/L	50	34.3	34.8	69	70	47-145	1	40	
Anthracene	ug/L	50	53.5	52.2	107	104	33-145	3	74	
Benzidine	ug/L	50	24.5J	29.4J	49	59	10-120		40	
Benzo(a)anthracene	ug/L	50	53.9	52.6	108	105	58-125	3	40	
Benzo(a)pyrene	ug/L	50	55.0	53.1	110	106	54-128	3	40	
Benzo(b)fluoranthene	ug/L	50	56.9	54.9	114	110	27-133	4	66	
Benzo(g,h,i)perylene	ug/L	50	58.5	56.7	117	113	50-134	3	40	
Benzo(k)fluoranthene	ug/L	50	55.4	53.4	111	107	33-143	4	53	
Benzoic acid	ug/L	100	45.5J	44.5J	45	44	17-163		72	
Benzyl alcohol	ug/L	50	50.9	49.8	102	100	24-159	2	71	
bis(2-Chloroethoxy)methane	ug/L	50	52.2	50.9	104	102	20-219	3	97	
bis(2-Chloroethyl) ether	ug/L	50	59.4	56.5	119	113	20-162	5	63	
bis(2-Ethylhexyl)phthalate	ug/L	50	65.7	63.2	131	126	55-135	4	40	
Butylbenzylphthalate	ug/L	50	61.8	59.4	124	119	20-152	4	60	
Carbazole	ug/L	50	58.8	57.2	118	114	60-122	3	40	
Chrysene	ug/L	50	53.6	51.9	107	104	33-184	3	54	
Di-n-butylphthalate	ug/L	50	63.3	60.6	127	121	59-127	4	40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

LABORATORY CONTROL SAMPLE & LCSD:		1433934		1433935						
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Di-n-octylphthalate	ug/L	50	68.9	66.0	138	132	20-168	4	87	
Dibenz(a,h)anthracene	ug/L	50	58.7	56.7	117	113	20-158	3	108	
Dibenzofuran	ug/L	50	51.4	50.2	103	100	20-158	2	82	
Diethylphthalate	ug/L	50	57.3	55.4	115	111	56-125	3	40	
Dimethylphthalate	ug/L	50	53.9	52.0	108	104	45-127	4	40	
Fluoranthene	ug/L	50	53.9	52.5	108	105	57-128	3	40	
Fluorene	ug/L	50	50.2	48.7	100	97	52-124	3	40	
Hexachloro-1,3-butadiene	ug/L	50	45.1	43.4	90	87	22-124	4	40	
Hexachlorobenzene	ug/L	50	49.7	47.9	99	96	20-200	4	126	
Hexachlorocyclopentadiene	ug/L	50	41.1	40.1	82	80	16-120	3	100	
Hexachloroethane	ug/L	50	52.9	50.9	106	102	21-115	4	183	
Indeno(1,2,3-cd)pyrene	ug/L	50	58.2	56.0	116	112	52-134	4	47	
Isophorone	ug/L	50	53.6	51.7	107	103	42-124	4	69	
N-Nitroso-di-n-propylamine	ug/L	50	50.9	50.4	102	101	20-152	1	55	
N-Nitrosodimethylamine	ug/L	50	40.9	39.7	82	79	59-121	3	38	
N-Nitrosodiphenylamine	ug/L	50	60.3	58.2	121	116	24-120	3	62	L1,L3
Naphthalene	ug/L	50	43.2	41.8	86	84	40-121	3	40	
Nitrobenzene	ug/L	50	50.0	48.4	100	97	26-137	3	66	
Pentachlorophenol	ug/L	50	61.2	60.2	122	120	40-120	2	62	L1,L3
Phenanthrene	ug/L	50	51.4	50.3	103	101	59-120	2	40	
Phenol	ug/L	50	27.6	28.2	55	56	20-171	2	99	
Pyrene	ug/L	50	51.3	49.5	103	99	21-196	3	93	
Pyridine	ug/L	50	14.7	17.9	29	36	20-120	19	40	
2,4,6-Tribromophenol (S)	%.				107	108	21-133			
2-Fluorobiphenyl (S)	%.				96	94	21-133			
2-Fluorophenol (S)	%.				73	74	21-133			
Nitrobenzene-d5 (S)	%.				99	100	46-219			
Phenol-d5 (S)	%.				53	56	8-424			
Terphenyl-d14 (S)	%.				104	104	21-133			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

QC Batch: 299361
QC Batch Method: EPA 245.2
Analysis Method: EPA 245.2
Analysis Description: 245.2 Mercury
Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20289515001

METHOD BLANK: 1433947 Matrix: Water
Associated Lab Samples: 20289515001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	09/19/23 10:45	

LABORATORY CONTROL SAMPLE: 1433948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.1	111	80-120	

MATRIX SPIKE SAMPLE: 1433950

Parameter	Units	20289515001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	1	1.1	102	75-125	

SAMPLE DUPLICATE: 1433949

Parameter	Units	20289515001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	ND	ND		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

QC Batch: 299354
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20289515001

METHOD BLANK: 1433922 Matrix: Water
Associated Lab Samples: 20289515001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0010	09/18/23 13:49	
Arsenic	mg/L	ND	0.0010	09/18/23 13:49	
Beryllium	mg/L	ND	0.00050	09/18/23 13:49	
Cadmium	mg/L	ND	0.0010	09/18/23 13:49	
Chromium	mg/L	ND	0.0010	09/18/23 13:49	
Copper	mg/L	ND	0.0010	09/18/23 13:49	
Lead	mg/L	ND	0.0010	09/18/23 13:49	
Nickel	mg/L	ND	0.0010	09/18/23 13:49	
Selenium	mg/L	ND	0.0010	09/18/23 13:49	
Silver	mg/L	ND	0.00050	09/18/23 13:49	
Thallium	mg/L	ND	0.00050	09/18/23 13:49	
Total Hardness	mg/L	0.11	0.0050	09/18/23 13:49	
Zinc	mg/L	ND	0.0050	09/18/23 13:49	

LABORATORY CONTROL SAMPLE: 1433923

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.06	0.060	101	85-115	
Arsenic	mg/L	0.06	0.060	100	85-115	
Beryllium	mg/L	0.06	0.053	88	85-115	
Cadmium	mg/L	0.06	0.062	103	85-115	
Chromium	mg/L	0.06	0.062	104	85-115	
Copper	mg/L	0.06	0.062	104	85-115	
Lead	mg/L	0.06	0.061	101	85-115	
Nickel	mg/L	0.06	0.061	102	85-115	
Selenium	mg/L	0.06	0.060	100	85-115	
Silver	mg/L	0.03	0.032	105	85-115	
Thallium	mg/L	0.03	0.030	101	85-115	
Total Hardness	mg/L		38.9			
Zinc	mg/L	0.06	0.062	103	85-115	

MATRIX SPIKE SAMPLE: 1433925

Parameter	Units	20289492002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	ND	0.06	0.064	104	70-130	
Arsenic	mg/L	ND	0.06	0.062	103	70-130	
Beryllium	mg/L	ND	0.06	0.068	113	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
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(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

MATRIX SPIKE SAMPLE: 1433925

Parameter	Units	20289492002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/L	ND	0.06	0.065	108	70-130	
Chromium	mg/L	ND	0.06	0.064	106	70-130	
Copper	mg/L	0.016	0.06	0.079	106	70-130	
Lead	mg/L	ND	0.06	0.062	104	70-130	
Nickel	mg/L	0.038	0.06	0.10	103	70-130	
Selenium	mg/L	ND	0.06	0.061	102	70-130	
Silver	mg/L	ND	0.03	0.032	106	70-130	
Thallium	mg/L	ND	0.03	0.031	104	70-130	
Total Hardness	mg/L	76.9		118			
Zinc	mg/L	0.079	0.06	0.14	102	70-130	

MATRIX SPIKE SAMPLE: 1433926

Parameter	Units	20289515001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	ND	0.06	0.062	102	70-130	
Arsenic	mg/L	ND	0.06	0.060	99	70-130	
Beryllium	mg/L	ND	0.06	0.062	104	70-130	
Cadmium	mg/L	ND	0.06	0.061	102	70-130	
Chromium	mg/L	ND	0.06	0.061	100	70-130	
Copper	mg/L	0.0067	0.06	0.066	98	70-130	
Lead	mg/L	ND	0.06	0.060	100	70-130	
Nickel	mg/L	0.0011	0.06	0.060	97	70-130	
Selenium	mg/L	ND	0.06	0.059	99	70-130	
Silver	mg/L	ND	0.03	0.030	100	70-130	
Thallium	mg/L	ND	0.03	0.030	100	70-130	
Total Hardness	mg/L	75.6		111			
Zinc	mg/L	0.038	0.06	0.094	94	70-130	

SAMPLE DUPLICATE: 1433924

Parameter	Units	20289492002 Result	Dup Result	RPD	Qualifiers
Antimony	mg/L	ND	ND		
Arsenic	mg/L	ND	ND		
Beryllium	mg/L	ND	ND		
Cadmium	mg/L	ND	ND		
Chromium	mg/L	ND	ND		
Copper	mg/L	0.016	0.016	1	
Lead	mg/L	ND	ND		
Nickel	mg/L	0.038	0.038	0	
Selenium	mg/L	ND	ND		
Silver	mg/L	ND	ND		
Thallium	mg/L	ND	ND		
Total Hardness	mg/L	76.9	77.4	1	
Zinc	mg/L	0.079	0.078	0	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

QC Batch: 299613
QC Batch Method: EPA 624.1
Analysis Method: EPA 624.1
Analysis Description: 624 MSV
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20289515002, 20289515003

METHOD BLANK: 1434691 Matrix: Water
Associated Lab Samples: 20289515002, 20289515003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	09/19/23 10:25	
1,1,1-Trichloroethane	ug/L	ND	5.0	09/19/23 10:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	09/19/23 10:25	
1,1,2-Trichloroethane	ug/L	ND	5.0	09/19/23 10:25	
1,1-Dichloroethane	ug/L	ND	5.0	09/19/23 10:25	
1,1-Dichloroethene	ug/L	ND	5.0	09/19/23 10:25	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	09/19/23 10:25	
1,2-Dichlorobenzene	ug/L	ND	5.0	09/19/23 10:25	
1,2-Dichloroethane	ug/L	ND	5.0	09/19/23 10:25	
1,2-Dichloropropane	ug/L	ND	5.0	09/19/23 10:25	
1,3-Dichlorobenzene	ug/L	ND	5.0	09/19/23 10:25	
1,4-Dichlorobenzene	ug/L	ND	5.0	09/19/23 10:25	
2-Chloroethylvinyl ether	ug/L	ND	20.0	09/19/23 10:25	
Acrolein	ug/L	ND	20.0	09/19/23 10:25	
Acrylonitrile	ug/L	ND	20.0	09/19/23 10:25	
Benzene	ug/L	ND	5.0	09/19/23 10:25	
Bromodichloromethane	ug/L	ND	5.0	09/19/23 10:25	
Bromoform	ug/L	ND	5.0	09/19/23 10:25	
Bromomethane	ug/L	ND	5.0	09/19/23 10:25	
Carbon tetrachloride	ug/L	ND	5.0	09/19/23 10:25	
Chlorobenzene	ug/L	ND	5.0	09/19/23 10:25	
Chloroethane	ug/L	ND	5.0	09/19/23 10:25	
Chloroform	ug/L	ND	5.0	09/19/23 10:25	
Chloromethane	ug/L	ND	5.0	09/19/23 10:25	
cis-1,2-Dichloroethene	ug/L	ND	5.0	09/19/23 10:25	
cis-1,3-Dichloropropene	ug/L	ND	5.0	09/19/23 10:25	
Dibromochloromethane	ug/L	ND	5.0	09/19/23 10:25	
Dichlorodifluoromethane	ug/L	ND	5.0	09/19/23 10:25	
Ethylbenzene	ug/L	ND	5.0	09/19/23 10:25	
m&p-Xylene	ug/L	ND	10.0	09/19/23 10:25	
Methyl-tert-butyl ether	ug/L	ND	5.0	09/19/23 10:25	
Methylene Chloride	ug/L	ND	5.0	09/19/23 10:25	
Naphthalene	ug/L	ND	25.0	09/19/23 10:25	N2
o-Xylene	ug/L	ND	5.0	09/19/23 10:25	
Tetrachloroethene	ug/L	ND	5.0	09/19/23 10:25	
Toluene	ug/L	ND	5.0	09/19/23 10:25	
trans-1,2-Dichloroethene	ug/L	ND	5.0	09/19/23 10:25	
trans-1,3-Dichloropropene	ug/L	ND	5.0	09/19/23 10:25	
Trichloroethene	ug/L	ND	5.0	09/19/23 10:25	
Trichlorofluoromethane	ug/L	ND	5.0	09/19/23 10:25	

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Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

METHOD BLANK: 1434691 Matrix: Water
Associated Lab Samples: 20289515002, 20289515003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Vinyl chloride	ug/L	ND	5.0	09/19/23 10:25	
Xylene (Total)	ug/L	ND	15.0	09/19/23 10:25	
4-Bromofluorobenzene (S)	%.	92	82-118	09/19/23 10:25	
Dibromofluoromethane (S)	%.	111	77-123	09/19/23 10:25	
Toluene-d8 (S)	%.	86	81-120	09/19/23 10:25	

LABORATORY CONTROL SAMPLE: 1434692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.7	103		
1,1,1-Trichloroethane	ug/L	20	19.6	98	76-123	
1,1,2,2-Tetrachloroethane	ug/L	20	20.7	104	64-131	
1,1,2-Trichloroethane	ug/L	20	20.4	102	76-118	
1,1-Dichloroethane	ug/L	20	19.3	97	69-125	
1,1-Dichloroethene	ug/L	20	20.0	100	63-122	
1,2-Dibromo-3-chloropropane	ug/L	20	21.1	106		
1,2-Dichlorobenzene	ug/L	20	20.1	101	80-113	
1,2-Dichloroethane	ug/L	20	18.8	94	64-127	
1,2-Dichloropropane	ug/L	20	19.1	95	68-125	
1,3-Dichlorobenzene	ug/L	20	20.5	103	79-112	
1,4-Dichlorobenzene	ug/L	20	20.0	100	79-113	
2-Chloroethylvinyl ether	ug/L	20	18.7J	93	52-138	
Acrolein	ug/L	100	106	106	10-164	
Acrylonitrile	ug/L	20	20.4	102	48-145	
Benzene	ug/L	20	19.3	97	72-131	
Bromodichloromethane	ug/L	20	19.9	99	72-117	
Bromoform	ug/L	20	21.6	108	58-124	
Bromomethane	ug/L	20	18.8	94	39-163	
Carbon tetrachloride	ug/L	20	19.2	96	73-121	
Chlorobenzene	ug/L	20	20.9	104	77-119	
Chloroethane	ug/L	20	19.3	96	36-155	
Chloroform	ug/L	20	19.2	96	69-115	
Chloromethane	ug/L	20	21.0	105	30-148	
cis-1,2-Dichloroethene	ug/L	20	18.8	94	72-115	
cis-1,3-Dichloropropene	ug/L	20	20.3	102	70-120	
Dibromochloromethane	ug/L	20	21.1	105	63-120	
Dichlorodifluoromethane	ug/L	20	18.2	91		
Ethylbenzene	ug/L	20	21.3	107	81-110	
m&p-Xylene	ug/L	40	42.6	106	79-115	
Methyl-tert-butyl ether	ug/L	20	19.2	96	58-135	
Methylene Chloride	ug/L	20	18.7	93	58-136	
Naphthalene	ug/L	20	21.9J	109	46-149	N2
o-Xylene	ug/L	20	21.1	106	78-117	
Tetrachloroethene	ug/L	20	20.5	102	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

