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

DECEMBER 9, 2022

Jimmy Junkin, Water Services Department Manager
City of Athens Utilities
Post Office Box 1089
Athens, AL 35612

RE: Draft Permit
NPDES Permit No. AL0020206
Athens WWTP
Limestone County, Alabama

Dear Mr. Junkin:

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:

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

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

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

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

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.

Should you have any questions, please contact the undersigned dastokes@adem.alabama.gov

Sincerely,

Dustin Stokes
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

Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: CITY OF ATHENS UTILITIES
POST OFFICE BOX 1089
ATHENS, AL 35612

FACILITY LOCATION: ATHENS WWTP (9.0 MGD)
942 EAST SANDERFER ROAD
ATHENS, ALABAMA
LIMESTONE COUNTY

PERMIT NUMBER: AL0020206

RECEIVING WATERS: TOWN CREEK

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

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

Draft

Alabama Department of Environmental Management

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PART I: DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

1. DSN 001-1: Municipal & Industrial 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	*****	*****	*****	6.0 Minimum Daily	*****	*****	mg/l	5X Weekly	Grab	Not Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	8.5 Maximum Daily	S.U.	5X Weekly	Grab	Not Seasonal
Solids, Total Suspended (00530) Effluent Gross Value	2251 Monthly Average	3377 Weekly Average	lbs/day	*****	30.0 Monthly Average	45.0 Weekly Average	mg/l	5X Weekly	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	5X Weekly	24-Hr Composite	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	292 Monthly Average	439 Weekly Average	lbs/day	*****	3.9 Monthly Average	5.8 Weekly Average	mg/l	5X Weekly	24-Hr Composite	W
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	75.0 Monthly Average	112 Weekly Average	lbs/day	*****	1.0 Monthly Average	1.5 Weekly Average	mg/l	5X Weekly	24-Hr Composite	S
Nitrogen, Kjeldahl Total (As N) (00625) 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
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
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

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

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

(2) S = Summer (April – October)
W = Winter (November - March)
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.

(4) A measurement of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as "*B" on the monthly DMR.

(5) If only one sampling event occurs during a monitoring period, the sample result shall be reported on the DMRs as both the monthly average and daily maximum.

DSN 001-1 (Continued): Municipal & Industrial 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)
Copper Total Recoverable (01119) See note (5) Effluent Gross Value	*****	*****	*****	*****	21.2 Monthly Average	31.4 Maximum Daily	ug/l	Monthly	Grab	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, 4) Effluent Gross Value	*****	*****	*****	*****	0.011 Monthly Average	0.019 Maximum Daily	mg/l	5X Weekly	Grab	Not Seasonal
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	548 Monthly Average	2507 Maximum Daily	col/100mL	5X Weekly	Grab	ECW
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	298 Maximum Daily	col/100mL	5X Weekly	Grab	ECS
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	450 Monthly Average	675 Weekly Average	lbs/day	*****	6.0 Monthly Average	9.0 Weekly Average	mg/l	5X Weekly	24-Hr Composite	S
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	975 Monthly Average	1463 Weekly Average	lbs/day	*****	13.0 Monthly Average	19.5 Weekly Average	mg/l	5X Weekly	24-Hr Composite	W
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	5X Weekly	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

(2) S = Summer (April – October)
W = Winter (November - March)
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.

(4) A measurement of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as "*B" on the monthly DMR.

(5) If only one sampling event occurs during a monitoring period, the sample result shall be reported on the DMRs as both the monthly average and maximum daily.

2. DSN 001-Q: Quarterly

This is an administrative outfall designation. Outfall 001T is the same physical outfall as Outfall 0011. Discharge from this outfall 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
Mercury Total Recoverable (71901) See notes (2, 3) Effluent Gross Value	*****	*****	*****	*****	0.012 Monthly Average	2.4 Maximum Daily	ug/l	Quarterly	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

(2) EPA Method 1631/1669E, or alternative method specifically approved by the Department shall be used for analysis of this parameter.

(3) If only one sampling event occurs during a monitoring period, the sample result shall be reported on the DMRs as both the monthly average and maximum daily.

3. DSN 001-T: 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
Toxicity, Ceriodaphnia Chronic (61426) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	24-Hr Composite	Not Seasonal
Toxicity, Pimephales Chronic (61428) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	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.

4. DSN 002-S: Stormwater

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 002S, which is described more fully in the Permittee's application as a storm water outfall located at the wastewater treatment plant. 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
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	*****	*****	*****	*****	*****	15.0 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 Stormwater in Part IV.G

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). Location should be shown on a USGS quad sheet or copy thereof; and

(6) Corrective actions taken and/or planned to eliminate future discharges.

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

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

2. Termination of Discharge

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

3. Updating Information

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

b. If the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

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

E. SCHEDULE OF COMPLIANCE

1. Compliance with discharge limits

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

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. Schedule

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

PART II: OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit.

2. Best Management Practices

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 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;

(9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;

(10) When required by the reopener conditions in this permit;

(11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);

(12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;

(13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or

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

1. Chronic Toxicity Test

a. The permittee shall perform short-term chronic toxicity tests on the wastewater at Outfall 001.

b. The samples shall be diluted using appropriate control water to the Instream Waste Concentration (IWC) which is 99 percent effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 7-day, 10-year low flow period.

c. Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and test samples at the 95% confidence level indicates chronic toxicity and shall constitute noncompliance with this permit.

2. General Test Requirements

a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA

821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.

b. Test results shall be deemed unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period for the following:

(1) For testing with P. promelas: effluent toxicity tests with control survival of less than 80% or if dry weight per surviving control organism is less than 0.25 mg;

(2) For testing with C. dubia: if the number of young per surviving control organism is less than 15 or if less than 60% of surviving control females produce three broods; or

(3) If the other requirements of the EPA Test Procedure are not met.

c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are to be reported to the Department along with an explanation of the tests performed and the test results.

d. Toxicity tests shall be conducted for the duration of this permit in the month of **AUGUST**. Should results from the Annual Toxicity test indicate that Outfall 001 exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of FEBRUARY, MAY, AUGUST, and NOVEMBER.

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 Sections 2 and 6 shall be included with the DMR. The test results must be submitted to the Department no later than 28 days after the month that tests were performed.

4. **Additional Testing Requirements**

a. If chronic toxicity is indicated (i.e., noncompliance with permit limit), then the Permittee must perform two additional valid chronic toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall run consecutively beginning on the first calendar week following the date that the Permittee became aware of the permit noncompliance. The results of these follow-up tests shall be submitted to the Department no later than 28 days following the month 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 and guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-91-003, EPA/600/R-92/081, EPA/833/B-99/022, and/or EPA/600/6-91/005F)

5. **Test Methods**

The tests shall be performed in accordance with the latest edition of the "EPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms." The Larval Survival and Growth Test, Method 1000.0, shall be used for the fathead minnow (*Pimephales promelas*) test and the Survival and Reproduction Test, Method 1002.0, shall be used for the cladoceran (*Ceriodaphnia dubia*) test.

6. **Effluent Toxicity Testing Reports**

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

a. Introduction

(1) Facility name, location and county

(2) Permit number

(3) Toxicity testing requirements of permit

(4) Name of receiving water body

(5) Contract laboratory information (if tests are performed under contract)

(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 dates (MGD, CFS, GPM)

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

c. Source of Effluent and Dilution Water

(1) Effluent samples

(2) Sampling point

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

(4) Sample collection method

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

(6) Lapsed time from sample collection to delivery

(7) Lapsed time from sample collection to test initiation

(8) Sample temperature when received at the laboratory

(9) Dilution Water

(10) Source

(11) Collection/preparation date(s) and time(s)

(12) Pretreatment (if applicable)

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

d. Test Conditions

(1) Toxicity test method utilized

(2) End point(s) of test

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

(4) Date and time test started

(5) Date and time test terminated

(6) Type and volume of test chambers

(7) Volume of solution per chamber

(8) Number of organisms per test chamber

(9) Number of replicate test chambers per treatment

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

(11) Specify if aeration was needed

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

(13) Specify if (and how) pH control measures were implemented

(14) Light intensity (mean)

e. Test Organisms

(1) Scientific name

(2) Life stage and age

(3) Source

(4) Disease(s) treatment (if applicable)

f. Quality Assurance

(1) Reference toxicant utilized and source

(2) Date and time of most recent chronic reference toxicant test(s), raw data, and current control chart(s). (The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.)