LABORATORY CONTROL SAMPLE: 1434692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	19.2	96	80-116	
trans-1,2-Dichloroethene	ug/L	20	19.2	96	60-126	
trans-1,3-Dichloropropene	ug/L	20	20.9	104	71-120	
Trichloroethene	ug/L	20	19.6	98	76-113	
Trichlorofluoromethane	ug/L	20	19.8	99	27-166	
Vinyl chloride	ug/L	20	23.2	116	45-126	
Xylene (Total)	ug/L	60	63.7	106		
4-Bromofluorobenzene (S)	%.			98	82-118	
Dibromofluoromethane (S)	%.			97	77-123	
Toluene-d8 (S)	%.			98	81-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1434693 1434694

Parameter	Units	20289230002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	22.4	24.0	112	120		7	
1,1,1-Trichloroethane	ug/L	ND	20	20	21.2	22.5	106	113	76-141	6	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.4	20.1	97	101	60-144	4	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	20.6	100	103	72-132	3	
1,1-Dichloroethane	ug/L	ND	20	20	21.7	22.8	109	114	67-139	5	
1,1-Dichloroethene	ug/L	ND	20	20	22.2	24.0	111	120	62-139	8	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	21.8	24.0	109	120		10	
1,2-Dichlorobenzene	ug/L	ND	20	20	20.6	22.8	103	114	77-129	10	
1,2-Dichloroethane	ug/L	ND	20	20	19.4	20.4	97	102	63-139	5	
1,2-Dichloropropane	ug/L	ND	20	20	18.0	18.9	90	95	68-137	5	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.1	21.8	101	109	76-128	8	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.6	21.2	98	106	76-128	8	
2-Chloroethylvinyl ether	ug/L	ND	20	20	13.7J	14.4J	69	72	10-156		M1
Acrolein	ug/L	ND	100	100	105	119	105	119	10-200	13	
Acrylonitrile	ug/L	ND	20	20	18.8J	17.6J	94	88	31-177		
Benzene	ug/L	ND	20	20	20.8	21.5	104	108	52-167	4	
Bromodichloromethane	ug/L	ND	20	20	20.0	21.2	100	106	70-131	6	
Bromoform	ug/L	ND	20	20	20.7	22.4	103	112	58-134	8	
Bromomethane	ug/L	ND	20	20	20.9	21.8	104	109	36-177	4	
Carbon tetrachloride	ug/L	ND	20	20	20.9	22.5	104	113	67-143	8	
Chlorobenzene	ug/L	ND	20	20	20.9	21.7	105	109	73-135	4	
Chloroethane	ug/L	ND	20	20	20.9	21.7	105	108	35-172	4	
Chloroform	ug/L	ND	20	20	22.3	23.4	104	109	65-131	5	
Chloromethane	ug/L	ND	20	20	23.2	23.3	116	116	27-168	0	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.7	21.9	103	109	80-120	6	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.0	20.0	95	100	67-139	5	
Dibromochloromethane	ug/L	ND	20	20	21.2	22.6	106	113	60-134	7	
Dichlorodifluoromethane	ug/L	ND	20	20	21.6	23.4	108	117		8	
Ethylbenzene	ug/L	ND	20	20	20.1	20.8	101	104	75-130	4	
m&p-Xylene	ug/L	ND	40	40	39.6	42.0	99	105	60-150	6	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1434693 1434694

Parameter	Units	20289230002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Methyl-tert-butyl ether	ug/L	ND	20	20	19.4	20.8	97	104	36-160	7	
Methylene Chloride	ug/L	ND	20	20	20.1	21.5	101	107	60-138	6	
Naphthalene	ug/L	ND	20	20	24.8J	27.5	124	137	60-155		N2
o-Xylene	ug/L	ND	20	20	20.6	22.3	103	112	61-149	8	
Tetrachloroethene	ug/L	ND	20	20	22.7	24.4	113	122	65-146	7	
Toluene	ug/L	ND	20	20	18.0	18.4	90	92	32-181	3	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.8	22.8	109	114	64-139	5	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.2	21.0	101	105	69-133	4	
Trichloroethene	ug/L	ND	20	20	21.1	22.2	106	111	73-132	5	
Trichlorofluoromethane	ug/L	ND	20	20	17.7	23.5	88	117	24-189	28	R1
Vinyl chloride	ug/L	ND	20	20	26.6	26.6	133	133	47-145	0	
Xylene (Total)	ug/L	ND	60	60	60.1	64.4	100	107		7	
4-Bromofluorobenzene (S)	%.						93	92	82-118		
Dibromofluoromethane (S)	%.						105	108	77-123		
Toluene-d8 (S)	%.						89	89	81-120		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

QC Batch: 299798
QC Batch Method: EPA 420.1
Analysis Method: EPA 420.1
Analysis Description: 420.1 Phenolics
Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20289515002

METHOD BLANK: 1435573 Matrix: Water
Associated Lab Samples: 20289515002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.020	09/20/23 11:05	

LABORATORY CONTROL SAMPLE: 1435574

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	0.1	0.12	116	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289515

QC Batch: 300003
QC Batch Method: SM 4500-CN-C
Analysis Method: SM 4500-CN-E
Analysis Description: 4500CNE Cyanide, Total
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20289515002

METHOD BLANK: 1436585 Matrix: Water
Associated Lab Samples: 20289515002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.020	09/21/23 10:26	

LABORATORY CONTROL SAMPLE: 1436586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.090	90	80-120	

MATRIX SPIKE SAMPLE: 1436588

Parameter	Units	20289640003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	<0.014	0.1	0.098	97	75-125	

SAMPLE DUPLICATE: 1436587

Parameter	Units	20289640003 Result	Dup Result	RPD	Qualifiers
Cyanide	mg/L	<0.014	ND		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALIFIERS

Project: Permit requirements
Pace Project No.: 20289515

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

ANALYTE QUALIFIERS

Ac	Analysis of acrolein was performed from an unpreserved sample outside of the 3 day holding time required by the test method and for NPDES compliance per 40CFRPart 136 for unpreserved samples.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Permit requirements
Pace Project No.: 20289515

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20289515001	**Effluent Composite**	EPA 625.1	299357	EPA 625.1	299406
20289515001	**Effluent Composite**	EPA 200.8	299354	EPA 200.8	299420
20289515001	**Effluent Composite**	EPA 245.2	299361	EPA 245.2	299422
20289515002	**Effluent Grab**	EPA 624.1	299613		
20289515003	**Trip Blank**	EPA 624.1	299613		
20289515002	**Effluent Grab**	EPA 420.1	299798	EPA 420.1	299934
20289515002	**Effluent Grab**	SM 4500-CN-C	300003	SM 4500-CN-E	300057

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO# : 20289515

20289515

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacela

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Prattville Wastewater - WW Pine Creek	Report To: Napleon Wilks	Attention:	
Address: 101 W. Main Street	Copy To:	Company Name:	Regulatory Agency
Prattville, AL 36067		Address:	
Email: Napleon.Wilks@prattvilleal.gov	Purchase Order #:	Pace Quote:	
Phone: (334)361-3626 Fax:	Project Name: Permit requirements Table C Pine Creek	Pace Project Manager: cindy.simpson@pacelabs.com,	State / Location
Requested Due Date:	Order #: 859908	Pace Profile #: 17053	AL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): 625	200.8 Metals	Mercury	Cyanide	Phenol Total	624.1	Residual Chlorine (Y/N)
1	Composite Effluent	WT	C	9/14	0800	9/15	0800		4	2		2						X	X	X					
2	Grab Effluent	WT	G	9/15	1135	9/15	1140		6	4	1			1							X	X	X		
3	Trip Blank	WT							4	4													X		
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	[signature] City of Prattville	09/15	13:46	[signature]	9.15	1346	2.4	Y	N	Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Napoleon Wilks III
SIGNATURE of SAMPLER: [signature]	DATE Signed: 09-15-23

DC#_Title: ENV-FRM-SROS-0009 v02_NOLA SCUR Form
Effective Date: 3/23/2022

WO#: 20289515

PM: CRS Due Date: 09/29/23
CLIENT: TU-Prattvill

Pace

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Project

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☒ Customer ☐ Other

Custody Seal on Cooler/Box Present: ☐ YES ☒ NO **Custody Seals intact:** ☐ YES ☒ NO

Samples on ice: ☒ YES ☐ NO **Type of Ice:** (Wet) Blue None

Date and Initials of person examining contents: MK 9/19/23

Temp should be ≤6°C *Temp must be measured from Temperature blank when present

Cooler #1 Thermometer Used: TUTM13 Cooler Temp °C: (Observed) 2.4 (CF) 0 (Actual) 2.4
Cooler #2 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #3 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #4 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____

Tracking #:_____

Temperature Blank Present*?	☐Yes ☐No ~~☐N/A~~	
Chain of Custody Present:	~~☐Yes~~ ☐No ☐N/A	
Chain of Custody Complete.	~~☐Yes~~ ☐No ☐N/A	
Chain of Custody Relinquished:	~~☐Yes~~ ☐No ☐N/A	
Sampler Name & Signature on COC:	~~☐Yes~~ ☐No ☐N/A	
Samples Arrived within Hold Time:	~~☐Yes~~ ☐No ☐N/A	
Sufficient Volume:	~~☐Yes~~ ☐No ☐N/A	
Correct Containers Used:	~~☐Yes~~ ☐No ☐N/A	
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ~~☐N/A~~	
Sample Labels match COC:	~~☐Yes~~ ☐No ☐N/A	
All containers received within manafacture's precautionary and/or expiration dates.	☐Yes ☐No ~~☐N/A~~	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes ☐No ~~☐N/A~~	If No, was preserative added? ☐Yes ☐No If added record lot #.:
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes ☐No ~~☐N/A~~	HNO3 _____ H2SO4 _____ Date:_____ Time:_____
Headspace in VOA Vials (>6mm):	☐Yes ☐No ~~☐N/A~~	
Trip Blank Present:	☐Yes ~~☐No~~	

Client Notification/ Resolution:

Person Contacted:_____ Date/Time:_____

Comments/ Resolution:_____

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

September 28, 2023

Donna White
Prattville
101 West Main Street
Prattville, AL 36067

RE: Project: Permit requirements
Pace Project No.: 20289657

Dear Donna White:

Enclosed are the analytical results for sample(s) received by the laboratory on September 18, 2023. The results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Baton Rouge
- Pace Analytical Services - New Orleans

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Simpson

Cindy Simpson
cindy.simpson@pacelabs.com
(205)614-6630
Project Manager

Enclosures

cc: Mr. Napoleon Wilks IV, City of Prattville
Mr. Rick Teague, Prattville Wastewater

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

CERTIFICATIONS

Project: Permit requirements
Pace Project No.: 20289657

Pace Analytical Services New Orleans

Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 2000662023-7
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Texas Commission on Env. Quality (NELAC): T104704405-23-18
U.S. Dept. of Agriculture Foreign Soil Import: 525-23-117-89728

Pace Analytical Services Baton Rouge

7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289657

Sample: Effluent Composite **Lab ID: 20289657001** Collected: 09/18/23 08:00 Received: 09/18/23 13:17 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
BR EPA 625.1 Water	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Baton Rouge							
Acenaphthene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	208-96-8	
Aniline	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	62-53-3	
Anthracene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	120-12-7	
Benzidine	ND	ug/L	50.0	1	09/22/23 04:00	09/22/23 18:12	92-87-5	
Benzo(a)anthracene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	207-08-9	
Benzoic acid	ND	ug/L	50.0	1	09/22/23 04:00	09/22/23 18:12	65-85-0	
Benzyl alcohol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	85-68-7	
Carbazole	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	59-50-7	
4-Chloroaniline	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	7005-72-3	
Chrysene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	91-94-1	L1
2,4-Dichlorophenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	131-11-3	
Di-n-butylphthalate	ND	ug/L	20.0	1	09/22/23 04:00	09/22/23 18:12	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	50.0	1	09/22/23 04:00	09/22/23 18:12	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	1	09/22/23 04:00	09/22/23 18:12	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	117-81-7	
Fluoranthene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	206-44-0	
Fluorene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	77-47-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289657

Sample: Effluent Composite **Lab ID: 20289657001** Collected: 09/18/23 08:00 Received: 09/18/23 13:17 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
BR EPA 625.1 Water	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1							
	Pace Analytical Services - Baton Rouge							
Hexachloroethane	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	193-39-5	
Isophorone	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12		N2
Naphthalene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	91-20-3	
2-Nitroaniline	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	1	09/22/23 04:00	09/22/23 18:12	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	1	09/22/23 04:00	09/22/23 18:12	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	1	09/22/23 04:00	09/22/23 18:12	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	108-60-1	
Pentachlorophenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	87-86-5	
Phenanthrene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	85-01-8	
Phenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	108-95-2	
Pyrene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	129-00-0	
Pyridine	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1	09/22/23 04:00	09/22/23 18:12	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	79	%.	46-219	1	09/22/23 04:00	09/22/23 18:12	4165-60-0	
2-Fluorobiphenyl (S)	65	%.	21-133	1	09/22/23 04:00	09/22/23 18:12	321-60-8	
Terphenyl-d14 (S)	91	%.	21-133	1	09/22/23 04:00	09/22/23 18:12	1718-51-0	
Phenol-d5 (S)	30	%.	8-424	1	09/22/23 04:00	09/22/23 18:12	4165-62-2	
2-Fluorophenol (S)	42	%.	21-133	1	09/22/23 04:00	09/22/23 18:12	367-12-4	
2,4,6-Tribromophenol (S)	89	%.	21-133	1	09/22/23 04:00	09/22/23 18:12	118-79-6	
200.8 Metals, Total	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
	Pace Analytical Services - New Orleans							
Antimony	ND	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7440-36-0	
Arsenic	ND	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7440-38-2	
Beryllium	ND	mg/L	0.00050	1	09/21/23 12:35	09/22/23 23:58	7440-41-7	
Cadmium	ND	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7440-43-9	
Chromium	ND	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7440-47-3	
Copper	**0.0059**	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7440-50-8	
Lead	ND	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7439-92-1	
Nickel	ND	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7440-02-0	
Selenium	ND	mg/L	0.0010	1	09/21/23 12:35	09/22/23 23:58	7782-49-2	
Silver	ND	mg/L	0.00050	1	09/21/23 12:35	09/22/23 23:58	7440-22-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289657

Sample: Effluent Composite **Lab ID: 20289657001** Collected: 09/18/23 08:00 Received: 09/18/23 13:17 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 Metals, Total	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - New Orleans							
Thallium	ND	mg/L	0.00050	1	09/21/23 12:35	09/22/23 23:58	7440-28-0	
Total Hardness	**76.3**	mg/L	0.0050	1	09/21/23 12:35	09/22/23 23:58		
Zinc	**0.035**	mg/L	0.0050	1	09/21/23 12:35	09/22/23 23:58	7440-66-6	
245.2 Mercury	Analytical Method: EPA 245.2 Preparation Method: EPA 245.2 Pace Analytical Services - New Orleans							
Mercury	ND	ug/L	0.20	1	09/21/23 11:30	09/21/23 14:55	7439-97-6	

Sample: Effluent Grab **Lab ID: 20289657002** Collected: 09/18/23 07:15 Received: 09/18/23 13:17 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
Acrolein	ND	ug/L	20.0	1		09/22/23 13:21	107-02-8	Ac
Acrylonitrile	ND	ug/L	20.0	1		09/22/23 13:21	107-13-1	
Benzene	ND	ug/L	5.0	1		09/22/23 13:21	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		09/22/23 13:21	75-27-4	
Bromoform	ND	ug/L	5.0	1		09/22/23 13:21	75-25-2	
Bromomethane	ND	ug/L	5.0	1		09/22/23 13:21	74-83-9	
Carbon tetrachloride	ND	ug/L	5.0	1		09/22/23 13:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		09/22/23 13:21	108-90-7	
Chloroethane	ND	ug/L	5.0	1		09/22/23 13:21	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	20.0	1		09/22/23 13:21	110-75-8	
Chloroform	ND	ug/L	5.0	1		09/22/23 13:21	67-66-3	
Chloromethane	ND	ug/L	5.0	1		09/22/23 13:21	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		09/22/23 13:21	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1		09/22/23 13:21	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		09/22/23 13:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		09/22/23 13:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		09/22/23 13:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		09/22/23 13:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		09/22/23 13:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		09/22/23 13:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		09/22/23 13:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		09/22/23 13:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		09/22/23 13:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		09/22/23 13:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		09/22/23 13:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		09/22/23 13:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		09/22/23 13:21	100-41-4	
Methylene Chloride	ND	ug/L	5.0	1		09/22/23 13:21	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	5.0	1		09/22/23 13:21	1634-04-4	N2
Naphthalene	ND	ug/L	25.0	1		09/22/23 13:21	91-20-3	N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289657

Sample: Effluent Grab **Lab ID: 20289657002** Collected: 09/18/23 07:15 Received: 09/18/23 13:17 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		09/22/23 13:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		09/22/23 13:21	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		09/22/23 13:21	127-18-4	
Toluene	ND	ug/L	5.0	1		09/22/23 13:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		09/22/23 13:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		09/22/23 13:21	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		09/22/23 13:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		09/22/23 13:21	75-69-4	
Vinyl chloride	ND	ug/L	5.0	1		09/22/23 13:21	75-01-4	
Xylene (Total)	ND	ug/L	15.0	1		09/22/23 13:21	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	1		09/22/23 13:21	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		09/22/23 13:21	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%.	82-118	1		09/22/23 13:21	460-00-4	
Toluene-d8 (S)	96	%.	81-120	1		09/22/23 13:21	2037-26-5	
Dibromofluoromethane (S)	96	%.	77-123	1		09/22/23 13:21	1868-53-7	
420.1 Phenolics, Total	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - New Orleans							
Phenolics, Total Recoverable	**0.022**	mg/L	0.020	1	09/20/23 08:30	09/20/23 13:00	64743-03-9	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-C Pace Analytical Services - New Orleans							
Cyanide	ND	mg/L	0.020	1	09/21/23 09:28	09/21/23 10:33	57-12-5	

Sample: Trip Blank **Lab ID: 20289657003** Collected: 09/18/23 07:15 Received: 09/18/23 13:17 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
Benzene	ND	ug/L	5.0	1		09/22/23 13:04	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		09/22/23 13:04	75-27-4	
Bromoform	ND	ug/L	5.0	1		09/22/23 13:04	75-25-2	
Bromomethane	ND	ug/L	5.0	1		09/22/23 13:04	74-83-9	
Carbon tetrachloride	ND	ug/L	5.0	1		09/22/23 13:04	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		09/22/23 13:04	108-90-7	
Chloroethane	ND	ug/L	5.0	1		09/22/23 13:04	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	20.0	1		09/22/23 13:04	110-75-8	
Chloroform	ND	ug/L	5.0	1		09/22/23 13:04	67-66-3	
Chloromethane	ND	ug/L	5.0	1		09/22/23 13:04	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		09/22/23 13:04	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		09/22/23 13:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		09/22/23 13:04	541-73-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20289657

Sample: Trip Blank **Lab ID: 20289657003** Collected: 09/18/23 07:15 Received: 09/18/23 13:17 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
1,4-Dichlorobenzene	ND	ug/L	5.0	1		09/22/23 13:04	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		09/22/23 13:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		09/22/23 13:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		09/22/23 13:04	75-35-4	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		09/22/23 13:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		09/22/23 13:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		09/22/23 13:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		09/22/23 13:04	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		09/22/23 13:04	100-41-4	
Methylene Chloride	ND	ug/L	5.0	1		09/22/23 13:04	75-09-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		09/22/23 13:04	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		09/22/23 13:04	127-18-4	
Toluene	ND	ug/L	5.0	1		09/22/23 13:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		09/22/23 13:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		09/22/23 13:04	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		09/22/23 13:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		09/22/23 13:04	75-69-4	
Vinyl chloride	ND	ug/L	5.0	1		09/22/23 13:04	75-01-4	
Surrogates								
4-Bromofluorobenzene (S)	99	%.	82-118	1		09/22/23 13:04	460-00-4	
Toluene-d8 (S)	96	%.	81-120	1		09/22/23 13:04	2037-26-5	
Dibromofluoromethane (S)	96	%.	77-123	1		09/22/23 13:04	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

QC Batch: 300033
QC Batch Method: EPA 625.1
Analysis Method: EPA 625.1
Analysis Description: BR EPA 625.1 Water
Laboratory: Pace Analytical Services - Baton Rouge

Associated Lab Samples: 20289657001

METHOD BLANK: 1436690 Matrix: Water
Associated Lab Samples: 20289657001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	09/22/23 13:21	
1,2-Dichlorobenzene	ug/L	ND	10.0	09/22/23 13:21	
1,2-Diphenylhydrazine	ug/L	ND	10.0	09/22/23 13:21	
1,3-Dichlorobenzene	ug/L	ND	10.0	09/22/23 13:21	
1,4-Dichlorobenzene	ug/L	ND	10.0	09/22/23 13:21	
1-Methylnaphthalene	ug/L	ND	10.0	09/22/23 13:21	N2
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	09/22/23 13:21	
2,4,5-Trichlorophenol	ug/L	ND	10.0	09/22/23 13:21	
2,4,6-Trichlorophenol	ug/L	ND	10.0	09/22/23 13:21	
2,4-Dichlorophenol	ug/L	ND	10.0	09/22/23 13:21	
2,4-Dimethylphenol	ug/L	ND	10.0	09/22/23 13:21	
2,4-Dinitrophenol	ug/L	ND	50.0	09/22/23 13:21	
2,4-Dinitrotoluene	ug/L	ND	10.0	09/22/23 13:21	
2,6-Dinitrotoluene	ug/L	ND	10.0	09/22/23 13:21	
2-Chloronaphthalene	ug/L	ND	10.0	09/22/23 13:21	
2-Chlorophenol	ug/L	ND	10.0	09/22/23 13:21	
2-Methylnaphthalene	ug/L	ND	10.0	09/22/23 13:21	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	09/22/23 13:21	
2-Nitroaniline	ug/L	ND	10.0	09/22/23 13:21	
2-Nitrophenol	ug/L	ND	10.0	09/22/23 13:21	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	09/22/23 13:21	N2
3,3'-Dichlorobenzidine	ug/L	ND	10.0	09/22/23 13:21	
3-Nitroaniline	ug/L	ND	50.0	09/22/23 13:21	
4,6-Dinitro-2-methylphenol	ug/L	ND	50.0	09/22/23 13:21	
4-Bromophenylphenyl ether	ug/L	ND	10.0	09/22/23 13:21	
4-Chloro-3-methylphenol	ug/L	ND	10.0	09/22/23 13:21	
4-Chloroaniline	ug/L	ND	10.0	09/22/23 13:21	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	09/22/23 13:21	
4-Nitroaniline	ug/L	ND	50.0	09/22/23 13:21	
4-Nitrophenol	ug/L	ND	50.0	09/22/23 13:21	
Acenaphthene	ug/L	ND	10.0	09/22/23 13:21	
Acenaphthylene	ug/L	ND	10.0	09/22/23 13:21	
Aniline	ug/L	ND	10.0	09/22/23 13:21	
Anthracene	ug/L	ND	10.0	09/22/23 13:21	
Benzidine	ug/L	ND	50.0	09/22/23 13:21	
Benzo(a)anthracene	ug/L	ND	10.0	09/22/23 13:21	
Benzo(a)pyrene	ug/L	ND	10.0	09/22/23 13:21	
Benzo(b)fluoranthene	ug/L	ND	10.0	09/22/23 13:21	
Benzo(g,h,i)perylene	ug/L	ND	10.0	09/22/23 13:21	
Benzo(k)fluoranthene	ug/L	ND	10.0	09/22/23 13:21	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

METHOD BLANK: 1436690 Matrix: Water
Associated Lab Samples: 20289657001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzoic acid	ug/L	ND	50.0	09/22/23 13:21	
Benzyl alcohol	ug/L	ND	10.0	09/22/23 13:21	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	09/22/23 13:21	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	09/22/23 13:21	
bis(2-Ethylhexyl)phthalate	ug/L	ND	10.0	09/22/23 13:21	
Butylbenzylphthalate	ug/L	ND	10.0	09/22/23 13:21	
Carbazole	ug/L	ND	10.0	09/22/23 13:21	
Chrysene	ug/L	ND	10.0	09/22/23 13:21	
Di-n-butylphthalate	ug/L	ND	20.0	09/22/23 13:21	
Di-n-octylphthalate	ug/L	ND	10.0	09/22/23 13:21	
Dibenz(a,h)anthracene	ug/L	ND	10.0	09/22/23 13:21	
Dibenzofuran	ug/L	ND	10.0	09/22/23 13:21	
Diethylphthalate	ug/L	ND	10.0	09/22/23 13:21	
Dimethylphthalate	ug/L	ND	10.0	09/22/23 13:21	
Fluoranthene	ug/L	ND	10.0	09/22/23 13:21	
Fluorene	ug/L	ND	10.0	09/22/23 13:21	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	09/22/23 13:21	
Hexachlorobenzene	ug/L	ND	10.0	09/22/23 13:21	
Hexachlorocyclopentadiene	ug/L	ND	10.0	09/22/23 13:21	
Hexachloroethane	ug/L	ND	10.0	09/22/23 13:21	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	09/22/23 13:21	
Isophorone	ug/L	ND	10.0	09/22/23 13:21	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	09/22/23 13:21	
N-Nitrosodimethylamine	ug/L	ND	10.0	09/22/23 13:21	
N-Nitrosodiphenylamine	ug/L	ND	10.0	09/22/23 13:21	
Naphthalene	ug/L	ND	10.0	09/22/23 13:21	
Nitrobenzene	ug/L	ND	10.0	09/22/23 13:21	
Pentachlorophenol	ug/L	ND	10.0	09/22/23 13:21	
Phenanthrene	ug/L	ND	10.0	09/22/23 13:21	
Phenol	ug/L	ND	10.0	09/22/23 13:21	
Pyrene	ug/L	ND	10.0	09/22/23 13:21	
Pyridine	ug/L	ND	10.0	09/22/23 13:21	
2,4,6-Tribromophenol (S)	%.	88	21-133	09/22/23 13:21	
2-Fluorobiphenyl (S)	%.	72	21-133	09/22/23 13:21	
2-Fluorophenol (S)	%.	69	21-133	09/22/23 13:21	
Nitrobenzene-d5 (S)	%.	88	46-219	09/22/23 13:21	
Phenol-d5 (S)	%.	59	8-424	09/22/23 13:21	
Terphenyl-d14 (S)	%.	84	21-133	09/22/23 13:21	

LABORATORY CONTROL SAMPLE & LCSD: 1436691 1436692

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	39.3	38.9	79	78	44-142	1	50	
1,2-Dichlorobenzene	ug/L	50	41.4	41.8	83	84	32-111	1	40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

LABORATORY CONTROL SAMPLE & LCSD:		1436691	1436692							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Diphenylhydrazine	ug/L	50	48.8	49.5	98	99	49-122	1	40	
1,3-Dichlorobenzene	ug/L	50	40.3	41.5	81	83	28-110	3	40	
1,4-Dichlorobenzene	ug/L	50	40.2	41.1	80	82	29-112	2	40	
1-Methylnaphthalene	ug/L	50	41.1	40.2	82	80	41-119	2	40	N2
2,2'-Oxybis(1-chloropropane)	ug/L	50	51.4	50.1	103	100	36-166	3	76	
2,4,5-Trichlorophenol	ug/L	50	46.1	46.5	92	93	53-123	1	40	
2,4,6-Trichlorophenol	ug/L	50	45.8	45.7	92	91	37-144	0	58	
2,4-Dichlorophenol	ug/L	100	92.7	90.5	93	90	39-135	2	50	
2,4-Dimethylphenol	ug/L	50	37.6	37.0	75	74	32-120	2	58	
2,4-Dinitrophenol	ug/L	50	50.1	53.8	100	108	20-191	7	132	
2,4-Dinitrotoluene	ug/L	50	44.4	44.7	89	89	39-139	1	42	
2,6-Dinitrotoluene	ug/L	50	48.1	49.5	96	99	20-191	3	48	
2-Chloronaphthalene	ug/L	50	44.0	43.1	88	86	60-120	2	24	
2-Chlorophenol	ug/L	50	40.9	40.5	82	81	23-134	1	61	
2-Methylnaphthalene	ug/L	50	43.6	43.3	87	87	40-121	1	40	
2-Methylphenol(o-Cresol)	ug/L	50	38.3	38.1	77	76	30-117	0	40	
2-Nitroaniline	ug/L	50	50.6	51.5	101	103	55-127	2	40	
2-Nitrophenol	ug/L	50	45.3	44.4	91	89	44-123	2	55	
3&4-Methylphenol(m&p Cresol)	ug/L	50	36.2	37.4	72	75	29-110	3	40	N2
3,3'-Dichlorobenzidine	ug/L	50	68.7	70.4	137	141	27-129	3	108	L1
3-Nitroaniline	ug/L	50	48J	49.1J	96	98	41-128		40	
4,6-Dinitro-2-methylphenol	ug/L	50	46.4J	49.1J	93	98	20-181		203	
4-Bromophenylphenyl ether	ug/L	50	43.4	43.8	87	88	53-127	1	43	
4-Chloro-3-methylphenol	ug/L	50	48.3	48.6	97	97	22-147	1	73	
4-Chloroaniline	ug/L	50	44.3	43.5	89	87	33-117	2	40	
4-Chlorophenylphenyl ether	ug/L	50	45.2	45.3	90	91	25-158	0	61	
4-Nitroaniline	ug/L	50	56.5	58.5	113	117	38-120	4	40	
4-Nitrophenol	ug/L	50	40.2J	41.8J	80	84	20-132		131	
Acenaphthene	ug/L	50	42.4	41.9	85	84	47-122	1	40	
Acenaphthylene	ug/L	50	41.1	40.9	82	82	41-130	0	40	
Aniline	ug/L	50	27.1	31.3	54	63	47-145	14	40	
Anthracene	ug/L	50	46.5	47.4	93	95	33-145	2	74	
Benzidine	ug/L	50	20.2J	34.7J	40	69	10-120		40	
Benzo(a)anthracene	ug/L	50	49.1	48.9	98	98	58-125	1	40	
Benzo(a)pyrene	ug/L	50	48.9	49.1	98	98	54-128	0	40	
Benzo(b)fluoranthene	ug/L	50	53.4	52.9	107	106	27-133	1	66	
Benzo(g,h,i)perylene	ug/L	50	49.9	50.5	100	101	50-134	1	40	
Benzo(k)fluoranthene	ug/L	50	48.0	48.7	96	97	33-143	2	53	
Benzoic acid	ug/L	100	36.9J	35.3J	37	35	17-163		72	
Benzyl alcohol	ug/L	50	44.6	45.5	89	91	24-159	2	71	
bis(2-Chloroethoxy)methane	ug/L	50	47.8	46.5	96	93	20-219	3	97	
bis(2-Chloroethyl) ether	ug/L	50	53.4	51.3	107	103	20-162	4	63	
bis(2-Ethylhexyl)phthalate	ug/L	50	58.8	60.1	118	120	55-135	2	40	
Butylbenzylphthalate	ug/L	50	55.4	57.0	111	114	20-152	3	60	
Carbazole	ug/L	50	51.6	52.5	103	105	60-122	2	40	
Chrysene	ug/L	50	48.8	48.3	98	97	33-184	1	54	
Di-n-butylphthalate	ug/L	50	55.7	57.2	111	114	59-127	3	40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