(3) Dilution water utilized in reference toxicant test

(4) Results of reference toxicant test(s) (NOEC, IC25, etc.); report concentration-response relationship and evaluate test sensitivity

(5) Physical and chemical methods utilized

g. Results

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

(2) Provide table of endpoints: NOECs, IC25s, PASS/FAIL, etc. (as required in the applicable NPDES permit)

(3) Indicate statistical methods used to calculate endpoints

(4) Provide all physical and chemical data required by method

(5) Results of test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD) calculated for sublethal endpoints determined by hypothesis testing.

h. Conclusions and Recommendations

(1) Relationship between test endpoints and permit limits

(2) Actions to be taken

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

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. Administrative Procedures

(1) A copy of the SWPP Plan shall be maintained at the facility and shall be available for inspection by the Department.

(2) A log of daily inspections required by Provision IV.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.

FACT SHEET

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

Date Prepared: August 23, 2022 **By:** Dustin Stokes

NPDES Permit No. AL0020206

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

   City of Athens Utilities
   Post Office Box 1089
   Athens, AL 35612

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

   Athens WWTP
   942 East Sanderfer Road
   Athens, AL 35611

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	Town Creek	Fish and Wildlife (F&W)
002	Town Creek	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.

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0020206** Date: August 22, 2022

Permit Applicant: City of Athens Utilities
Post Office Box 1089
Athens, AL 35612

Location: **Athens WWTP**
942 East Sanderfer Road
Athens, AL 35611

Draft Permit is:

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

Basis for Limitations:

Water Quality Model:	DO, NH_3-N, CBOD
Reissuance with no modification:	DO, pH, TSS, NH_3-N (summer), TRC, CBOD % Removal, TSS % Removal, Mercury
Instream calculation at 7Q10:	99%
Toxicity based:	TRC
Secondary Treatment Levels:	TSS, TSS % Removal, CBOD % Removal
Other (described below):	pH, E. coli, Copper, Mercury

Design Flow in Million Gallons per Day: 9.0 MGD

Major: Yes

Description of Discharge:

Feature ID	Description	Receiving Water	WBC	303(d)	TMDL
001	Municipal and Industrial Wastewater	Town Creek	Fish and Wildlife (F&W)	No	Yes
002	Stormwater Discharge	Town Creek	Fish and Wildlife (F&W)	No	Yes

Discussion:

This is a permit reissuance due to expiration. Limits for Five Day Carbonaceous Biochemical Oxygen Demand (CBOD), Total Ammonia-Nitrogen (NH_3-N), and Dissolved Oxygen (DO) were developed based on a Waste Load Allocation (WLA) model that was completed by ADEM's Water Quality Branch (WQB) on May 27, 2020. The monthly average limits for CBOD summer (April-October) and winter (November-March) are 6.0 mg/L and 13.0 mg/L, respectively. The monthly average limits for NH_3-N summer (April-October) and winter (November-March) are 1.0 mg/L and 3.9 mg/L, respectively. The WLA asserts that the seasonal effluent limitations are protective of the Swan Creek use classification of fish & Wildlife and that it maintains instream dissolved oxygen concentrations above 5 mg/L. The increased NH_3-N winter limitation is not backsliding since the increase would result in water quality standards being obtained and the revision is consistent with the Department's anti-degradation policy. In addition, the CBOD limits are being lowered in this reissuance. The daily minimum DO limit is 6.0 mg/L.

The pH daily minimum and daily maximum limits of 6.0 and 8.5 S.U, respectively, were developed to be supportive of the water-use classification of the receiving stream. The Total Residual Chlorine (TRC) limits of 0.011 mg/L (monthly average) and 0.019 mg/L (daily maximum) are based on EPA's recommended water quality values and on the current Toxicity Rationale, which considers the available dilution in the receiving stream. In accordance with a letter dated August 11, 1998 from EPA Headquarters and a 1991 memorandum from EPA Region 4's Environmental Services Division (ESD), due to testing and method detection limitations, a Total Residual Chlorine measurement below 0.05 mg/L shall be considered below detection for compliance purposes. Monitoring for TRC is only applicable if chlorine is utilized for disinfection purposes.

The Department revised bacteriological criteria in ADEM Administrative Code R.335-6-10-.09. As a result, this permit includes E. coli limits and seasons that are consistent with the revised regulations. The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since Town Creek is classified as Fish & Wildlife, the 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 Total Suspended Solids (TSS) and TSS % removal limits of 30.0 mg/L monthly average and 85.0%, respectively, are based on the requirements of 40 CFR part 133.102 regarding Secondary Treatment. A minimum percent removal limit of 85.0% is imposed for CBOD also in accordance with 40 CFR 133.102 regarding Secondary Treatment.

This permit requires the Permittee to monitor and report the nutrient-related parameters of Total Kjeldahl Nitrogen (TKN), Nitrate plus Nitrite Nitrogen ($N0_2$+$N0_3$-N) 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 nutrient limits on this discharge.

Storm water runoff monitoring is being imposed by this permit based on 40 CFR Part 122. The designated outfall for storm water runoff monitoring is 002S. Storm water runoff is to be monitored annually.

Because this is a major facility (design capacity greater than 1 MGD) treating both municipal and industrial wastewater, chronic toxicity testing with two species (Ceriodaphnia and Pimephales) is being imposed on this permit. Toxicity testing is imposed for both survival and life-cycle impairment (i.e., growth and reproduction). Chronic toxicity at the IWC of 99 percent is required once per year during the month of August. The decreased IWC is not backsliding since the decrease would result in water quality standards being obtained and the revision is consistent with the Department's anti-degradation policy. If the toxicity tests of the effluent from Outfall 001 indicates chronic toxicity, then toxicity tests may be required to be conducted during the months of February, May, August and November.

Because this is a major facility treating both municipal and industrial wastewater, the Department completed a reasonable potential analysis (RPA) of the discharge based on the application data, DMR data, and background data from station TOWL-2. The RPA indicates whether pollutants in treated effluent have potential to contribute to excursions of Alabama's in-stream water quality standards. Based on the analytical data submitted by the Permittee, it appears reasonable potential may exist to cause an in-stream water quality criteria exceedance for mercury and copper. As a result, the Department is imposing monthly average and daily maximum discharge limitations for Total Recoverable Mercury of 0.012 µg/L and 2.4 µg/L, respectively. The Department is also imposing monthly average and daily maximum discharge limitations for Total Recoverable Copper of 21.2 µg/L and 31.4 µg/L, respectively.

The monitoring frequency for DO, pH, TSS, NH_3-N, TRC, E. coli and CBOD is five times per week. The monitoring frequency for Copper, TKN, $N0_2$+$N0_3$-N and TP is once per month. The monitoring frequency for Mercury is once per quarter. TSS % removal and CBOD % removal are to be calculated once per month. Flow is to be continuously monitored daily.

The segment of Town Creek, containing the discharge, is classified as a Tier I stream and is not on the most recent 303(d) list. However, the discharge is in close proximity to Swan Creek. Swan Creek is listed on the most recent 303(d) list for nutrient impairment. Nutrient monitoring is imposed in the reissuance so that sufficient information will be available regarding the nutrient contribution to this segment of Swan Creek for the purpose of TMDL development. The EPA is in

the process of developing a model for Swan Creek, which would aid in the development of a TMDL. Based on the information available at this time, it is not expected that this discharge is resulting in the nutrient impairment in the downstream segment of the receiving stream. Also, since this reissuance does not include an expansion, an increase in nutrients to this segment of Swan in the discharge is not expected. If additional data becomes available during the development of a TMDL that this source causes or contributes to the impairment, the Department will modify/reissue the Permit with the appropriate limits consistent with the TMDL. The facility's storm water runoff is not expected to contribute to the impairment. Swan Creek has an approved TMDL for Low Dissolved Oxygen/Organic Loading (O.E./D.O.) that was finalized in February 2002. In May 2016, the Department completed a Use Classification Upgrade Report that presented information and evidence supporting the designated use upgrade of Swan Creek from the Agricultural and Industrial Water Supply (A&I) use to the Fish and Wildlife (F&W) stream use classification. The effluent limits provided in the May 27, 2020 WLA evaluation are reflective of the necessary limits for Athens WWTP to support the use class upgrade given in the 2016 report. Additionally, while the NH_3-N limits were increased from the previous Permit, the CBOD limits were decreased. Swan Creek also has an approved TMDL for Siltation. Per the TMDL, in general for sediment loads to the receiving streams, the point source discharge levels are negligible to the non-point sources. In addition, the point sources are generally composed of organic material and therefore would provide less direct impact to biological integrity (through settling and accumulation) than would direct soil loss to the streams. Present calculations do not show a need for siltation reduction of point sources under the Swan Creek Siltation TMDLs. The facility's storm water discharge is consistent with the assumptions in the TMDLs and are not expected to contribute to either impairment. Additionally, the facility is required to develop and implement a Storm Water Pollution Prevention Plan, which should help minimize pollutants in the storm water.

ADEM Administrative Rule 335-6-10-.12 requires applicants for 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 water body, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

Prepared by: Dustin Stokes

Waste Load Allocation Summary

REQUEST INFORMATION

Request Number: 3447

From:	Nicholas Lowe	**In Branch/Section**	Municipal		
Date Submitted	11/30/2017	**Date Required**	12/30/2017	**FUND Code**	605
Date Permit application received by NPDES program					
Receiving Waterbody	Town Creek				
Previous Stream Name					
Facility Name	Athens WWTP	(Name of Discharger-WQ will use to file)			
		Previous Discharger Name			
River Basin	Tennessee	**Outfall Latitude**	34.770046	(decimal degrees)	
***County**	Limestone	**Outfall Longitude**	-86.948631	(decimal degrees)	
Permit Number	AL0020206	**Permit Type**			
		Permit Status	Active		
		Type of Discharger	MUNICIPAL		
Do other discharges exist that may impact the model?	☑ Yes ☐ No				

If yes, impacting dischargers names.	Swan Creek Community	**Impacting dischargers permit numbers.**	AL0058760

Existing Discharge Design Flow	9	MGD	**Note: The flow rates given should be those requested for modeling.**
Proposed Discharge Design Flow		MGD	

Comments included ☑ Yes ☐ No

Information Verified By: JJM

Year File Was Created: 1984

Response ID Number: 1635

Lat/Long Method:

12 Digit HUC Code	060300021101		
Use Classification	F&W		
Site Visit Completed?	☐ Yes ☑ No	**Date of Site Visit**	
Waterbody Impaired?	☐ Yes ☑ No	**Date of WLA Response**	5/27/2020
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	8.41	**Miles**	**Date of Allocation**	5/27/2020	
Name of Model Used	SWQM		**Allocation Type**	2 Seasons	
Model Completed by	James Mooney		**Type of Model Used**	Calibrated	
Allocation Developed by	Water Quality Branch				

Waste Load Allocation Summary

	Conventional Parameters		Other Parameters	
Annual Effluent Limits	Qw 9 MGD	Qw 9 MGD	Qw MGD	Qw MGD
	Season Summer	Season Winter	Season	Season
Qw MGD	From Apr	From Nov	From	From
	Through Oct	Through Mar	Through	Through
CBOD5	CBOD5 6	CBOD5 13	TP	TP
NH3-N	NH3-N 1	NH3-N 3.9	TN	TN
TKN	TKN	TKN	TSS	TSS
D.O.	D.O. 6	D.O. 6		

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

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	1	mg/l	1	mg/l
NH3-N	0.0075	mg/l	0.0075	mg/l
Temperature	28	°C	18	°C
pH	7	su	7	su

Hydrology at Discharge Location

Drainage Area Qualifier				Method Used to Calculate
Exact	Drainage Area	9.63	sq mi	
	Stream 7Q10	0.23	cfs	Bingham Equation
	Stream 1Q10	0.17	cfs	75%of 7Q10
	Stream 7Q2	0.8	cfs	Bingham Equation
	Annual Average	20.51	cfs	ADEM Estimate w/USGS Gage Data

Comments and/or Notations A seasonal wasteload allocation was completed to determine the necessary effluent limitations for Athens WWTP that would be protective of the upgraded Swan Creek use classification of Fish and Wildlife (finalized May 2016) and maintain instream dissolved oxygen concentrations above 5 mg/l.

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	**Athens WWTP**	
NPDES Permit Number:	**AL0020206**	
Receiving Stream:	**Town Creek**	
Facility Design Flow (Q_w):	**9.000 MGD**	
Receiving Stream $7Q_{10}$:	**0.230 cfs**	
Receiving Stream $1Q_{10}$:	**0.170 cfs**	
Winter Headwater Flow (WHF):	**0.80 cfs**	
Summer Temperature for CCC:	**28 deg. Celsius**	
Winter Temperature for CCC:	**18 deg. Celsius**	
Headwater Background NH_3-N Level:	**0.01 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.

$$\text{Stream Dilution Ration (SDR)} = \frac{Qw}{7Q10 + Qw} = \textbf{98.38\%}$$

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.

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

$$= \textbf{98.38\%} \quad \textbf{Effluent-Dominated, CCC Applies}$$

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**	**2.48 mg/l**
Allowable Winter Instream NH_3-N:	**36.09 mg/l**	**4.72 mg/l**

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

$$= \textbf{2.6 mg/l NH3-N at 7Q10}$$

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

$$= \textbf{5.0 mg/l NH3-N at Winter Flow}$$

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	**1.00 mg/l NH3-N**	**2.60 mg/l NH3-N**
Winter	**3.90 mg/l NH3-N**	**5.00 mg/l NH3-N**

Summer: The DO based limit of 1.00 mg/l NH3-N applies.
Winter: The DO based limit of 3.90 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.

Chronic toxicity testing is required

Instream Waste Concentration (IWC) = $\frac{Qw}{7Q10 + Qw}$ = **98.38%**

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 average (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 (November through April):	Not applicable	**Not applicable**
Monthly limit as geometric mean (May through October):	Not applicable	**Not applicable**
Daily Max (November through April):	Not applicable	**Not applicable**
Daily Max (May through October):	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:	0.011 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	0.019 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: Dustin Stokes Date: 8/19/2022

Facility Name: Athens WWTP

NPDES No.: AL0020206

6/13/2017

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

ID	Pollutant	Carcinogen "yes"	Type	Background from upstream source (C_{d2}) Daily Max	Background from upstream source (C_{d2}) Monthly Ave	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)
				µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
1	Antimony		Metals	0	0	0	0	2.25	0.75	-
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	20.4	3.4	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.206
9	Mercury**		Metals	0	0	0	0	0.0106	0.00262	0.302
10	Nickel**		Metals	0	0	0	0	3.32	2.21	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	52.7	33.7	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	93800	89833	160000	145000	-
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	1.09	0.36	-
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	**Trichloroethylene***	YES	VOC	0	0	0	0	0	0	-
53	**Vinyl Chloride***	YES	VOC	0	0	0	0	0	0	-
54	P-Chloro-M-Cresol		Acids	0	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	0	-
56	2, 4-Dichlorophenol		Acids	0	0	0	0	0	0	-
57	2, 4-Dimethylphenol		Acids	0	0	0	0	0	0	-
58	4, 6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0	-
59	2, 4-Dinitrophenol		Acids	0	0	0	0	0	0	-
60	**4,6-Dinto-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	-

9	Enter Q_d = wastewater discharge flow from facility (MGD)
13.925061	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)
0.23	Enter 7Q10, Q_s = background stream flow in cfs above point of discharge
0.17	Enter or estimated, 1Q10, Q_s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
20.51	Enter Mean Annual Flow, Q_s = background stream flow in cfs above point of discharge
0.8	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_s +Qd2+Q_d	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)
89	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