LABORATORY CONTROL SAMPLE & LCSD:		1436691	1436692							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Di-n-octylphthalate	ug/L	50	61.5	63.1	123	126	20-168	3	87	
Dibenz(a,h)anthracene	ug/L	50	51.1	51.4	102	103	20-158	1	108	
Dibenzofuran	ug/L	50	45.2	45.5	90	91	20-158	1	82	
Diethylphthalate	ug/L	50	51.7	52.5	103	105	56-125	1	40	
Dimethylphthalate	ug/L	50	48.7	49.0	97	98	45-127	1	40	
Fluoranthene	ug/L	50	47.1	47.7	94	95	57-128	1	40	
Fluorene	ug/L	50	44.5	44.7	89	89	52-124	1	40	
Hexachloro-1,3-butadiene	ug/L	50	39.4	39.2	79	78	22-124	1	40	
Hexachlorobenzene	ug/L	50	43.3	43.7	87	87	20-200	1	126	
Hexachlorocyclopentadiene	ug/L	50	24.2	23.8	48	48	16-120	2	100	
Hexachloroethane	ug/L	50	49.0	46.2	98	92	21-115	6	183	
Indeno(1,2,3-cd)pyrene	ug/L	50	51.7	51.6	103	103	52-134	0	47	
Isophorone	ug/L	50	49.1	47.7	98	95	42-124	3	69	
N-Nitroso-di-n-propylamine	ug/L	50	48.6	46.1	97	92	20-152	5	55	
N-Nitrosodimethylamine	ug/L	50	34.7	35.4	69	71	59-121	2	38	
N-Nitrosodiphenylamine	ug/L	50	52.0	53.5	104	107	24-120	3	62	
Naphthalene	ug/L	50	39.1	38.1	78	76	40-121	3	40	
Nitrobenzene	ug/L	50	45.8	43.7	92	87	26-137	5	66	
Pentachlorophenol	ug/L	50	54.1	56.6	108	113	40-120	5	62	
Phenanthrene	ug/L	50	44.8	45.8	90	92	59-120	2	40	
Phenol	ug/L	50	22.2	24.7	44	49	20-171	11	99	
Pyrene	ug/L	50	46.2	46.1	92	92	21-196	0	93	
Pyridine	ug/L	50	10.4	16.3	21	33	20-120	44	40	R1
2,4,6-Tribromophenol (S)	%.				98	98	21-133			
2-Fluorobiphenyl (S)	%.				81	79	21-133			
2-Fluorophenol (S)	%.				61	62	21-133			
Nitrobenzene-d5 (S)	%.				90	86	46-219			
Phenol-d5 (S)	%.				42	45	8-424			
Terphenyl-d14 (S)	%.				92	92	21-133			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

QC Batch: 299993
QC Batch Method: EPA 245.2
Analysis Method: EPA 245.2
Analysis Description: 245.2 Mercury
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20289657001

METHOD BLANK: 1436564 Matrix: Water
Associated Lab Samples: 20289657001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	09/21/23 14:50	

LABORATORY CONTROL SAMPLE: 1436565

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.1	111	80-120	

MATRIX SPIKE SAMPLE: 1436567

Parameter	Units	20289657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	1	1.0	101	75-125	

SAMPLE DUPLICATE: 1436566

Parameter	Units	20289657001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	ND	ND		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

QC Batch: 300111
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20289657001

METHOD BLANK: 1436902 Matrix: Water
Associated Lab Samples: 20289657001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0010	09/22/23 17:05	
Arsenic	mg/L	ND	0.0010	09/22/23 17:05	
Beryllium	mg/L	ND	0.00050	09/22/23 17:05	
Cadmium	mg/L	ND	0.0010	09/22/23 17:05	
Chromium	mg/L	ND	0.0010	09/22/23 17:05	
Copper	mg/L	ND	0.0010	09/22/23 17:05	
Lead	mg/L	ND	0.0010	09/22/23 17:05	
Nickel	mg/L	ND	0.0010	09/22/23 17:05	
Selenium	mg/L	ND	0.0010	09/22/23 17:05	
Silver	mg/L	ND	0.00050	09/22/23 17:05	
Thallium	mg/L	ND	0.00050	09/22/23 17:05	
Total Hardness	mg/L	0.011	0.0050	09/22/23 17:05	
Zinc	mg/L	ND	0.0050	09/22/23 17:05	

LABORATORY CONTROL SAMPLE: 1436903

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.06	0.059	98	85-115	
Arsenic	mg/L	0.06	0.058	96	85-115	
Beryllium	mg/L	0.06	0.056	93	85-115	
Cadmium	mg/L	0.06	0.059	99	85-115	
Chromium	mg/L	0.06	0.058	96	85-115	
Copper	mg/L	0.06	0.059	98	85-115	
Lead	mg/L	0.06	0.059	99	85-115	
Nickel	mg/L	0.06	0.058	97	85-115	
Selenium	mg/L	0.06	0.053	89	85-115	
Silver	mg/L	0.03	0.030	100	85-115	
Thallium	mg/L	0.03	0.029	98	85-115	
Total Hardness	mg/L		38.7			
Zinc	mg/L	0.06	0.058	97	85-115	

MATRIX SPIKE SAMPLE: 1436905

Parameter	Units	20289753001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.0018	0.06	0.061	99	70-130	
Arsenic	mg/L	0.0037	0.06	0.062	97	70-130	
Beryllium	mg/L	ND	0.06	0.061	102	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

MATRIX SPIKE SAMPLE: 1436905

Parameter	Units	20289753001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/L	ND	0.06	0.060	100	70-130	
Chromium	mg/L	0.0015	0.06	0.060	97	70-130	
Copper	mg/L	0.015	0.06	0.074	98	70-130	
Lead	mg/L	ND	0.06	0.061	101	70-130	
Nickel	mg/L	0.0049	0.06	0.063	98	70-130	
Selenium	mg/L	ND	0.06	0.056	93	70-130	
Silver	mg/L	ND	0.03	0.029	98	70-130	
Thallium	mg/L	ND	0.03	0.030	101	70-130	
Total Hardness	mg/L	94.7		137			
Zinc	mg/L	0.039	0.06	0.096	95	70-130	

MATRIX SPIKE SAMPLE: 1436906

Parameter	Units	20289754001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.0014	0.06	0.062	101	70-130	
Arsenic	mg/L	0.0016	0.06	0.059	96	70-130	
Beryllium	mg/L	ND	0.06	0.060	101	70-130	
Cadmium	mg/L	ND	0.06	0.061	102	70-130	
Chromium	mg/L	0.0033	0.06	0.062	98	70-130	
Copper	mg/L	0.018	0.06	0.077	99	70-130	
Lead	mg/L	0.0097	0.06	0.071	102	70-130	
Nickel	mg/L	0.0045	0.06	0.064	98	70-130	
Selenium	mg/L	ND	0.06	0.055	92	70-130	
Silver	mg/L	ND	0.03	0.030	101	70-130	
Thallium	mg/L	ND	0.03	0.030	101	70-130	
Total Hardness	mg/L	69.8		110			
Zinc	mg/L	0.091	0.06	0.15	96	70-130	

SAMPLE DUPLICATE: 1436904

Parameter	Units	20289753001 Result	Dup Result	RPD	Qualifiers
Antimony	mg/L	0.0018	0.0019	2	
Arsenic	mg/L	0.0037	0.0037	1	
Beryllium	mg/L	ND	ND		
Cadmium	mg/L	ND	ND		
Chromium	mg/L	0.0015	0.0016	3	
Copper	mg/L	0.015	0.015	3	
Lead	mg/L	ND	.00064J		
Nickel	mg/L	0.0049	0.0051	4	
Selenium	mg/L	ND	.00045J		
Silver	mg/L	ND	ND		
Thallium	mg/L	ND	ND		
Total Hardness	mg/L	94.7	97.0	2	
Zinc	mg/L	0.039	0.038	2	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

QC Batch: 300272
QC Batch Method: EPA 624.1
Analysis Method: EPA 624.1
Analysis Description: 624 MSV
Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20289657002, 20289657003

METHOD BLANK: 1437790 Matrix: Water

Associated Lab Samples: 20289657002, 20289657003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	09/22/23 11:36	
1,1,1-Trichloroethane	ug/L	ND	5.0	09/22/23 11:36	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	09/22/23 11:36	
1,1,2-Trichloroethane	ug/L	ND	5.0	09/22/23 11:36	
1,1-Dichloroethane	ug/L	ND	5.0	09/22/23 11:36	
1,1-Dichloroethene	ug/L	ND	5.0	09/22/23 11:36	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	09/22/23 11:36	
1,2-Dichlorobenzene	ug/L	ND	5.0	09/22/23 11:36	
1,2-Dichloroethane	ug/L	ND	5.0	09/22/23 11:36	
1,2-Dichloropropane	ug/L	ND	5.0	09/22/23 11:36	
1,3-Dichlorobenzene	ug/L	ND	5.0	09/22/23 11:36	
1,4-Dichlorobenzene	ug/L	ND	5.0	09/22/23 11:36	
2-Chloroethylvinyl ether	ug/L	ND	20.0	09/22/23 11:36	
Acrolein	ug/L	ND	20.0	09/22/23 11:36	
Acrylonitrile	ug/L	ND	20.0	09/22/23 11:36	
Benzene	ug/L	ND	5.0	09/22/23 11:36	
Bromodichloromethane	ug/L	ND	5.0	09/22/23 11:36	
Bromoform	ug/L	ND	5.0	09/22/23 11:36	
Bromomethane	ug/L	ND	5.0	09/22/23 11:36	
Carbon tetrachloride	ug/L	ND	5.0	09/22/23 11:36	
Chlorobenzene	ug/L	ND	5.0	09/22/23 11:36	
Chloroethane	ug/L	ND	5.0	09/22/23 11:36	
Chloroform	ug/L	ND	5.0	09/22/23 11:36	
Chloromethane	ug/L	ND	5.0	09/22/23 11:36	
cis-1,2-Dichloroethene	ug/L	ND	5.0	09/22/23 11:36	
cis-1,3-Dichloropropene	ug/L	ND	5.0	09/22/23 11:36	
Dibromochloromethane	ug/L	ND	5.0	09/22/23 11:36	
Dichlorodifluoromethane	ug/L	ND	5.0	09/22/23 11:36	
Ethylbenzene	ug/L	ND	5.0	09/22/23 11:36	
m&p-Xylene	ug/L	ND	10.0	09/22/23 11:36	
Methyl-tert-butyl ether	ug/L	ND	5.0	09/22/23 11:36	
Methylene Chloride	ug/L	ND	5.0	09/22/23 11:36	
Naphthalene	ug/L	ND	25.0	09/22/23 11:36	N2
o-Xylene	ug/L	ND	5.0	09/22/23 11:36	
Tetrachloroethene	ug/L	ND	5.0	09/22/23 11:36	
Toluene	ug/L	ND	5.0	09/22/23 11:36	
trans-1,2-Dichloroethene	ug/L	ND	5.0	09/22/23 11:36	
trans-1,3-Dichloropropene	ug/L	ND	5.0	09/22/23 11:36	
Trichloroethene	ug/L	ND	5.0	09/22/23 11:36	
Trichlorofluoromethane	ug/L	ND	5.0	09/22/23 11:36	

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Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

METHOD BLANK: 1437790 Matrix: Water
Associated Lab Samples: 20289657002, 20289657003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Vinyl chloride	ug/L	ND	5.0	09/22/23 11:36	
Xylene (Total)	ug/L	ND	15.0	09/22/23 11:36	
4-Bromofluorobenzene (S)	%.	108	82-118	09/22/23 11:36	
Dibromofluoromethane (S)	%.	92	77-123	09/22/23 11:36	
Toluene-d8 (S)	%.	101	81-120	09/22/23 11:36	

LABORATORY CONTROL SAMPLE: 1437791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.1	101		
1,1,1-Trichloroethane	ug/L	20	17.8	89	76-123	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	64-131	
1,1,2-Trichloroethane	ug/L	20	19.4	97	76-118	
1,1-Dichloroethane	ug/L	20	18.1	90	69-125	
1,1-Dichloroethene	ug/L	20	23.4	117	63-122	
1,2-Dibromo-3-chloropropane	ug/L	20	18.6	93		
1,2-Dichlorobenzene	ug/L	20	19.7	99	80-113	
1,2-Dichloroethane	ug/L	20	16.9	84	64-127	
1,2-Dichloropropane	ug/L	20	17.7	89	68-125	
1,3-Dichlorobenzene	ug/L	20	19.8	99	79-112	
1,4-Dichlorobenzene	ug/L	20	19.4	97	79-113	
2-Chloroethylvinyl ether	ug/L	20	16.4J	82	52-138	
Acrolein	ug/L	100	87.3	87	10-164	
Acrylonitrile	ug/L	20	18.6J	93	48-145	
Benzene	ug/L	20	18.0	90	72-131	
Bromodichloromethane	ug/L	20	18.5	93	72-117	
Bromoform	ug/L	20	20.7	104	58-124	
Bromomethane	ug/L	20	15.9	80	39-163	
Carbon tetrachloride	ug/L	20	17.6	88	73-121	
Chlorobenzene	ug/L	20	19.8	99	77-119	
Chloroethane	ug/L	20	15.1	76	36-155	
Chloroform	ug/L	20	17.5	87	69-115	
Chloromethane	ug/L	20	17.9	90	30-148	
cis-1,2-Dichloroethene	ug/L	20	17.5	88	72-115	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	70-120	
Dibromochloromethane	ug/L	20	20.0	100	63-120	
Dichlorodifluoromethane	ug/L	20	16.2	81		
Ethylbenzene	ug/L	20	20.1	101	81-110	
m&p-Xylene	ug/L	40	40.6	101	79-115	
Methyl-tert-butyl ether	ug/L	20	17.3	87	58-135	
Methylene Chloride	ug/L	20	17.1	86	58-136	
Naphthalene	ug/L	20	17.5J	87	46-149	N2
o-Xylene	ug/L	20	19.7	98	78-117	
Tetrachloroethene	ug/L	20	20.3	101	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