August 19, 2022

Facility Name: Athens WWTP

NPDES No.: AL0020206

Freshwater F&W classification.						Freshwater Acute (µg/l) Q_s = 1Q10						Freshwater Chronic (µg/l) Q_s = 7Q10				Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average; Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (Cd2) Daily Max	Max Daily Discharge as reported by Applicant (C_{dmax})	Water Quality Criteria (C_r)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background from upstream source (Cd2) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})	Water Quality Criteria (C_r)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_r)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony			0	2.25	-	-	-	-	0	0.75	-	-	-	-	3.73E+02	3.79E+02	7.59E+01	No
2	Arsenic		YES	0	0	592.334	599.566	119.913	No	0	0	261.324	265.640	53.128	No	3.03E-01	7.49E-01	1.50E-01	No
3	Berylium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	7.619	7.712	1.542	No	0	0	0.961	0.977	0.195	No	-	-	-	-
5	Chromium/ Chromium III			0	0	2466.165	2496.293	499.259	No	0	0	320.800	326.099	65.220	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	16.195	3.239	No	0	0	11.000	11.182	2.236	No	-	-	-	-
7	Copper	YES		0	20.4	31.035	31.414	6.283	Yes	0	3.4	20.894	21.239	4.248	No	-	-	-	-
8	Lead			0	0	276.082	279.452	55.890	No	0	0	10.759	10.936	2.187	No	-	-	-	-
9	Mercury	YES		0	0.0106	2.400	2.429	0.486	No	0	0.00262	0.012	0.012	0.002	Yes	4.24E-02	4.31E-02	8.62E-03	No
10	Nickel			0	3.32	840.151	850.407	170.081	No	0	2.21	93.315	94.856	18.971	No	9.93E+02	1.01E+03	2.02E+02	No
11	Selenium			0	0	20.000	20.244	4.049	No	0	0	5.000	5.083	1.017	No	2.43E+03	2.47E+03	4.94E+02	No
12	Silver			0	0	2.633	2.665	0.533	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	2.78E-01	5.56E-02	No
14	Zinc			0	52.7	321.706	325.634	65.127	No	0	33.7	324.338	329.695	65.939	No	1.49E+04	1.51E+04	3.03E+03	No
15	Cyanide			0	0	22.000	22.269	4.454	No	0	0	5.200	5.286	1.057	No	9.33E+03	9.49E+03	1.90E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	160000	-	-	-	-	0	145000	-	-	-	-	-	-	-	-
18	Acrolein			0	0	-	-	-	-	0	0	-	-	-	-	5.43E+00	5.52E+00	1.10E+00	No
19	Acrylonitrile		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.44E-01	3.56E-01	7.12E-02	No
20	Aldrin		YES	0	0	3.000	3.037	0.607	No	0	0	-	-	-	-	2.94E-05	7.27E-05	1.45E-05	No
21	Benzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.55E+01	3.83E+01	7.65E+00	No
22	Bromoform		YES	0	0	-	-	-	-	0	0	-	-	-	-	7.88E+01	1.95E+02	3.90E+01	No
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.57E-01	2.37E+00	4.73E-01	No
24	Chlordane		YES	0	0	2.400	2.429	0.486	No	0	0	0.0043	0.004	0.001	No	4.73E-04	1.17E-03	2.34E-04	No
25	Clorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	9.06E+02	9.21E+02	1.84E+02	No
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	7.41E+00	1.83E+01	3.66E+00	No
27	Chloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
29	ChloroForm		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.02E+02	2.52E+02	5.04E+01	No
30	4,4' - DDD		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.81E-04	4.49E-04	8.97E-05	No
31	4,4' - DDE		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.28E-04	3.17E-04	6.33E-05	No
32	4,4' - DDT		YES	0	0	1.100	1.113	0.223	No	0	0	0.001	0.001	0.000	No	1.28E-04	3.17E-04	6.33E-05	No
33	Dichlorobromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.00E+01	2.48E+01	4.96E+00	No
34	1, 1-Dichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
35	1, 2-Dichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.14E+01	5.28E+01	1.06E+01	No
36	Trans-1, 2-Dichloro-Ethylene			0	0	-	-	-	-	0	0	-	-	-	-	5.91E+03	6.00E+03	1.20E+03	No
37	1, 1-Dichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	4.17E+03	1.03E+04	2.06E+03	No
38	1, 2-Dichloropropane			0	0	-	-	-	-	0	0	-	-	-	-	6.49E+00	6.63E+00	1.73E+00	No
39	1, 3-Dichloro-Propylene			0	0	-	-	-	-	0	0	-	-	-	-	1.23E+01	1.25E+01	2.50E+00	No
40	Dieldrin		YES	0	0	0.240	0.243	0.049	No	0	0	0.056	0.057	0.011	No	3.12E-05	7.72E-05	1.54E-05	No
41	Ethylbenzene			0	0	-	-	-	-	0	0	-	-	-	-	1.24E+03	1.26E+03	2.53E+02	No
42	Methyl Bromide			0	0	-	-	-	-	0	0	-	-	-	-	8.71E+02	8.85E+02	1.77E+02	No
43	Methyl Chloride			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.46E+02	8.55E+02	1.71E+02	No
45	1, 1, 2, 2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.33E+00	5.77E+00	1.15E+00	No
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.92E+00	4.74E+00	9.48E-01	No
47	Toluene			0	1.09	-	-	-	-	0	0.36	-	-	-	-	8.72E+03	8.87E+03	1.77E+03	No
48	Toxaphene		YES	0	0	0.730	0.739	0.148	No	0	0	0.0002	0.000	0.000	No	1.62E-04	4.00E-04	8.01E-05	No
49	Tributyltin (TBT)		YES	0	0	0.460	0.466	0.093	No	0	0	0.072	0.073	0.015	No	-	-	-	-
50	1, 1, 1-Trichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
51	1, 1, 2-Trichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.10E+00	2.25E+01	4.50E+00	No
52	Trichlorethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.75E+01	4.32E+01	8.64E+00	No
53	Vinyl Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.42E+00	3.52E+00	7.05E-01	No
54	P-Chloro-M-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
55	2-Chlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	8.71E+01	8.85E+01	1.77E+01	No
56	2, 4-Dichlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	1.72E+02	1.75E+02	3.50E+01	No
57	2, 4-Dimethylphenol			0	0	-	-	-	-	0	0	-	-	-	-	4.98E+02	5.06E+02	1.01E+02	No
58	4, 6-Dinitro-O-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
59	2, 4-Dinitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	3.11E+03	3.16E+03	6.32E+02	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.65E+02	4.09E+02	8.18E+01	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.67E-08	6.59E-08	1.32E-08	No
62	2-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
63	4-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
64	Pentachlorophenol		YES	0	0	8.723	8.830	1.766	No	0	0	6.693	6.803	1.361	No	1.77E+00	4.37E+00	8.74E-01	No
65	Phenol			0	0	-	-	-	-	0	0	-	-	-	-	5.00E+05	5.08E+05	1.02E+05	No
66	2, 4, 6-Trichlorophenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.41E+00	3.50E+00	6.99E-01	No
67	Acenaphthene			0	0	-	-	-	-	0	0	-	-	-	-	5.79E+02	5.88E+02	1.18E+02	No
68	Acenaphthylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
69	Anthracene			0	0	-	-	-	-	0	0	-	-	-	-	2.33E+04	2.37E+04	4.74E+03	No
70	Benzidine			0	0	-	-	-	-	0	0	-	-	-	-	1.16E-04	1.18E-04	2.36E-05	No
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	2.63E-02	5.27E-03	No
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	2.63E-02	5.27E-03	No
73	Benzo(b)fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.08E-02	2.17E-03	No
74	Benzo(GHI)Perylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.08E-02	2.17E-03	No
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.07E-01	7.60E-01	1.52E-01	No
78	Bis (2-Chloroiso-Propyl) Ether			0	0	-	-	-	-	0	0	-	-	-	-	3.78E+04	3.84E+04	7.68E+03	No
79	Bis (2-Ethylhexyl) Phthalate		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.28E+00	3.17E+00	6.34E-01	No
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
81	Butyl Benzyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	1.13E+03	1.15E+03	2.29E+02	No
82	2-Chloronaphthalene			0	0	-	-	-	-	0	0	-	-	-	-	9.24E+02	9.39E+02	1.88E+02	No
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
84	Chrysene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	2.63E-02	5.27E-03	No
85	Di-N-Butyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	2.62E+03	2.67E+03	5.33E+02	No
86	Di-N-Octyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
87	Dibenzo(A,H)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	2.63E-02	5.27E-03	No
88	1, 2-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	7.55E+02	7.68E+02	1.54E+02	No
89	1, 3-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	5.62E+02	5.72E+02	1.14E+02	No
90	1, 4-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	1.12E+02	1.14E+02	2.29E+01	No
91	3, 3-Dichlorobenzidine		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.66E-02	4.11E-02	8.22E-03	No
92	Diethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	2.56E+04	2.60E+04	5.20E+03	No
93	Dimethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	6.48E+05	6.59E+05	1.32E+05	No
94	2, 4-Dinitrotoluene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.98E+00	4.90E+00	9.80E-01	No
95	2, 6-Dinitrotoluene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
96	1,2-Diphenylhydrazine			0	0	-	-	-	-	0	0	-	-	-	-	1.17E-01	1.19E-01	2.38E-02	No
97	Endosulfan (alpha)		YES	0	0	0.22	0.223	0.045	No	0	0	0.056	0.057	0.011	No	5.19E+01	1.28E+02	2.56E+01	No
98	Endosulfan (beta)		YES	0	0	0.22	0.223	0.045	No	0	0	0.056	0.057	0.011	No	5.19E+01	1.28E+02	2.56E+01	No
99	Endosulfan sulfate		YES	0	0	-	-	-	-	0	0	-	-	-	-	5.19E+01	1.28E+02	2.56E+01	No
100	Endrin		YES	0	0	0.086	0.087	0.017	No	0	0	0.036	0.037	0.007	No	3.53E-02	8.72E-02	1.74E-02	No
101	Endrin Aldeyhde		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.76E-01	4.36E-01	8.72E-02	No
102	Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	8.12E+01	8.25E+01	1.65E+01	No
103	Fluorene			0	0	-	-	-	-	0	0	-	-	-	-	3.11E+03	3.16E+03	6.32E+02	No
104	Heptachlor		YES	0	0	0.52	0.526	0.105	No	0	0	0.0038	0.004	0.001	No	4.63E-05	1.14E-04	2.29E-05	No
105	Heptachlor Epoxide		YES	0	0	0.52	0.526	0.105	No	0	0	0.0038	0.004	0.001	No	2.29E-05	5.66E-05	1.13E-05	No
106	Hexachlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.68E-04	4.15E-04	8.30E-05	No
107	Hexachlorobutadiene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.08E+01	2.66E+01	5.32E+00	No
108	Hexachlorocyclohexan (alpha)		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.85E-03	7.05E-03	1.41E-03	No
109	Hexachlorocyclohexan (beta)		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.97E-03	2.47E-02	4.93E-03	No
110	Hexachlorocyclohexan (gamma)		YES	0	0	0.95	0.962	0.192	No	0	0	-	-	-	-	1.08E+00	2.66E+00	5.33E-01	No
111	HexachlorocycloPentadiene			0	0	-	-	-	-	0	0	-	-	-	-	6.45E+02	6.56E+02	1.31E+02	No
112	Hexachloroethane			0	0	-	-	-	-	0	0	-	-	-	-	1.92E+00	1.95E+00	3.90E-01	No
113	Indeno(1, 2, 3-CK)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	2.63E-02	5.27E-03	No
114	Isophorone			0	0	-	-	-	-	0	0	-	-	-	-	5.61E+02	5.70E+02	1.14E+02	No
115	Naphthalene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
116	Nitrobenzene			0	0	-	-	-	-	0	0	-	-	-	-	4.04E+02	4.10E+02	8.21E+01	No
117	N-Nitrosodi-N-Propylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.95E-01	7.29E-01	1.46E-01	No
118	N-Nitrosodimethylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.76E+00	4.35E+00	8.70E-01	No
119	N-Nitrosodiphenylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.50E+00	8.66E+00	1.73E+00	No
120	PCB-1016		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	9.25E-05	1.85E-05	No
121	PCB-1221		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	9.25E-05	1.85E-05	No
122	PCB-1232		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	9.25E-05	1.85E-05	No
123	PCB-1242		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	9.25E-05	1.85E-05	No
124	PCB-1248		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	9.25E-05	1.85E-05	No
125	PCB-1254		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	9.25E-05	1.85E-05	No
126	PCB-1260		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	9.25E-05	1.85E-05	No
127	Phenanthrene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
128	Pyrene			0	0	-	-	-	-	0	0	-	-	-	-	2.33E+03	2.37E+03	4.74E+02	No
129	1, 2, 4-Trichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	4.09E+01	4.16E+01	8.32E+00	No

Athens WWTP
AL0020206

Report End Date	Copper (ug/L)
9/30/2016	2.4
10/31/2016	2.6
11/30/2016	2.4
12/31/2016	5.3
1/31/2017	5.61
2/28/2017	4.06
3/31/2017	3.7
4/30/2017	4.85
5/31/2017	2.61
6/30/2017	2.18
7/31/2017	2.6
8/31/2017	2
9/30/2017	2.39
10/31/2017	2.5
11/30/2017	2
12/31/2017	2.6
1/31/2018	3.84
2/28/2018	5.75
3/31/2018	1.5
4/30/2018	1.78
5/31/2018	2.65
6/30/2018	3.1
7/31/2018	4.2
8/31/2018	2
9/30/2018	2.9
10/31/2018	2.4
11/30/2018	2
12/31/2018	2
1/31/2019	1.3
2/28/2019	2.56
3/31/2019	1.96
4/30/2019	4.79
5/31/2019	1.06
6/30/2019	2.43
7/31/2019	1
8/31/2019	5.5
9/30/2019	10
10/31/2019	3
11/30/2019	5.5
12/31/2019	3.5
1/31/2020	1
2/29/2020	20.4
3/31/2020	10.6
4/30/2020	0.9
5/31/2020	2.52
6/30/2020	2.43
7/31/2020	10
8/31/2020	3
9/30/2020	2.7
10/31/2020	1.5
11/30/2020	2.4
12/31/2020	3.9
1/31/2021	4.7
2/28/2021	2.67
3/31/2021	1.8
4/30/2021	1.77
5/31/2021	1.56
6/30/2021	2.07
7/31/2021	2.2
8/31/2021	1.5
9/30/2021	5.6
10/31/2021	2.4
11/30/2021	4.2
12/31/2021	4.1
1/31/2022	2.12
2/28/2022	2.71
3/31/2022	2.16
4/30/2022	2.3
5/31/2022	1.89
6/30/2022	2.59
3/8/2018 app	3.32
12/5/2019 app	3.76
7/20/2020 app	4.72

Max	20.4
Avg	3.40

Athens WWTP
AL0020206

Report End Date	Mercury (ug/L)
12/31/2016	0.001
3/31/2017	0.0041
6/30/2017	0.00335
9/30/2017	0.0106
12/31/2017	0.0014
3/31/2018	0.00366
6/30/2018	0.0014
9/30/2018	0.00194
12/31/2018	0.00172
3/31/2019	0.00089
6/30/2019	0.00163
9/30/2019	0.00185
12/31/2019	0.00495
3/31/2020	0.0031
6/30/2020	0.0021
9/30/2020	0.00173
12/31/2020	0.00164
3/31/2021	0.00215
6/30/2021	0.00135
9/30/2021	0.00357
12/31/2021	0.00324
3/31/2022	0.00111
6/30/2022	0.00175

Max	**0.0106**
Avg	**0.00262**

Athens WWTP
AL0020206
Expanded Effluent Data Summary

Parameter	3/8/2018	12/5/2019	7/20/2020	Maximum	Average
Hardness as CaCO3	127	147	160	160	145
Antimony	0.00225	0.00000	0.00000	0.00225	0.00075
Copper	0.00332	0.00376	0.00472	0.00472	0.00393
Nickel	0.00190	0.00141	0.00332	0.00332	0.00221
Zinc	0.02700	0.02140	0.05270	0.05270	0.03370
Toulene	0.00109	0.00000	0.00000	0.00109	0.00036

*All values entered in mg/L

Athens WWTP
AL0020206

Sample Date	Available Cyanide
5/25/2022 App data	0
6/8/2022 App data	0
6/22/2022 App data	0

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.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL 0020206	AL 0020206	Athens WWTP	

Form 2A NPDES | **EPA**

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

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MUNICIPAL SECTION

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

Facility Information

1.1 Facility name
Athens Wastewater Treatment Plant (WWTP)

Mailing address (street or P.O. box)
PO Box 1089

City or town	State	ZIP code
Athens	AL	35612

Contact name (first and last)	Title	Phone number	Email address
Virgil White	Superintendent	(256) 497-7451	vwhite@athens-utilities.com

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
942 East Sanderfer Road

City or town	State	ZIP code
Athens	AL	35611

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) AL 0020206	☐ 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
AL 0020206	AL 0020206	Athens WWTP	

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
Athens, AL	25000 to 30000	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			

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

Annual Average Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
6.3 mgd	6.6 mgd	7.3 mgd

Maximum Daily Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
19.7 mgd	21.1 mgd	22.9 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	

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MUNICIPAL SECTION

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			

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL 0020206	AL 0020206	Athens WWTP	

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
4,760,000 gpd

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

Our staff performs routine line inspections, and we are developing a master plan to address having a 3rd party firm measure flows, do smoke testing, and analyze priority sub-basins where I&I is of greatest issue.