LABORATORY CONTROL SAMPLE: 1437791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	18.1	90	80-116	
trans-1,2-Dichloroethene	ug/L	20	18.0	90	60-126	
trans-1,3-Dichloropropene	ug/L	20	19.6	98	71-120	
Trichloroethene	ug/L	20	18.7	94	76-113	
Trichlorofluoromethane	ug/L	20	15.6	78	27-166	
Vinyl chloride	ug/L	20	17.5	88	45-126	
Xylene (Total)	ug/L	60	60.2	100		
4-Bromofluorobenzene (S)	%.			97	82-118	
Dibromofluoromethane (S)	%.			92	77-123	
Toluene-d8 (S)	%.			95	81-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1437792 1437793

Parameter	Units	20290104001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.1	21.3	100	107		6	
1,1,1-Trichloroethane	ug/L	ND	20	20	18.9	19.5	94	98	76-141	3	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.8	19.4	94	97	60-144	3	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.0	19.2	95	96	72-132	1	
1,1-Dichloroethane	ug/L	ND	20	20	19.4	19.8	97	99	67-139	2	
1,1-Dichloroethene	ug/L	ND	20	20	25.1	26.1	125	130	62-139	4	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	20.5	21.5	102	108		5	
1,2-Dichlorobenzene	ug/L	ND	20	20	19.5	21.2	97	106	77-129	8	
1,2-Dichloroethane	ug/L	ND	20	20	17.6	18.0	88	90	63-139	3	
1,2-Dichloropropane	ug/L	ND	20	20	18.0	18.2	90	91	68-137	1	
1,3-Dichlorobenzene	ug/L	ND	20	20	19.3	20.6	97	103	76-128	6	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.0	20.1	95	100	76-128	6	
2-Chloroethylvinyl ether	ug/L	ND	20	20	ND	ND	0	0	10-156		M1
Acrolein	ug/L	ND	100	100	79.2	87.4	79	87	10-200	10	
Acrylonitrile	ug/L	ND	20	20	16.9J	18.8J	85	94	31-177		
Benzene	ug/L	ND	20	20	19.0	19.4	95	97	52-167	2	
Bromodichloromethane	ug/L	ND	20	20	22.9	23.3	94	96	70-131	2	
Bromoform	ug/L	ND	20	20	22.3	23.9	98	106	58-134	7	
Bromomethane	ug/L	ND	20	20	16.9	17.1	84	85	36-177	1	
Carbon tetrachloride	ug/L	ND	20	20	19.0	19.6	95	98	67-143	3	
Chlorobenzene	ug/L	ND	20	20	19.9	20.4	100	102	73-135	2	
Chloroethane	ug/L	ND	20	20	17.1	17.4	86	87	35-172	1	
Chloroform	ug/L	14.3	20	20	31.9	31.8	88	88	65-131	0	
Chloromethane	ug/L	13.8	20	20	33.9	33.4	100	98	27-168	1	
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.9	19.2	95	96	80-120	1	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.8	18.5	89	93	67-139	4	
Dibromochloromethane	ug/L	ND	20	20	24.1	24.7	99	102	60-134	2	
Dichlorodifluoromethane	ug/L	ND	20	20	26.1	28.8	131	144		10	
Ethylbenzene	ug/L	ND	20	20	20.5	21.0	99	102	75-130	2	
m&p-Xylene	ug/L	ND	40	40	42.5	43.9	100	103	60-150	3	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1437792 1437793

Parameter	Units	20290104001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Methyl-tert-butyl ether	ug/L	ND	20	20	17.8	18.6	89	93	36-160	5	
Methylene Chloride	ug/L	15.2	20	20	30.7	32.0	77	84	60-138	4	
Naphthalene	ug/L	ND	20	20	19.7J	24.3J	99	122	60-155		N2
o-Xylene	ug/L	ND	20	20	20.8	22.3	98	105	61-149	7	
Tetrachloroethene	ug/L	6.7	20	20	27.1	28.8	102	110	65-146	6	
Toluene	ug/L	ND	20	20	18.0	18.2	90	91	32-181	1	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.6	19.0	98	95	64-139	3	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.0	19.8	95	99	69-133	4	
Trichloroethene	ug/L	ND	20	20	19.8	19.8	99	99	73-132	0	
Trichlorofluoromethane	ug/L	ND	20	20	17.4	18.0	87	90	24-189	4	
Vinyl chloride	ug/L	ND	20	20	19.6	20.0	98	100	47-145	2	
Xylene (Total)	ug/L	ND	60	60	63.3	66.2	106	110		4	
4-Bromofluorobenzene (S)	%.						97	96	82-118		
Dibromofluoromethane (S)	%.						97	97	77-123		
Toluene-d8 (S)	%.						91	91	81-120		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

QC Batch: 299798
QC Batch Method: EPA 420.1
Analysis Method: EPA 420.1
Analysis Description: 420.1 Phenolics
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20289657002

METHOD BLANK: 1435573 Matrix: Water
Associated Lab Samples: 20289657002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.020	09/20/23 11:05	

LABORATORY CONTROL SAMPLE: 1435574

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	0.1	0.12	116	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20289657

QC Batch: 300003
QC Batch Method: SM 4500-CN-C
Analysis Method: SM 4500-CN-E
Analysis Description: 4500CNE Cyanide, Total
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20289657002

METHOD BLANK: 1436585 Matrix: Water
Associated Lab Samples: 20289657002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.020	09/21/23 10:26	

LABORATORY CONTROL SAMPLE: 1436586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.090	90	80-120	

MATRIX SPIKE SAMPLE: 1436588

Parameter	Units	20289640003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	<0.014	0.1	0.098	97	75-125	

SAMPLE DUPLICATE: 1436587

Parameter	Units	20289640003 Result	Dup Result	RPD	Qualifiers
Cyanide	mg/L	<0.014	ND		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALIFIERS

Project: Permit requirements
Pace Project No.: 20289657

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

ANALYTE QUALIFIERS

Ac	Analysis of acrolein was performed from an unpreserved sample outside of the 3 day holding time required by the test method and for NPDES compliance per 40CFRPart 136 for unpreserved samples.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Permit requirements
Pace Project No.: 20289657

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20289657001	**Effluent Composite**	EPA 625.1	300033	EPA 625.1	300273
20289657001	**Effluent Composite**	EPA 200.8	300111	EPA 200.8	300177
20289657001	**Effluent Composite**	EPA 245.2	299993	EPA 245.2	300140
20289657002	**Effluent Grab**	EPA 624.1	300272		
20289657003	**Trip Blank**	EPA 624.1	300272		
20289657002	**Effluent Grab**	EPA 420.1	299798	EPA 420.1	299934
20289657002	**Effluent Grab**	SM 4500-CN-C	300003	SM 4500-CN-E	300057

Pace Analytical
www.PACELABS.COM

CHAIN-OF-CUSTODY / Analytical Request Docu

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.c

WO# : 20289657

20289657

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Prattville Wastewater - WW Pine Creek	Report To: Napleon Wilks	Attention:
Address: 101 W. Main Street	Copy To:	Company Name:
Prattville, AL 36067		Address:
Email: Napleon.Wilks@prattvilleal.gov	Purchase Order #:	Pace Quote:
Phone: (334)361-3626 Fax:	Project Name: Permit requirements Table C Pine Creek	Pace Project Manager: cindy.simpson@pacelabs.com,
Requested Due Date:	Order #: 859908	Pace Profile #: 17053

Regulatory Agency	
State / Location	AL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	625	200.8 Metals	Mercury	Cyanide	Phenol Total	624.1	Residual Chlorine (Y/N)
1	Composite Effluent	WT	C	9-17	0800	9-18	0800		4	2		2						X	X	X				X	
2	Grab Effluent	WT	G			9-18	0715		6	4	1			1							X	X	X		
3	Trip Blank	WT							4	4													X		
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Darius Reese / City of Prattville	9-18-23	0718	Ray Smedley / City Prattville	9-18-23	0718				
	Ray Smedley / Prattville	9-18	0715	Glenn Lung PACE	9/18/23	1130				
	Glenn Lung PACE	9/18/23	1317		9.18	1317	2.6	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Darius Reese

SIGNATURE of SAMPLER: Darius Reese — DATE Signed: 9-18-23

DC#_Title: ENV-FRM-SROS-0009 v02_NOLA SCUR Form
Effective Date: 3/23/2022

WO#: 20289657

PM: CRS Due Date: 10/02/23

Pace

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Project # CLIENT: TU-Prattvill

Courier: ☑ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: ☐ YES ☑ NO Custody Seals intact: ☐ YES ☑ NO

Samples on ice: ☑ YES ☐ NO Type of Ice: Wet Blue None

Date and Initials of person examining contents: MM 9.18

Temp should be ≤6°C *Temp must be measured from Temperature blank when present

Cooler #1 Thermometer Used: TM13 Cooler Temp °C: (Observed) 2.6 (CF) 0.0 (Actual) 2.6
Cooler #2 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #3 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #4 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____

Tracking #:_____

Temperature Blank Present*?	☐Yes ☐No ☑N/A	
Chain of Custody Present:	☑Yes ☐No ☐N/A	
Chain of Custody Complete:	☑Yes ☐No ☐N/A	
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	
Sufficient Volume:	☑Yes ☐No ☐N/A	
Correct Containers Used:	☑Yes ☐No ☐N/A	
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☑N/A	
Sample Labels match COC:	☑Yes ☐No ☐N/A	
All containers received within manufacture's precautionary and/or expiration dates.	☑Yes ☐No ☐N/A	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes ☐No ☑N/A	If No, was preservative added? ☐Yes ☐No If added record lot #.:
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	HNO3_____ H2SO4_____ Date:_____ Time:_____
Headspace in VOA Vials (>6mm):	☑Yes ☐No ☐N/A	
Trip Blank Present:	☑Yes ☐No	

Client Notification/ Resolution:

Person Contacted:_____ Date/Time:_____

Comments/ Resolution:_____

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

CERTIFICATIONS

Project: Permit requirements
Pace Project No.: 20292338

Pace Analytical Services New Orleans
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 2000662023-7
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Texas Commission on Env. Quality (NELAC): T104704405-23-18
U.S. Dept. of Agriculture Foreign Soil Import: 525-23-117-89728

Pace Analytical Services Baton Rouge
7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20292338

Sample: Effluent Composite **Lab ID: 20292338001** Collected: 10/09/23 07:00 Received: 10/09/23 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
BR EPA 625.1 Water	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Baton Rouge							
Acenaphthene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	208-96-8	
Aniline	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	62-53-3	
Anthracene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	120-12-7	
Benzidine	ND	ug/L	50.0	1	10/16/23 13:25	10/17/23 08:55	92-87-5	
Benzo(a)anthracene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	207-08-9	
Benzoic acid	ND	ug/L	50.0	1	10/16/23 13:25	10/17/23 08:55	65-85-0	
Benzyl alcohol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	85-68-7	
Carbazole	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	86-74-8	
4-Chloro-3-methylphenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	59-50-7	
4-Chloroaniline	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	7005-72-3	
Chrysene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	91-94-1	L1
2,4-Dichlorophenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	131-11-3	
Di-n-butylphthalate	ND	ug/L	20.0	1	10/16/23 13:25	10/17/23 08:55	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	50.0	1	10/16/23 13:25	10/17/23 08:55	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	1	10/16/23 13:25	10/17/23 08:55	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	117-81-7	
Fluoranthene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	206-44-0	
Fluorene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	77-47-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20292338

Sample: Effluent Composite **Lab ID: 20292338001** Collected: 10/09/23 07:00 Received: 10/09/23 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
BR EPA 625.1 Water	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1							
	Pace Analytical Services - Baton Rouge							
Hexachloroethane	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	193-39-5	
Isophorone	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	90-12-0	N2
2-Methylnaphthalene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55		N2
Naphthalene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	91-20-3	
2-Nitroaniline	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	1	10/16/23 13:25	10/17/23 08:55	99-09-2	
4-Nitroaniline	ND	ug/L	50.0	1	10/16/23 13:25	10/17/23 08:55	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	1	10/16/23 13:25	10/17/23 08:55	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	62-75-9	L2
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	108-60-1	
Pentachlorophenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	87-86-5	
Phenanthrene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	85-01-8	
Phenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	108-95-2	
Pyrene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	129-00-0	
Pyridine	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1	10/16/23 13:25	10/17/23 08:55	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	75	%.	46-219	1	10/16/23 13:25	10/17/23 08:55	4165-60-0	
2-Fluorobiphenyl (S)	61	%.	21-133	1	10/16/23 13:25	10/17/23 08:55	321-60-8	
Terphenyl-d14 (S)	93	%.	21-133	1	10/16/23 13:25	10/17/23 08:55	1718-51-0	
Phenol-d5 (S)	20	%.	8-424	1	10/16/23 13:25	10/17/23 08:55	4165-62-2	
2-Fluorophenol (S)	32	%.	21-133	1	10/16/23 13:25	10/17/23 08:55	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	21-133	1	10/16/23 13:25	10/17/23 08:55	118-79-6	
200.8 Metals, Total	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
	Pace Analytical Services - New Orleans							
Antimony	ND	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7440-36-0	
Arsenic	ND	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7440-38-2	
Beryllium	ND	mg/L	0.00050	1	10/13/23 12:14	10/16/23 23:12	7440-41-7	
Cadmium	ND	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7440-43-9	
Chromium	ND	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7440-47-3	
Copper	**0.0082**	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7440-50-8	
Lead	ND	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7439-92-1	
Nickel	**0.0011**	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7440-02-0	
Selenium	ND	mg/L	0.0010	1	10/13/23 12:14	10/16/23 23:12	7782-49-2	
Silver	ND	mg/L	0.00050	1	10/13/23 12:14	10/16/23 23:12	7440-22-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20292338

Sample: Effluent Composite **Lab ID: 20292338001** Collected: 10/09/23 07:00 Received: 10/09/23 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 Metals, Total	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - New Orleans							
Thallium	ND	mg/L	0.00050	1	10/13/23 12:14	10/16/23 23:12	7440-28-0	
Total Hardness	**73.0**	mg/L	0.0050	1	10/13/23 12:14	10/16/23 23:12		
Zinc	**0.064**	mg/L	0.0050	1	10/13/23 12:14	10/16/23 23:12	7440-66-6	
245.2 Mercury	Analytical Method: EPA 245.2 Preparation Method: EPA 245.2 Pace Analytical Services - New Orleans							
Mercury	ND	ug/L	0.20	1	10/16/23 07:11	10/17/23 11:32	7439-97-6	

Sample: Effluent Grab **Lab ID: 20292338002** Collected: 10/09/23 07:00 Received: 10/09/23 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
Acrolein	ND	ug/L	20.0	1		10/13/23 12:32	107-02-8	Ac
Acrylonitrile	ND	ug/L	20.0	1		10/13/23 12:32	107-13-1	
Benzene	ND	ug/L	5.0	1		10/13/23 12:32	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		10/13/23 12:32	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/13/23 12:32	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/13/23 12:32	74-83-9	
Carbon tetrachloride	ND	ug/L	5.0	1		10/13/23 12:32	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/13/23 12:32	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/13/23 12:32	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	20.0	1		10/13/23 12:32	110-75-8	M1
Chloroform	ND	ug/L	5.0	1		10/13/23 12:32	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/13/23 12:32	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/13/23 12:32	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1		10/13/23 12:32	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/13/23 12:32	95-50-1	M1
1,3-Dichlorobenzene	ND	ug/L	5.0	1		10/13/23 12:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/13/23 12:32	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1		10/13/23 12:32	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/13/23 12:32	75-34-3	HS
1,2-Dichloroethane	ND	ug/L	5.0	1		10/13/23 12:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/13/23 12:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/13/23 12:32	156-59-2	M1
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/13/23 12:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/13/23 12:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/13/23 12:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/13/23 12:32	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		10/13/23 12:32	100-41-4	
Methylene Chloride	ND	ug/L	5.0	1		10/13/23 12:32	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	5.0	1		10/13/23 12:32	1634-04-4	N2
Naphthalene	ND	ug/L	25.0	1		10/13/23 12:32	91-20-3	M1,N2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20292338