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
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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 0011	Outfall Number 001Q	Outfall Number 001T
State	Alabama	Alabama	Alabama
County	Limestone	Limestone	Limestone
City or town	Athens	Athens	Athens
Distance from shore	0 ft.	0 ft.	0 ft.
Depth below surface	0 ft.	0 ft.	0 ft.
Average daily flow rate	6.7 mgd	6.7 mgd	6.7 mgd
Latitude	34° 46′ 12″ N	34° 46′ 12″ N	34° 46′ 12″ N
Longitude	86° 56′ 54″ W	86° 56′ 54″ W	86° 56′ 54″ 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 ____

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.

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Receiving Water Description

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

	Outfall Number 0011	Outfall Number 001Q	Outfall Number 001T
Receiving water name	Town Creek	Town Creek	Town Creek
Name of watershed, river, or stream system	Tennessee River	Tennessee River	Tennessee River
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	06030002		
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 0011	Outfall Number 001Q	Outfall Number 001T
Highest Level of Treatment (check all that apply per outfall)	☐ Primary ☐ Equivalent to secondary ☑ Secondary ☐ Advanced ☐ Other (specify)	☐ 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.

	Outfall Number 0011	Outfall Number 001Q	Outfall Number 001T
Disinfection type	Ultraviolet Light	Ultraviolet Light	Ultraviolet Light
Seasons used	All	All	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 001T		Outfall Number 001T	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Number of tests of discharge water		4		4		4
Number of tests of receiving water		0		0		0

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
	Passed 2017, 2018, and 2020 years with one week of analyses. The year 2019 was a strange year due to an invalid set due to lab issues and a set of analyses that ended in failure, but we passed two consecutive weeks of followup analyses as required by permit.

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: We strongly feel this set of 2019 samples were held too long and outside the proper temperature range prior to analyses being performed. Shipping via carrier, long hold times, and risk of temperature issues encountered going through Pace Analytical were eliminated through a change of laboratory to Guardian Systems We could easily reach Guardian Systems within a two hour drive and were able hand deliver the samples and coordinate things better.
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. We performed two extra toxicity screening analyses as required by NPDES with both resulting in passage for all parameters.
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
5	

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. ATHENS CODE DIVISION USE OF PUBLIC AND PRIVATE SEWERS GENERALLY.. Attached.
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

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
Jimmy Junkin	Water Services Department Manager
Signature: Jimmy Junkin	Date signed: 2/11/2021

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL 0020206	AL 0020206	Athens WWTP	0111

Form Approved 03/05/19
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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)	9.8	mg/L	3.4	mg/L	5/week	SM-5210B, 2011	1.0 ☐ ML ☑ MDL
~~Fecal coliform~~ E. coli	2420	MPN col/100mL	72	MPN col/100mL	5/week	Colilert Quanti Tray	1.0 ☐ ML ☑ MDL
Design flow rate	22.9	MGD	6.23	MGD	365/year		
pH (minimum)	6.3	mg/L					
pH (maximum)	8.1	mg/L					
Temperature (winter)	11.2	degrees C	20.4	degrees C	365/year		
Temperature (summer)	28	degrees C	20.4	degrees C	365/year		
Total suspended solids (TSS)	352.7	mg/L	9.7	mg/L	5/Week	SM-2540D,2011	2.0 ☐ 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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AL 0020206	AL 0020206	Athens WWTP	0011

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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)	4.1	mg/L	0.25	mg/L	5/week	EPA 350.1	0.015 ☐ ML ☑ MDL
Chlorine (total residual, TRC)[2]	NA	NA	NA	NA	NA	NA	NA ☐ ML ☐ MDL
Dissolved oxygen	12.6	mg/L	8.5	mg/L	365/year	SM4500-O G-2001	1.00 ☐ ML ☑ MDL
Nitrate/nitrite	6.13	mg/L	4.59	mg/L	3	300.0	0.0600 ☐ ML ☑ MDL
Kjeldahl nitrogen	3.67	mg/L	2.71	mg/L	3	4500-Norg C	1.5 ☐ ML ☑ MDL
Oil and grease	ND	mg/L	ND	mg/L	3	1664A	5.62 ☐ ML ☑ MDL
Phosphorus	3.19	mg/L	< 2.61	mg/L	3	EPA 365.3	1.00 ☐ ML ☑ MDL
Total dissolved solids	313	mg/L	269	mg/L	3	2540 C-2011	1.00 ☐ 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
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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 $CaCO_3$)	160	mg/L	145	mg/L	3	Calculated Result	2.50 ☐ ML ☑ MDL
Antimony, total recoverable	0.00225	mg/L	<0.00225	mg/L	3	200.8	0.00200 ☐ ML ☑ MDL
Arsenic, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.00100 ☐ ML ☑ MDL
Beryllium, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.00100 ☐ ML ☑ MDL
Cadmium, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.00100 ☐ ML ☑ MDL
Chromium, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.0200 ☐ ML ☑ MDL
Copper, total recoverable	0.00472	mg/L	0.00393	mg/L	3	200.8	0.00100 ☐ ML ☑ MDL
Lead, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.00200 ☐ ML ☑ MDL
Mercury, total recoverable	0.0106	ug/L	0.002879	ug/L	16	EPA 1631E	0.00050 ☐ ML ☑ MDL
Nickel, total recoverable	0.00332	mg/L	0.00221	mg/L	3	200.8	0.00200 ☐ ML ☑ MDL
Selenium, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.00200 ☐ ML ☑ MDL
Silver, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.00100 ☐ ML ☑ MDL
Thallium, total recoverable	ND	mg/L	ND	mg/L	3	200.8	0.00100 ☐ ML ☑ MDL
Zinc, total recoverable	0.0527	mg/L	0.0337	mg/L	3	200.8	0.0200 ☐ ML ☑ MDL
Cyanide	0.00608	mg/L	<0.00608	mg/L	3	ASTM D7511-12	0.00500 ☐ ML ☑ MDL
Total phenolic compounds	ND	mg/L	ND	mg/L	3	420.4	0.0400 ☐ ML ☑ MDL
Volatile Organic Compounds							
Acrolein	ND	mg/L	ND	mg/L	3	624.1	0.0500 ☐ ML ☑ MDL
Acrylonitrile	ND	mg/L	ND	mg/L	3	624.1	0.0100 ☐ ML ☑ MDL
Benzene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Bromoform	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL

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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	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Chlorobenzene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Chlorodibromomethane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☐ MDL
Chloroethane	ND	mg/L	ND	mg/L	3	624.1	0.00500 ☐ ML ☑ MDL
2-chloroethylvinyl ether	ND	mg/L	ND	mg/L	3	624.1	0.0500 ☐ ML ☑ MDL
Chloroform	ND	mg/L	ND	mg/L	3	624.1	0.00500 ☐ ML ☑ MDL
Dichlorobromomethane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,1-dichloroethane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,2-dichloroethane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
trans-1,2-dichloroethylene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,1-dichloroethylene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,2-dichloropropane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,3-dichloropropylene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☐ MDL
Ethylbenzene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Methyl bromide	ND	mg/L	ND	mg/L	3	624.1	0.00500 ☐ ML ☑ MDL
Methyl chloride	ND	mg/L	ND	mg/L	3	624.1	0.00250 ☐ ML ☑ MDL
Methylene chloride	ND	mg/L	ND	mg/L	3	624.1	0.00500 ☐ ML ☑ MDL
1,1,2,2-tetrachloroethane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Tetrachloroethylene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Toluene	0.00109	mg/L	<0.00109	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,1,1-trichloroethane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,1,2-trichloroethane	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL

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	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Vinyl chloride	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
Acid-Extractable Compounds							
p-chloro-m-cresol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
2-chlorophenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
2,4-dichlorophenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
2,4-dimethylphenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
4,6-dinitro-o-cresol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
2,4-dinitrophenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
2-nitrophenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☑ ML ☐ MDL
4-nitrophenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Pentachlorophenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☐ MDL
Phenol	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
2,4,6-trichlorophenol	ND	mg/L	ND	mg/L	3	625.1	0..0100 ☐ ML ☑ MDL
Base-Neutral Compounds							
Acenaphthene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Acenaphthylene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Anthracene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Benzidine	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Benzo(a)anthracene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Benzo(a)pyrene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
3,4-benzofluoranthene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL

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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	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Benzo(k)fluoranthene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Bis (2-chloroethoxy) methane	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Bis (2-chloroethyl) ether	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Bis (2-chloroisopropyl) ether	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Bis (2-ethylhexyl) phthalate	ND	mg/L	ND	mg/L	3	625.1	0.00300 ☐ ML ☑ MDL
4-bromophenyl phenyl ether	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Butyl benzyl phthalate	ND	mg/L	ND	mg/L	3	625.1	0.00300 ☐ ML ☑ MDL
2-chloronaphthalene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
4-chlorophenyl phenyl ether	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Chrysene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
di-n-butyl phthalate	ND	mg/L	ND	mg/L	3	625.1	0.00300 ☐ ML ☑ MDL
di-n-octyl phthalate	ND	mg/L	ND	mg/L	3	625.1	0.00300 ☐ ML ☑ MDL
Dibenzo(a,h)anthracene	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
1,2-dichlorobenzene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,3-dichlorobenzene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
1,4-dichlorobenzene	ND	mg/L	ND	mg/L	3	624.1	0.00100 ☐ ML ☑ MDL
3,3-dichlorobenzidine	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Diethyl phthalate	ND	mg/L	ND	mg/L	3	625.1	0.00300 ☐ ML ☑ MDL
Dimethyl phthalate	ND	mg/L	ND	mg/L	3	625.1	0.00300 ☐ ML ☑ MDL
2,4-dinitrotoluene	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
2,6-dinitrotoluene	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL

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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	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Fluoranthene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Fluorene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Hexachlorobenzene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Hexachlorobutadiene	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Hexachlorocyclo-pentadiene	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Hexachloroethane	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Indeno(1,2,3-cd)pyrene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Isophorone	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Naphthalene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Nitrobenzene	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☑ ML ☑ MDL
N-nitrosodi-n-propylamine	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☑ ML ☑ MDL
N-nitrosodimethylamine	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
N-nitrosodiphenylamine	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Phenanthrene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
Pyrene	ND	mg/L	ND	mg/L	3	625.1	0.00100 ☐ ML ☑ MDL
1,2,4-trichlorobenzene	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ 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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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.							
(S) Toulene-d8	108	mg/L	< 108	mg/L	3	624.1	80.0 ☐ ML ☑ MDL
(S) Dibromofluoromethane	96.2	mg/L	< 96.2	mg/L	3	624.1	76.0 ☐ ML ☑ MDL
(S) a,a,a-Trifuorotoluene	100	mg/L	<100	mg/L	3	624.1	80.0 ☐ ML ☑ MDL
(S) 4-Bromofluorobenzene	110	mg/L	105	mg/L	3	624.1	80.0 ☐ ML ☑ MDL
(S) 1,2-Dichloroethane-d4	103	mg/L	< 98.6	mg/L	3	624.1	70.0 ☐ ML ☑ MDL
(S) 2-Fluorophenol	43.2	mg/L	32.8	mg/L	3	625.1	10.0 ☐ ML ☑ MDL
(S) Phenol-d5	30.6	mg/L	23.0	mg/L	3	625.1	8.00 ☐ ML ☑ MDL
(S) Nitrobenzene-d5	56	mg/L	46.6	mg/L	3	625.1	15.0 ☐ ML ☑ MDL
(S) 2-Fluorobiphenol	64.1	mg/L	53.6	mg/L	3	625.1	22.0 ☐ ML ☑ MDL
(S) 2,4,6-Tribromophenol	93.4	mg/L	79.9	mg/L	3	625.1	10.0 ☐ ML ☑ MDL
(S) p-Terphenyl-d14	77.5	mg/L	68.0	mg/L	3	625.1	29.0 ☐ ML ☑ MDL
2,2-Oxybis(1-Chloropropane)	ND	mg/L	ND	mg/L	3	625.1	0.0100 ☐ ML ☑ MDL
Calcium	55.2	mg/L	49.7	mg/L	3	200.7	1.00 ☐ ML ☑ MDL
Magnesium	5.43	mg/L	5.00	mg/L	3	200.7	1.00 ☐ 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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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 2	Test Number 3
Test species	Ceriodaphnia Dubia	Primephales Promelas	Primephales Promelas
Age at initiation of test	<24 hrs	<24 hrs	<24 hrs
Outfall number	001T	001T	001T
Date sample collected	08/21/2017	08/23/2017	08/25/2017
Date test started	08/22/2017	08/24/2017	08/26/2017
Duration	8/22-23/2017 3 brood	8/25-26/2017 3brood	8/26-28/2017 3 brood
Toxicity Test Methods			
Test method number	1002.0	1002.0	1002.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

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	NA %	NA %	NA %
LC_{50}	NA	NA	NA
95% confidence interval	NA %	NA %	NA %
Control percent survival	NA %	NA %	NA %

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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	0.307 %		0.307 %		0.307 %	
Control percent survival	100 %		100 %		100 %	
Other (describe)	NA		NA		NA	
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)?	07/26/2017		07/26/2017		07/26/2017	
Other (describe)	7/26 through 8/1/2017		7/26 through 8/1/2017		7/26 through 8/1/2017	

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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 2	Test Number 3
Test Information			
Test species	PImephales Promelas	Primephales Promelas	Primephales Promelas
Age at initiation of test	<48hrs	<48hrs	<48hrs
Outfall number	001T	001T	001T
Date sample collected	08/21/2017	08/23/2017	08/25/2017
Date test started	08/22/2017	08/24/2017	08/26/2017
Duration	8/22-23/2017	8/25-26/2017	8/26-28/2017
Toxicity Test Methods			
Test method number	1000.0	1000.0	1000.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	0.307 %		0.307 %		0.307 %	
Control percent survival	100 %		100 %		97.5 %	
Other (describe)	NA		NA		NA	
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)?	07/26/2017		07/26/2017		07/26/2017	
Other (describe)	7/26 through 8/1/2017		7/26 through 8/1/2017		7/26 through 8/1/2017	

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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 2	Test Number 3
Test species	Ceriodaphnia Dubia	Ceriodaphnia Dubia	Ceriodaphnia Dubia
Age at initiation of test	<24 hrs	<24 hrs	<24 hrs
Outfall number	001T	001T	001T
Date sample collected	08/06/2018	08/08/2018	08/10/2018
Date test started	08/07/2018	08/09/2018	08/11/2018
Duration	3 brood	3brood	3 brood
Toxicity Test Methods			
Test method number	1002.0	1002.0	1002.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	0.2935 %		0.2935 %		0.2935 %	
Control percent survival	100 %		100 %		100 %	
Other (describe)	NA		NA		NA	
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)?	07/03/2018		07/03/2018		07/03/2018	
Other (describe)	7/3 through 7/9/2018		7/3 through 7/9/2018		7/3 through 7/9/2018	

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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 2	Test Number 3
Test Information			
Test species	Primephales Promelas	Primephales Promelas	Primephales Promelas
Age at initiation of test	24-36 hrs	24-36 hrs	24-36 hrs
Outfall number	001T	001T	001T
Date sample collected	08/06/2018	08/08/2018	08/10/2018
Date test started	08/07/2018	08/09/2018	08/11/2018
Duration	7 day	7 day	7 day
Toxicity Test Methods			
Test method number	1000.0	1000.0	1000.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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

	Test Number 1		Test Number 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	0.4300 %		0.4300 %		0.4300 %	
Control percent survival	100 %		100 %		100 %	
Other (describe)	NA		NA		NA	
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)?	07/03/2018		07/03/2018		07/03/2018	
Other (describe)	7/3 through 7/10/2018		7/3 through 7/10/2018		7/3 through 7/10/2018	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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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 2	Test Number 3
Test Information			
Test species	Ceriodaphnia Dubia	Ceriodaphnia Dubia	Ceriodaphnia Dubia
Age at initiation of test	<24 hrs	<24 hrs	<24 hrs
Outfall number	001T	001T	001T
Date sample collected	08/05/2019	08/07/2019	08/09/2019
Date test started	08/06/2019	08/08/2019	08/10/2019
Duration	3 Brood	3 Brood	3 Brood
Toxicity Test Methods			
Test method number	1002.0	1002.0	1002.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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
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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number	Form Approved 03/05/19 OMB No. 2040-0004
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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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	invalid %		invalid %		invalid %	
IC_{25}	0.2238 %		0.2238 %		0.2238 %	
Control percent survival	invalid %		invalid %		invalid %	
Other (describe)	NA		NA		NA	
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)?	08/06/2019		08/06/2019		08/06/2019	
Other (describe)	8/06 through 8/13/2019		8/06 through 8/13/2019		8/06 through 8/13/2019	