Sample: Effluent Grab **Lab ID: 20292338002** Collected: 10/09/23 07:00 Received: 10/09/23 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/13/23 12:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/13/23 12:32	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/13/23 12:32	127-18-4	
Toluene	ND	ug/L	5.0	1		10/13/23 12:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/13/23 12:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/13/23 12:32	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		10/13/23 12:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/13/23 12:32	75-69-4	
Vinyl chloride	ND	ug/L	5.0	1		10/13/23 12:32	75-01-4	M1
Xylene (Total)	ND	ug/L	15.0	1		10/13/23 12:32	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	1		10/13/23 12:32	179601-23-1	
o-Xylene	ND	ug/L	5.0	1		10/13/23 12:32	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%.	82-118	1		10/13/23 12:32	460-00-4	
Toluene-d8 (S)	101	%.	81-120	1		10/13/23 12:32	2037-26-5	
Dibromofluoromethane (S)	105	%.	77-123	1		10/13/23 12:32	1868-53-7	
420.1 Phenolics, Total	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - New Orleans							
Phenolics, Total Recoverable	ND	mg/L	0.020	1	10/18/23 12:50	10/18/23 15:35	64743-03-9	P1
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E Preparation Method: SM 4500-CN-C Pace Analytical Services - New Orleans							
Cyanide	ND	mg/L	0.020	1	10/16/23 14:00	10/16/23 16:50	57-12-5	

Sample: Trip Blank **Lab ID: 20292338003** Collected: 10/09/23 07:00 Received: 10/09/23 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
Benzene	ND	ug/L	5.0	1		10/13/23 11:22	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		10/13/23 11:22	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/13/23 11:22	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/13/23 11:22	74-83-9	
Carbon tetrachloride	ND	ug/L	5.0	1		10/13/23 11:22	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/13/23 11:22	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/13/23 11:22	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	20.0	1		10/13/23 11:22	110-75-8	
Chloroform	ND	ug/L	5.0	1		10/13/23 11:22	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/13/23 11:22	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		10/13/23 11:22	124-48-1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/13/23 11:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	1		10/13/23 11:22	541-73-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

ANALYTICAL RESULTS

Project: Permit requirements
Pace Project No.: 20292338

Sample: Trip Blank **Lab ID: 20292338003** Collected: 10/09/23 07:00 Received: 10/09/23 14:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics	Analytical Method: EPA 624.1 Pace Analytical Services - New Orleans							
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/13/23 11:22	106-46-7	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/13/23 11:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/13/23 11:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/13/23 11:22	75-35-4	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/13/23 11:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/13/23 11:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/13/23 11:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/13/23 11:22	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	1		10/13/23 11:22	100-41-4	
Methylene Chloride	ND	ug/L	5.0	1		10/13/23 11:22	75-09-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/13/23 11:22	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/13/23 11:22	127-18-4	
Toluene	ND	ug/L	5.0	1		10/13/23 11:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/13/23 11:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/13/23 11:22	79-00-5	
Trichloroethene	ND	ug/L	5.0	1		10/13/23 11:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/13/23 11:22	75-69-4	
Vinyl chloride	ND	ug/L	5.0	1		10/13/23 11:22	75-01-4	
Surrogates								
4-Bromofluorobenzene (S)	94	%.	82-118	1		10/13/23 11:22	460-00-4	
Toluene-d8 (S)	96	%.	81-120	1		10/13/23 11:22	2037-26-5	
Dibromofluoromethane (S)	109	%.	77-123	1		10/13/23 11:22	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

QC Batch: 303630
QC Batch Method: EPA 625.1
Analysis Method: EPA 625.1
Analysis Description: BR EPA 625.1 Water
Laboratory: Pace Analytical Services - Baton Rouge

Associated Lab Samples: 20292338001

METHOD BLANK: 1453219 Matrix: Water
Associated Lab Samples: 20292338001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	10/17/23 08:14	
1,2-Dichlorobenzene	ug/L	ND	10.0	10/17/23 08:14	
1,2-Diphenylhydrazine	ug/L	ND	10.0	10/17/23 08:14	
1,3-Dichlorobenzene	ug/L	ND	10.0	10/17/23 08:14	
1,4-Dichlorobenzene	ug/L	ND	10.0	10/17/23 08:14	
1-Methylnaphthalene	ug/L	ND	10.0	10/17/23 08:14	N2
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	10/17/23 08:14	
2,4,5-Trichlorophenol	ug/L	ND	10.0	10/17/23 08:14	
2,4,6-Trichlorophenol	ug/L	ND	10.0	10/17/23 08:14	
2,4-Dichlorophenol	ug/L	ND	10.0	10/17/23 08:14	
2,4-Dimethylphenol	ug/L	ND	10.0	10/17/23 08:14	
2,4-Dinitrophenol	ug/L	ND	50.0	10/17/23 08:14	
2,4-Dinitrotoluene	ug/L	ND	10.0	10/17/23 08:14	
2,6-Dinitrotoluene	ug/L	ND	10.0	10/17/23 08:14	
2-Chloronaphthalene	ug/L	ND	10.0	10/17/23 08:14	
2-Chlorophenol	ug/L	ND	10.0	10/17/23 08:14	
2-Methylnaphthalene	ug/L	ND	10.0	10/17/23 08:14	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	10/17/23 08:14	
2-Nitroaniline	ug/L	ND	10.0	10/17/23 08:14	
2-Nitrophenol	ug/L	ND	10.0	10/17/23 08:14	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	10/17/23 08:14	N2
3,3'-Dichlorobenzidine	ug/L	ND	10.0	10/17/23 08:14	
3-Nitroaniline	ug/L	ND	50.0	10/17/23 08:14	
4,6-Dinitro-2-methylphenol	ug/L	ND	50.0	10/17/23 08:14	
4-Bromophenylphenyl ether	ug/L	ND	10.0	10/17/23 08:14	
4-Chloro-3-methylphenol	ug/L	ND	10.0	10/17/23 08:14	
4-Chloroaniline	ug/L	ND	10.0	10/17/23 08:14	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	10/17/23 08:14	
4-Nitroaniline	ug/L	ND	50.0	10/17/23 08:14	
4-Nitrophenol	ug/L	ND	50.0	10/17/23 08:14	
Acenaphthene	ug/L	ND	10.0	10/17/23 08:14	
Acenaphthylene	ug/L	ND	10.0	10/17/23 08:14	
Aniline	ug/L	ND	10.0	10/17/23 08:14	
Anthracene	ug/L	ND	10.0	10/17/23 08:14	
Benzidine	ug/L	ND	50.0	10/17/23 08:14	
Benzo(a)anthracene	ug/L	ND	10.0	10/17/23 08:14	
Benzo(a)pyrene	ug/L	ND	10.0	10/17/23 08:14	
Benzo(b)fluoranthene	ug/L	ND	10.0	10/17/23 08:14	
Benzo(g,h,i)perylene	ug/L	ND	10.0	10/17/23 08:14	
Benzo(k)fluoranthene	ug/L	ND	10.0	10/17/23 08:14	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

METHOD BLANK: 1453219 Matrix: Water
Associated Lab Samples: 20292338001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzoic acid	ug/L	ND	50.0	10/17/23 08:14	
Benzyl alcohol	ug/L	ND	10.0	10/17/23 08:14	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	10/17/23 08:14	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	10/17/23 08:14	
bis(2-Ethylhexyl)phthalate	ug/L	ND	10.0	10/17/23 08:14	
Butylbenzylphthalate	ug/L	ND	10.0	10/17/23 08:14	
Carbazole	ug/L	ND	10.0	10/17/23 08:14	
Chrysene	ug/L	ND	10.0	10/17/23 08:14	
Di-n-butylphthalate	ug/L	ND	20.0	10/17/23 08:14	
Di-n-octylphthalate	ug/L	ND	10.0	10/17/23 08:14	
Dibenz(a,h)anthracene	ug/L	ND	10.0	10/17/23 08:14	
Dibenzofuran	ug/L	ND	10.0	10/17/23 08:14	
Diethylphthalate	ug/L	ND	10.0	10/17/23 08:14	
Dimethylphthalate	ug/L	ND	10.0	10/17/23 08:14	
Fluoranthene	ug/L	ND	10.0	10/17/23 08:14	
Fluorene	ug/L	ND	10.0	10/17/23 08:14	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	10/17/23 08:14	
Hexachlorobenzene	ug/L	ND	10.0	10/17/23 08:14	
Hexachlorocyclopentadiene	ug/L	ND	10.0	10/17/23 08:14	
Hexachloroethane	ug/L	ND	10.0	10/17/23 08:14	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	10/17/23 08:14	
Isophorone	ug/L	ND	10.0	10/17/23 08:14	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	10/17/23 08:14	
N-Nitrosodimethylamine	ug/L	ND	10.0	10/17/23 08:14	
N-Nitrosodiphenylamine	ug/L	ND	10.0	10/17/23 08:14	
Naphthalene	ug/L	ND	10.0	10/17/23 08:14	
Nitrobenzene	ug/L	ND	10.0	10/17/23 08:14	
Pentachlorophenol	ug/L	ND	10.0	10/17/23 08:14	
Phenanthrene	ug/L	ND	10.0	10/17/23 08:14	
Phenol	ug/L	ND	10.0	10/17/23 08:14	
Pyrene	ug/L	ND	10.0	10/17/23 08:14	
Pyridine	ug/L	ND	10.0	10/17/23 08:14	
2,4,6-Tribromophenol (S)	%.	77	21-133	10/17/23 08:14	
2-Fluorobiphenyl (S)	%.	68	21-133	10/17/23 08:14	
2-Fluorophenol (S)	%.	40	21-133	10/17/23 08:14	
Nitrobenzene-d5 (S)	%.	84	46-219	10/17/23 08:14	
Phenol-d5 (S)	%.	24	8-424	10/17/23 08:14	
Terphenyl-d14 (S)	%.	88	21-133	10/17/23 08:14	

LABORATORY CONTROL SAMPLE: 1453220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	37.3	75	44-142	
1,2-Dichlorobenzene	ug/L	50	35.6	71	32-111	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

LABORATORY CONTROL SAMPLE: 1453220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Diphenylhydrazine	ug/L	50	42.5	85	49-122	
1,3-Dichlorobenzene	ug/L	50	34.6	69	28-110	
1,4-Dichlorobenzene	ug/L	50	34.7	69	29-112	
1-Methylnaphthalene	ug/L	50	37.8	76	41-119	N2
2,2'-Oxybis(1-chloropropane)	ug/L	50	42.4	85	36-166	
2,4,5-Trichlorophenol	ug/L	50	39.9	80	53-123	
2,4,6-Trichlorophenol	ug/L	50	40.6	81	37-144	
2,4-Dichlorophenol	ug/L	100	83.6	84	39-135	
2,4-Dimethylphenol	ug/L	50	43.2	86	32-120	
2,4-Dinitrophenol	ug/L	50	42.7J	85	20-191	
2,4-Dinitrotoluene	ug/L	50	50.6	101	39-139	
2,6-Dinitrotoluene	ug/L	50	47.1	94	20-191	
2-Chloronaphthalene	ug/L	50	42.2	84	60-120	
2-Chlorophenol	ug/L	50	35.1	70	23-134	
2-Methylnaphthalene	ug/L	50	40.9	82	40-121	
2-Methylphenol(o-Cresol)	ug/L	50	33.0	66	30-117	
2-Nitroaniline	ug/L	50	48.1	96	55-127	
2-Nitrophenol	ug/L	50	43.0	86	44-123	
3&4-Methylphenol(m&p Cresol)	ug/L	50	30.1	60	29-110	N2
3,3'-Dichlorobenzidine	ug/L	50	81.4	163	27-129	L1
3-Nitroaniline	ug/L	50	53.8	108	41-128	
4,6-Dinitro-2-methylphenol	ug/L	50	48.2J	96	20-181	
4-Bromophenylphenyl ether	ug/L	50	40.4	81	53-127	
4-Chloro-3-methylphenol	ug/L	50	45.3	91	22-147	
4-Chloroaniline	ug/L	50	43.4	87	33-117	
4-Chlorophenylphenyl ether	ug/L	50	41.0	82	25-158	
4-Nitroaniline	ug/L	50	55.9	112	38-120	
4-Nitrophenol	ug/L	50	34.9J	70	20-132	
Acenaphthene	ug/L	50	38.3	77	47-122	
Acenaphthylene	ug/L	50	37.8	76	41-130	
Aniline	ug/L	50	33.9	68	47-145	
Anthracene	ug/L	50	43.6	87	33-145	
Benzidine	ug/L	50	43.3J	87	10-120	
Benzo(a)anthracene	ug/L	50	46.6	93	58-125	
Benzo(a)pyrene	ug/L	50	50.2	100	54-128	
Benzo(b)fluoranthene	ug/L	50	52.3	105	27-133	
Benzo(g,h,i)perylene	ug/L	50	53.3	107	50-134	
Benzo(k)fluoranthene	ug/L	50	49.2	98	33-143	
Benzoic acid	ug/L	100	26.6J	27	17-163	
Benzyl alcohol	ug/L	50	31.3	63	24-159	
bis(2-Chloroethoxy)methane	ug/L	50	42.4	85	20-219	
bis(2-Chloroethyl) ether	ug/L	50	48.3	97	20-162	
bis(2-Ethylhexyl)phthalate	ug/L	50	50.3	101	55-135	
Butylbenzylphthalate	ug/L	50	51.1	102	20-152	
Carbazole	ug/L	50	57.4	115	60-122	
Chrysene	ug/L	50	46.7	93	33-184	
Di-n-butylphthalate	ug/L	50	54.4	109	59-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

LABORATORY CONTROL SAMPLE: 1453220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Di-n-octylphthalate	ug/L	50	48.2	96	20-168	
Dibenz(a,h)anthracene	ug/L	50	43.5	87	20-158	
Dibenzofuran	ug/L	50	40.8	82	20-158	
Diethylphthalate	ug/L	50	36.4	73	56-125	
Dimethylphthalate	ug/L	50	44.1	88	45-127	
Fluoranthene	ug/L	50	50.6	101	57-128	
Fluorene	ug/L	50	39.4	79	52-124	
Hexachloro-1,3-butadiene	ug/L	50	34.3	69	22-124	
Hexachlorobenzene	ug/L	50	42.1	84	20-200	
Hexachlorocyclopentadiene	ug/L	50	28.5	57	16-120	
Hexachloroethane	ug/L	50	38.6	77	21-115	
Indeno(1,2,3-cd)pyrene	ug/L	50	55.9	112	52-134	
Isophorone	ug/L	50	44.9	90	42-124	
N-Nitroso-di-n-propylamine	ug/L	50	42.6	85	20-152	
N-Nitrosodimethylamine	ug/L	50	23.9	48	59-121	L2
N-Nitrosodiphenylamine	ug/L	50	54.9	110	24-120	
Naphthalene	ug/L	50	36.9	74	40-121	
Nitrobenzene	ug/L	50	39.6	79	26-137	
Pentachlorophenol	ug/L	50	54.8	110	40-120	
Phenanthrene	ug/L	50	41.7	83	59-120	
Phenol	ug/L	50	17.5	35	20-171	
Pyrene	ug/L	50	45.2	90	21-196	
Pyridine	ug/L	50	17.2	34	20-120	
2,4,6-Tribromophenol (S)	%.			104	21-133	
2-Fluorobiphenyl (S)	%.			81	21-133	
2-Fluorophenol (S)	%.			40	21-133	
Nitrobenzene-d5 (S)	%.			83	46-219	
Phenol-d5 (S)	%.			24	8-424	
Terphenyl-d14 (S)	%.			93	21-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1453221 1453222

Parameter	Units	20292668001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,2,4-Trichlorobenzene	ug/L	ND	50	50	33.3	31.9	67	64	44-142	4	
1,2-Dichlorobenzene	ug/L	ND	50	50	30.8	27.5	62	55	32-111	11	
1,2-Diphenylhydrazine	ug/L		50	50	36.0	39.4	72	79	49-122	9	
1,3-Dichlorobenzene	ug/L	ND	50	50	30.1	26.5	60	53	28-110	13	
1,4-Dichlorobenzene	ug/L	ND	50	50	30.0	26.4	60	53	29-112	12	
1-Methylnaphthalene	ug/L		50	50	33.8	33.8	68	68	41-119	0	N2
2,2'-Oxybis(1-chloropropane)	ug/L		50	50	35.5	31.7	71	63	36-166	11	
2,4,5-Trichlorophenol	ug/L		50	50	28.7	35.1	57	70	53-123	20	
2,4,6-Trichlorophenol	ug/L		50	50	28.8	33.7	58	67	37-144	16	
2,4-Dichlorophenol	ug/L	ND	100	100	61.6	69.7	62	70	39-135	12	
2,4-Dimethylphenol	ug/L	ND	50	50	40.8	42.4	82	85	32-120	4	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1453221 1453222

Parameter	Units	20292668001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
2,4-Dinitrophenol	ug/L	ND	50	50	18.3J	21.3J	37	43	20-191		
2,4-Dinitrotoluene	ug/L	ND	50	50	41.3	48.2	83	96	39-139	16	
2,6-Dinitrotoluene	ug/L	ND	50	50	38.4	44.9	77	90	20-191	16	
2-Chloronaphthalene	ug/L		50	50	34.8	36.8	70	74	60-120	6	
2-Chlorophenol	ug/L	ND	50	50	27.6	26.0	55	52	23-134	6	
2-Methylnaphthalene	ug/L		50	50	36.8	36.4	74	73	40-121	1	
2-Methylphenol(o-Cresol)	ug/L		50	50	30.9	30.2	62	60	30-117	2	
2-Nitroaniline	ug/L		50	50	39.4	47.6	79	95	55-127	19	
2-Nitrophenol	ug/L	ND	50	50	34.6	33.3	69	67	44-123	4	
3&4-Methylphenol(m&p Cresol)	ug/L		50	50	33.1	33.9	66	68	29-110	2	N2
3,3'-Dichlorobenzidine	ug/L		50	50	43.5	49.6	87	99	27-129	13	
3-Nitroaniline	ug/L		50	50	46.5J	52.7	93	105	41-128		
4,6-Dinitro-2-methylphenol	ug/L	ND	50	50	23.3J	28.2J	47	56	20-181		
4-Bromophenylphenyl ether	ug/L		50	50	33.7	38.6	67	77	53-127	13	
4-Chloro-3-methylphenol	ug/L		50	50	38.6	42.6	77	85	22-147	10	
4-Chloroaniline	ug/L		50	50	41.6	44.5	83	89	33-117	7	
4-Chlorophenylphenyl ether	ug/L		50	50	34.7	39.7	69	79	25-158	13	
4-Nitroaniline	ug/L		50	50	43J	56.9	86	114	38-120		
4-Nitrophenol	ug/L	ND	50	50	ND	ND	0	0	20-132		M1
Acenaphthene	ug/L	ND	50	50	32.3	35.4	65	71	47-122	9	
Acenaphthylene	ug/L	ND	50	50	31.3	34.6	63	69	41-130	10	
Aniline	ug/L		50	50	37.5	38.3	75	77	47-145	2	
Anthracene	ug/L	ND	50	50	36.3	41.8	73	84	33-145	14	
Benzidine	ug/L		50	50	11.3J	12.3J	23	25	10-120		
Benzo(a)anthracene	ug/L	ND	50	50	37.4	42.7	75	85	58-125	13	
Benzo(a)pyrene	ug/L	ND	50	50	38.0	44.3	76	89	54-128	15	
Benzo(b)fluoranthene	ug/L	ND	50	50	40.0	47.7	80	95	27-133	18	
Benzo(g,h,i)perylene	ug/L		50	50	41.8	47.6	84	95	50-134	13	
Benzo(k)fluoranthene	ug/L	ND	50	50	38.3	42.5	77	85	33-143	10	
Benzoic acid	ug/L		100	100	19J	16.2J	19	16	17-163		M1
Benzyl alcohol	ug/L		50	50	28.5	29.2	57	58	24-159	2	
bis(2-Chloroethoxy)methane	ug/L		50	50	37.1	37.1	74	74	20-219	0	
bis(2-Chloroethyl) ether	ug/L		50	50	41.3	37.0	83	74	20-162	11	
bis(2-Ethylhexyl)phthalate	ug/L	ND	50	50	39.8	45.3	80	91	55-135	13	
Butylbenzylphthalate	ug/L		50	50	40.0	43.8	80	88	20-152	9	
Carbazole	ug/L		50	50	47.8	55.4	96	111	60-122	15	
Chrysene	ug/L	ND	50	50	37.3	42.7	75	85	33-184	14	
Di-n-butylphthalate	ug/L	ND	50	50	44.4	51.6	89	103	59-127	15	
Di-n-octylphthalate	ug/L		50	50	38.1	43.3	76	87	20-168	13	
Dibenz(a,h)anthracene	ug/L		50	50	35.0	39.4	70	79	20-158	12	
Dibenzofuran	ug/L		50	50	34.8	38.7	70	77	20-158	11	
Diethylphthalate	ug/L	ND	50	50	49.4	52.7	99	105	56-125	6	
Dimethylphthalate	ug/L	ND	50	50	37.4	42.6	75	85	45-127	13	
Fluoranthene	ug/L	ND	50	50	41.5	49.5	83	99	57-128	17	
Fluorene	ug/L	ND	50	50	33.3	37.5	67	75	52-124	12	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1453221 1453222

Parameter	Units	20292668001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Hexachloro-1,3-butadiene	ug/L	ND	50	50	31.1	30.1	62	60	22-124	3	
Hexachlorobenzene	ug/L	ND	50	50	35.4	40.9	71	82	20-200	14	
Hexachlorocyclopentadiene	ug/L		50	50	19.7	18.7	39	37	16-120	5	
Hexachloroethane	ug/L	ND	50	50	32.4	29.6	65	59	21-115	9	
Indeno(1,2,3-cd)pyrene	ug/L		50	50	43.7	49.6	87	99	52-134	12	
Isophorone	ug/L		50	50	39.4	39.7	79	79	42-124	1	
N-Nitroso-di-n-propylamine	ug/L		50	50	35.6	33.6	71	67	20-152	6	
N-Nitrosodimethylamine	ug/L		50	50	24.3	22.1	49	44	59-121	9	M0
N-Nitrosodiphenylamine	ug/L		50	50	45.9	51.8	92	104	24-120	12	
Naphthalene	ug/L	ND	50	50	48.8	50.2	98	100	40-121	3	
Nitrobenzene	ug/L	ND	50	50	35.4	32.7	71	65	26-137	8	
Pentachlorophenol	ug/L		50	50	26.3	32.8	53	66	40-120	22	
Phenanthrene	ug/L	ND	50	50	34.5	39.5	69	79	59-120	13	
Phenol	ug/L	ND	50	50	18.5	19.6	37	39	20-171	6	
Pyrene	ug/L	ND	50	50	38.5	43.4	77	87	21-196	12	
Pyridine	ug/L		50	50	26.4	25.6	53	51	20-120	3	
2,4,6-Tribromophenol (S)	%.						73	79	21-133		
2-Fluorobiphenyl (S)	%.						79	80	21-133		
2-Fluorophenol (S)	%.						38	35	21-133		
Nitrobenzene-d5 (S)	%.						86	84	46-219		
Phenol-d5 (S)	%.						30	28	8-424		
Terphenyl-d14 (S)	%.						71	83	21-133		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

QC Batch: 303610
QC Batch Method: EPA 245.2
Analysis Method: EPA 245.2
Analysis Description: 245.2 Mercury
Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20292338001

METHOD BLANK: 1453157 Matrix: Water
Associated Lab Samples: 20292338001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	10/17/23 10:53	

LABORATORY CONTROL SAMPLE: 1453158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.0	102	80-120	

MATRIX SPIKE SAMPLE: 1453160

Parameter	Units	20292208001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	1	1.0	93	75-125	

MATRIX SPIKE SAMPLE: 1453161

Parameter	Units	20292217001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	1	1.0	95	75-125	

SAMPLE DUPLICATE: 1453159

Parameter	Units	20292208001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	ND	.08J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

QC Batch: 303493
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20292338001

METHOD BLANK: 1452260 Matrix: Water
Associated Lab Samples: 20292338001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0010	10/16/23 21:04	
Arsenic	mg/L	ND	0.0010	10/16/23 21:04	
Beryllium	mg/L	ND	0.00050	10/16/23 21:04	
Cadmium	mg/L	ND	0.0010	10/16/23 21:04	
Chromium	mg/L	ND	0.0010	10/16/23 21:04	
Copper	mg/L	ND	0.0010	10/16/23 21:04	
Lead	mg/L	ND	0.0010	10/16/23 21:04	
Nickel	mg/L	ND	0.0010	10/16/23 21:04	
Selenium	mg/L	ND	0.0010	10/16/23 21:04	
Silver	mg/L	ND	0.00050	10/16/23 21:04	
Thallium	mg/L	ND	0.00050	10/16/23 21:04	
Total Hardness	mg/L	0.038	0.0050	10/16/23 21:04	
Zinc	mg/L	ND	0.0050	10/16/23 21:04	

LABORATORY CONTROL SAMPLE: 1452261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.06	0.060	100	85-115	
Arsenic	mg/L	0.06	0.060	101	85-115	
Beryllium	mg/L	0.06	0.059	99	85-115	
Cadmium	mg/L	0.06	0.060	101	85-115	
Chromium	mg/L	0.06	0.060	100	85-115	
Copper	mg/L	0.06	0.060	100	85-115	
Lead	mg/L	0.06	0.059	98	85-115	
Nickel	mg/L	0.06	0.060	100	85-115	
Selenium	mg/L	0.06	0.058	97	85-115	
Silver	mg/L	0.03	0.030	102	85-115	
Thallium	mg/L	0.03	0.029	96	85-115	
Total Hardness	mg/L		39.8			
Zinc	mg/L	0.06	0.061	101	85-115	

MATRIX SPIKE SAMPLE: 1452263

Parameter	Units	20292299001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	ND	0.06	0.059	96	70-130	
Arsenic	mg/L	ND	0.06	0.074	100	70-130	
Beryllium	mg/L	ND	0.06	0.064	104	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

MATRIX SPIKE SAMPLE: 1452263

Parameter	Units	20292299001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/L	ND	0.06	0.059	98	70-130	
Chromium	mg/L	ND	0.06	0.060	95	70-130	
Copper	mg/L	ND	0.06	0.062	95	70-130	
Lead	mg/L	ND	0.06	0.058	95	70-130	
Nickel	mg/L	ND	0.06	0.076	95	70-130	
Selenium	mg/L	ND	0.06	0.054	90	70-130	
Silver	mg/L	ND	0.03	0.029	95	70-130	
Thallium	mg/L	ND	0.03	0.029	94	70-130	
Total Hardness	mg/L	238000 ug/L		272			
Zinc	mg/L	303 ug/L	0.06	0.28	-42	70-130	M1

MATRIX SPIKE SAMPLE: 1452264

Parameter	Units	20292299002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	ND	0.06	0.060	100	70-130	
Arsenic	mg/L	ND	0.06	0.072	104	70-130	
Beryllium	mg/L	ND	0.06	0.064	105	70-130	
Cadmium	mg/L	ND	0.06	0.058	96	70-130	
Chromium	mg/L	ND	0.06	0.063	102	70-130	
Copper	mg/L	ND	0.06	0.063	100	70-130	
Lead	mg/L	ND	0.06	0.059	98	70-130	
Nickel	mg/L	ND	0.06	0.091	96	70-130	
Selenium	mg/L	ND	0.06	0.059	98	70-130	
Silver	mg/L	ND	0.03	0.030	99	70-130	
Thallium	mg/L	ND	0.03	0.030	97	70-130	
Total Hardness	mg/L	205000 ug/L		247			
Zinc	mg/L	ND	0.06	.22J	87	70-130	

SAMPLE DUPLICATE: 1452262

Parameter	Units	20292299001 Result	Dup Result	RPD	Qualifiers
Antimony	mg/L	ND	ND		
Arsenic	mg/L	ND	.013J		
Beryllium	mg/L	ND	ND		
Cadmium	mg/L	ND	ND		
Chromium	mg/L	ND	ND		
Copper	mg/L	ND	ND		
Lead	mg/L	ND	ND		
Nickel	mg/L	ND	ND		
Selenium	mg/L	ND	ND		
Silver	mg/L	ND	ND		
Thallium	mg/L	ND	ND		
Total Hardness	mg/L	238000 ug/L	250	5	
Zinc	mg/L	303 ug/L	ND		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

QC Batch: 303437
QC Batch Method: EPA 624.1
Analysis Method: EPA 624.1
Analysis Description: 624 MSV
Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20292338002, 20292338003

METHOD BLANK: 1452074 Matrix: Water

Associated Lab Samples: 20292338002, 20292338003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	10/13/23 10:30	
1,1,1-Trichloroethane	ug/L	ND	5.0	10/13/23 10:30	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	10/13/23 10:30	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/13/23 10:30	
1,1-Dichloroethane	ug/L	ND	5.0	10/13/23 10:30	
1,1-Dichloroethene	ug/L	ND	5.0	10/13/23 10:30	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	10/13/23 10:30	
1,2-Dichlorobenzene	ug/L	ND	5.0	10/13/23 10:30	
1,2-Dichloroethane	ug/L	ND	5.0	10/13/23 10:30	
1,2-Dichloropropane	ug/L	ND	5.0	10/13/23 10:30	
1,3-Dichlorobenzene	ug/L	ND	5.0	10/13/23 10:30	
1,4-Dichlorobenzene	ug/L	ND	5.0	10/13/23 10:30	
2-Chloroethylvinyl ether	ug/L	ND	20.0	10/13/23 10:30	
Acrolein	ug/L	ND	20.0	10/13/23 10:30	
Acrylonitrile	ug/L	ND	20.0	10/13/23 10:30	
Benzene	ug/L	ND	5.0	10/13/23 10:30	
Bromodichloromethane	ug/L	ND	5.0	10/13/23 10:30	
Bromoform	ug/L	ND	5.0	10/13/23 10:30	
Bromomethane	ug/L	ND	5.0	10/13/23 10:30	
Carbon tetrachloride	ug/L	ND	5.0	10/13/23 10:30	
Chlorobenzene	ug/L	ND	5.0	10/13/23 10:30	
Chloroethane	ug/L	ND	5.0	10/13/23 10:30	
Chloroform	ug/L	ND	5.0	10/13/23 10:30	
Chloromethane	ug/L	ND	5.0	10/13/23 10:30	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/13/23 10:30	
cis-1,3-Dichloropropene	ug/L	ND	5.0	10/13/23 10:30	
Dibromochloromethane	ug/L	ND	5.0	10/13/23 10:30	
Dichlorodifluoromethane	ug/L	ND	5.0	10/13/23 10:30	
Ethylbenzene	ug/L	ND	5.0	10/13/23 10:30	
m&p-Xylene	ug/L	ND	10.0	10/13/23 10:30	
Methyl-tert-butyl ether	ug/L	ND	5.0	10/13/23 10:30	
Methylene Chloride	ug/L	ND	5.0	10/13/23 10:30	
Naphthalene	ug/L	ND	25.0	10/13/23 10:30	N2
o-Xylene	ug/L	ND	5.0	10/13/23 10:30	
Tetrachloroethene	ug/L	ND	5.0	10/13/23 10:30	
Toluene	ug/L	ND	5.0	10/13/23 10:30	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/13/23 10:30	
trans-1,3-Dichloropropene	ug/L	ND	5.0	10/13/23 10:30	
Trichloroethene	ug/L	ND	5.0	10/13/23 10:30	
Trichlorofluoromethane	ug/L	ND	5.0	10/13/23 10:30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

METHOD BLANK: 1452074 Matrix: Water
Associated Lab Samples: 20292338002, 20292338003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Vinyl chloride	ug/L	ND	5.0	10/13/23 10:30	
Xylene (Total)	ug/L	ND	15.0	10/13/23 10:30	
4-Bromofluorobenzene (S)	%.	101	82-118	10/13/23 10:30	
Dibromofluoromethane (S)	%.	105	77-123	10/13/23 10:30	
Toluene-d8 (S)	%.	100	81-120	10/13/23 10:30	

LABORATORY CONTROL SAMPLE: 1452075

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.9	100		
1,1,1-Trichloroethane	ug/L	20	19.9	99	76-123	
1,1,2,2-Tetrachloroethane	ug/L	20	22.0	110	64-131	
1,1,2-Trichloroethane	ug/L	20	19.9	100	76-118	
1,1-Dichloroethane	ug/L	20	20.0	100	69-125	
1,1-Dichloroethene	ug/L	20	19.4	97	63-122	
1,2-Dibromo-3-chloropropane	ug/L	20	23.5	118		
1,2-Dichlorobenzene	ug/L	20	20.4	102	80-113	
1,2-Dichloroethane	ug/L	20	20.8	104	64-127	
1,2-Dichloropropane	ug/L	20	19.5	97	68-125	
1,3-Dichlorobenzene	ug/L	20	20.3	102	79-112	
1,4-Dichlorobenzene	ug/L	20	20.1	100	79-113	
2-Chloroethylvinyl ether	ug/L	20	19J	95	52-138	
Acrolein	ug/L	100	94.4	94	10-164	
Acrylonitrile	ug/L	20	24.1	120	48-145	
Benzene	ug/L	20	19.7	98	72-131	
Bromodichloromethane	ug/L	20	20.4	102	72-117	
Bromoform	ug/L	20	21.2	106	58-124	
Bromomethane	ug/L	20	23.0	115	39-163	
Carbon tetrachloride	ug/L	20	19.0	95	73-121	
Chlorobenzene	ug/L	20	20.1	100	77-119	
Chloroethane	ug/L	20	24.7	123	36-155	
Chloroform	ug/L	20	19.7	99	69-115	
Chloromethane	ug/L	20	23.0	115	30-148	
cis-1,2-Dichloroethene	ug/L	20	19.6	98	72-115	
cis-1,3-Dichloropropene	ug/L	20	19.9	99	70-120	
Dibromochloromethane	ug/L	20	20.5	103	63-120	
Dichlorodifluoromethane	ug/L	20	18.2	91		
Ethylbenzene	ug/L	20	20.0	100	81-110	
m&p-Xylene	ug/L	40	38.7	97	79-115	
Methyl-tert-butyl ether	ug/L	20	21.0	105	58-135	
Methylene Chloride	ug/L	20	19.2	96	58-136	
Naphthalene	ug/L	20	22.7J	114	46-149	N2
o-Xylene	ug/L	20	19.4	97	78-117	
Tetrachloroethene	ug/L	20	19.2	96	68-126	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

LABORATORY CONTROL SAMPLE: 1452075

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	18.8	94	80-116	
trans-1,2-Dichloroethene	ug/L	20	19.6	98	60-126	
trans-1,3-Dichloropropene	ug/L	20	20.8	104	71-120	
Trichloroethene	ug/L	20	18.4	92	76-113	
Trichlorofluoromethane	ug/L	20	22.4	112	27-166	
Vinyl chloride	ug/L	20	25.0	125	45-126	
Xylene (Total)	ug/L	60	58.1	97		
4-Bromofluorobenzene (S)	%.			96	82-118	
Dibromofluoromethane (S)	%.			106	77-123	
Toluene-d8 (S)	%.			99	81-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1452076 1452077

Parameter	Units	20292338002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	24.7	25.1	124	125		1	
1,1,1-Trichloroethane	ug/L	ND	20	20	25.2	25.4	126	127	76-141	1	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	24.8	25.1	124	126	60-144	1	
1,1,2-Trichloroethane	ug/L	ND	20	20	23.1	23.4	115	117	72-132	2	
1,1-Dichloroethane	ug/L	ND	20	20	25.7	25.6	128	128	67-139	0	HS
1,1-Dichloroethene	ug/L	ND	20	20	24.3	24.7	121	123	62-139	2	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	27.6	28.6	138	143		3	
1,2-Dichlorobenzene	ug/L	ND	20	20	25.4	26.3	127	131	77-129	3	M1
1,2-Dichloroethane	ug/L	ND	20	20	25.1	25.3	125	126	63-139	1	
1,2-Dichloropropane	ug/L	ND	20	20	23.5	22.8	117	114	68-137	3	
1,3-Dichlorobenzene	ug/L	ND	20	20	24.6	25.4	123	127	76-128	3	
1,4-Dichlorobenzene	ug/L	ND	20	20	24.6	25.2	123	126	76-128	2	
2-Chloroethylvinyl ether	ug/L	ND	20	20	21.0	20.0	105	100	10-156	5	M1
Acrolein	ug/L	ND	100	100	107	115	107	115	10-200	7	
Acrylonitrile	ug/L	ND	20	20	28.9	26.0	144	130	31-177	10	
Benzene	ug/L	ND	20	20	25.0	25.0	125	125	52-167	0	
Bromodichloromethane	ug/L	ND	20	20	24.9	25.0	125	125	70-131	0	
Bromoform	ug/L	ND	20	20	24.2	24.4	121	122	58-134	1	
Bromomethane	ug/L	ND	20	20	29.7	30.3	148	151	36-177	2	
Carbon tetrachloride	ug/L	ND	20	20	23.8	24.0	119	120	67-143	1	
Chlorobenzene	ug/L	ND	20	20	24.9	24.8	125	124	73-135	1	
Chloroethane	ug/L	ND	20	20	31.5	31.7	158	159	35-172	1	
Chloroform	ug/L	ND	20	20	25.9	26.1	124	126	65-131	1	
Chloromethane	ug/L	ND	20	20	27.8	28.6	139	143	27-168	3	
cis-1,2-Dichloroethene	ug/L	ND	20	20	24.9	25.2	125	126	80-120	1	M1
cis-1,3-Dichloropropene	ug/L	ND	20	20	24.3	23.6	121	118	67-139	3	
Dibromochloromethane	ug/L	ND	20	20	24.2	25.0	121	125	60-134	3	
Dichlorodifluoromethane	ug/L	ND	20	20	21.5	22.2	107	111		3	
Ethylbenzene	ug/L	ND	20	20	24.3	24.6	122	123	75-130	1	
m&p-Xylene	ug/L	ND	40	40	48.3	47.8	121	120	60-150	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1452076 1452077

Parameter	Units	20292338002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Methyl-tert-butyl ether	ug/L	ND	20	20	24.2	24.8	121	124	36-160	2	
Methylene Chloride	ug/L	ND	20	20	24.4	24.7	122	124	60-138	1	
Naphthalene	ug/L	ND	20	20	27.9	32.7	140	163	60-155	16	M1,N2
o-Xylene	ug/L	ND	20	20	23.9	23.9	119	120	61-149	0	
Tetrachloroethene	ug/L	ND	20	20	24.5	24.8	123	124	65-146	1	
Toluene	ug/L	ND	20	20	23.4	22.4	117	112	32-181	4	
trans-1,2-Dichloroethene	ug/L	ND	20	20	25.4	25.3	127	126	64-139	1	
trans-1,3-Dichloropropene	ug/L	ND	20	20	24.9	24.4	124	122	69-133	2	
Trichloroethene	ug/L	ND	20	20	23.8	23.4	119	117	73-132	2	
Trichlorofluoromethane	ug/L	ND	20	20	27.2	28.4	136	142	24-189	4	
Vinyl chloride	ug/L	ND	20	20	31.2	32.7	156	164	47-145	5	M1
Xylene (Total)	ug/L	ND	60	60	72.2	71.8	120	120		1	
4-Bromofluorobenzene (S)	%.						94	94	82-118		
Dibromofluoromethane (S)	%.						106	110	77-123		
Toluene-d8 (S)	%.						98	96	81-120		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

QC Batch: 304130
QC Batch Method: EPA 420.1
Analysis Method: EPA 420.1
Analysis Description: 420.1 Phenolics
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20292338002

METHOD BLANK: 1455524 Matrix: Water
Associated Lab Samples: 20292338002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	mg/L	ND	0.020	10/18/23 15:54	

LABORATORY CONTROL SAMPLE: 1455525

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	mg/L	0.1	0.092	92	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA

Project: Permit requirements
Pace Project No.: 20292338

QC Batch: 303749
QC Batch Method: SM 4500-CN-C
Analysis Method: SM 4500-CN-E
Analysis Description: 4500CNE Cyanide, Total
Laboratory: Pace Analytical Services - New Orleans
Associated Lab Samples: 20292338002

METHOD BLANK: 1453574 Matrix: Water
Associated Lab Samples: 20292338002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.020	10/16/23 17:06	

LABORATORY CONTROL SAMPLE: 1453575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.090	90	80-120	

MATRIX SPIKE SAMPLE: 1453577

Parameter	Units	20293071001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	0.1	0.090	86	75-125	

SAMPLE DUPLICATE: 1453576

Parameter	Units	20293071001 Result	Dup Result	RPD	Qualifiers
Cyanide	mg/L	ND	ND		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALIFIERS

Project: Permit requirements
Pace Project No.: 20292338

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

ANALYTE QUALIFIERS

Ac	Analysis of acrolein was performed from an unpreserved sample outside of the 3 day holding time required by the test method and for NPDES compliance per 40CFRPart 136 for unpreserved samples.
HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P1	Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.

Pace Analytical Services, LLC
1168 Whigham Place
Tuscaloosa, AL 35405
(205) 614-6630

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Permit requirements
Pace Project No.: 20292338

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20292338001	**Effluent Composite**	EPA 625.1	303630	EPA 625.1	303844
20292338001	**Effluent Composite**	EPA 200.8	303493	EPA 200.8	303535
20292338001	**Effluent Composite**	EPA 245.2	303610	EPA 245.2	303655
20292338002	**Effluent Grab**	EPA 624.1	303437		
20292338003	**Trip Blank**	EPA 624.1	303437		
20292338002	**Effluent Grab**	EPA 420.1	304130	EPA 420.1	304192
20292338002	**Effluent Grab**	SM 4500-CN-C	303749	SM 4500-CN-E	304010

Pace Analytical
WWW.PACELABS.COM

CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

WO# : 20292338

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelab

20292338

Section A	Section B	Section C
Required Client Information:	**Required Project Information:**	**Invoice Information:**
Company: Prattville Wastewater - WW	Report To: Napleon Wilks	Attention:
Address: 101 W. Main Street	Copy To:	Company Name:
Prattville, AL 36067		Address:
Email: Napleon.Wilks@prattvilleal.gov	Purchase Order #:	Pace Quote:
Phone: (334)361-3626 Fax:	Project Name: Permit requirements Table C Pine Creek	Pace Project Manager: cindy.simpson@pacelabs.com,
Requested Due Date:	Order #: 859908	Pace Profile #: 17053

State / Location: AL

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: 625	200.8 Metals	Mercury	Cyanide	Phenol Total	624.1	Residual Chlorine (Y/N)
1	Composite Effluent	WT	C	10-8-23	0700	10-9-23	0700		4	2		2						X	X	X					
2	Grab Effluent	WT	G	10-9-23	0745				6	4	1			1							X	X	X		
3	Trip Blank	WT							4	4													X		
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Darius Reese & Prattville	10-9-23	1302	M. Corbell	10/9	1302				
	M. Corbell	10/9	1445	Amanda Savage	10/9	1445	4.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Darius Reese

SIGNATURE of SAMPLER: Darius Reese DATE Signed: 10-9-23

DC#_Title: ENV-FRM-SROS-0009 v02_NOLA SCUR Form
Effective Date: 3/23/2022

WO#: 20292338
PM: CRS Due Date: 10/23/23
CLIENT: TU-Prattvill

Pace
1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Project

Courier: ☑ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: ☐ YES ☑ NO **Custody Seals intact:** ☐ YES ☑ NO

Samples on ice: ☑ YES ☐ NO **Type of Ice:** ~~Wet~~ Blue None

Date and Initials of person examining contents: RB 10/9

Temp should be ≤6°C *Temp must be measured from Temperature blank when present

Cooler #1 Thermometer Used: TUTM13 Cooler Temp °C: (Observed) 4.8 (CF) 0 (Actual) 4.8
Cooler #2 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #3 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____
Cooler #4 Thermometer Used:_____ Cooler Temp °C: (Observed)_____ (CF)_____ (Actual)_____

Tracking #:_____

Temperature Blank Present"?	☐Yes ☐No ☑N/A	
Chain of Custody Present:	☑Yes ☐No ☐N/A	
Chain of Custody Complete.	☑Yes ☐No ☐N/A	
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	
Sufficient Volume:	☑Yes ☐No ☐N/A	
Correct Containers Used:	☑Yes ☐No ☐N/A	
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☑N/A	
Sample Labels match COC:	☑Yes ☐No ☐N/A	
All containers received within manufacture's precautionary and/or expiration dates.	☑Yes ☐No ☐N/A	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes ☐No ☑N/A	If No, was preservative added? ☐Yes ☐No If added record lot #.:
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	HNO3_____ H2SO4_____ Date:_____ Time:_____
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	
Trip Blank Present:	☐Yes ☑No	

Client Notification/ Resolution:

Person Contacted:_____ Date/Time:_____

Comments/ Resolution:_____