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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 2	Test Number 3
Test Information			
Test species	Primephales Promelas	Primephales Promelas	Primephales Promelas
Age at initiation of test	24-36 hrs	24-36 hrs	24-36 hrs
Outfall number	001T	001T	001T
Date sample collected	08/05/2019	08/07/2019	08/09/2019
Date test started	08/06/2019	08/08/2019	08/10/2019
Duration	7 day	7 day	7 day
Toxicity Test Methods			
Test method number	1000.0	1000.0	1000.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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
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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% conficence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	invalid %		invalid %		invalid %	
IC_{25}	0.4300 %		0.4300 %		0.4300 %	
Control percent survival	invalid %		invalid %		invalid %	
Other (describe)	NA		NA		NA	
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)?	08/13/2019		08/13/2019		08/13/2019	
Other (describe)	8/13 through 8/20/2019		8/13 through 8/20/2019		8/13 through 8/20/2019	

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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	invalid %		invalid %		invalid %	
IC_{25}	0.4587 %		0.4587 %		0.4587 %	
Control percent survival	invalid %		invalid %		invalid %	
Other (describe)	NA		NA		NA	
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)?	08/13/2019		08/13/2019		08/13/2019	
Other (describe)	8/13 through 8/20/2019		8/13 through 8/20/2019		8/13 through 8/20/2019	

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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 2	Test Number 3
Test Information			
Test species	Ceriodaphnia Dubia	Ceriodaphnia Dubia	Ceriodaphnia Dubia
Age at initiation of test	<24 hrs	<24 hrs	<24 hrs
Outfall number	001T	001T	001T
Date sample collected	08/26/2019	08/28/2019	08/30/2019
Date test started	08/27/2019	08/29/2019	08/31/2019
Duration	3 Brood	3 Brood	3 Brood
Toxicity Test Methods			
Test method number	1002.0	1002.0	1002.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
Parameters Tested						
Check the parameters tested.	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☑ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☑ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☑ Dissolved oxygen

	Test Number 1	Test Number 2	Test Number 3
Acute Test Results			
Percent survival in 100% effluent	NA %	NA %	NA %
LC_{50}	NA	NA	NA
95% confidence interval	NA %	NA %	NA %
Control percent survival	NA %	NA %	NA %

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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	failed %		failed %		failed %	
IC_{25}	0.2238 %		0.2238 %		0.2238 %	
Control percent survival	invalid %		invalid %		invalid %	
Other (describe)	100% Survival, Failed Reproduction		100% Survival, Failed Reproduction		100% Survival, Failed Reproduction	
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)?	08/06/2019		08/06/2019		08/06/2019	
Other (describe)	8/06 through 8/12/2019		8/06 through 8/12/2019		8/06 through 8/12/2019	

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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 2	Test Number 3
Test species	Pimephales Promelas	Pimephales Promelas	Pimephales Promelas
Age at initiation of test	24-36 hrs	24-36 hrs	24-36 hrs
Outfall number	001T	001T	001T
Date sample collected	08/26/2019	08/28/2019	08/30/2019
Date test started	08/27/2019	08/29/2019	08/31/2019
Duration	7 day	7 day	7 day
Toxicity Test Methods			
Test method number	1000.0	1000.0	1000.0
Manual title	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)	EPA Methodology (Chronic Manual)
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	EPA-821-R-02-013	EPA-821-R-02-013	EPA-821-R-02-013
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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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 2	Test Number 3
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.	MHSFW	MHSFW	MHSFW
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

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	NA %	NA %	NA %
LC_{50}	NA	NA	NA
95% confidence interval	NA %	NA %	NA %
Control percent survival	NA %	NA %	NA %

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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	failed %		failed %		failed %	
IC_{25}	0.4587 %		0.4587 %		0.4587 %	
Control percent survival	invalid %		invalid %		invalid %	
Other (describe)	100% Survival, Failed Growth		100% Survival, Failed Growth		100% Survival, Failed Growth	
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)?	08/13/2019		08/13/2019		08/13/2019	
Other (describe)	8/13 through 8/20/2019		8/13 through 8/20/2019		8/13 through 8/20/2019	

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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 2	Test Number 3
Test Information			
Test species	Ceriodaphnia Dubia	Ceriodaphnia Dubia	Ceriodaphnia Dubia
Age at initiation of test	< 24 hrs	< 24 hrs	< 24 hrs
Outfall number	001T	001T	001T
Date sample collected	09/23/2019	09/25/2019	09/27/2019
Date test started	09/24/2019	09/26/2019	09/28/2019
Duration	7 day 3 brood	7 day 3 brood	7 day 3 brood
Toxicity Test Methods			
Test method number	1000.2	1000.2	1000.2
Manual title	EPA Chronic Manual	EPA Chronic Manual	EPA Chronic Manual
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	141-151	141-151	141-151
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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 2	Test Number 3
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.	MHSF	MHSF	MHSF
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	NA %		NA %		NA %	
Control percent survival	100 %		100 %		90 %	
Other (describe)	NA		NA		NA	
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)?	09/18/2019		09/18/2019		09/18/2019	
Other (describe)	9/18 through 9/25/2019		9/18 through 9/25/2019		9/18 through 9/25/2019	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL 0020206	AL 0020206	Athens WWTP	001T

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 2	Test Number 3
Test Information			
Test species	Pimephales Promelas	Pimephales Promelas	Pimephales Promelas
Age at initiation of test	< 24 hrs	< 24 hrs	< 24 hrs
Outfall number	001T	001T	001T
Date sample collected	09/23/2019	09/25/2019	09/27/2019
Date test started	09/24/2019	09/26/2019	09/28/2019
Duration	7 day	7 day	7 day
Toxicity Test Methods			
Test method number	1000.0	1000.0	1000.0
Manual title	EPA Chronic Manual	EPA Chronic Manual	EPA Chronic Manual
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	141-151	141-151	141-151
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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
AL 0020206	AL 0020206	Athens WWTP	001T

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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 2	Test Number 3
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.	MHSF	MHSF	MHSF
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
Parameters Tested						
Check the parameters tested.	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☑ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☑ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☑ Dissolved oxygen

	Test Number 1	Test Number 2	Test Number 3
Acute Test Results			
Percent survival in 100% effluent	NA %	NA %	NA %
LC_{50}	NA	NA	NA
95% confidence interval	NA %	NA %	NA %
Control percent survival	NA %	NA %	NA %

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL 0020206	AL 0020206	Athens WWTP	001T

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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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	NA %		NA %		NA %	
Control percent survival	100 %		100 %		97.5 %	
Other (describe)	NA		NA		NA	
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)?	09/18/2019		09/18/2019		09/18/2019	
Other (describe)	9/18 through 9/25/2019		9/18 through 9/25/2019		9/18 through 9/25/2019	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL 0020206	AL 0020206	Athens WWTP	001T

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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 2	Test Number 3
Test Information			
Test species	Ceriodaphnia Dubia	Ceriodaphnia Dubia	Ceriodaphnia Dubia
Age at initiation of test	< 24 hrs	< 24 hrs	< 24 hrs
Outfall number	001T	001T	001T
Date sample collected	09/30/2019	10/02/2019	10/04/2019
Date test started	10/01/2019	10/03/2019	10/05/2019
Duration	7 day 3 brood	7 day 3 brood	7 day 3 brood
Toxicity Test Methods			
Test method number	1000.2	1000.2	1000.2
Manual title	EPA Chronic Manual	EPA Chronic Manual	EPA Chronic Manual
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	141-151	141-151	141-151
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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

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 2	Test Number 3
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.	MHSF	MHSF	MHSF
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	NA %		NA %		NA %	
Control percent survival	100 %		100 %		90 %	
Other (describe)	NA		NA		NA	
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)?	10/22/2019		10/22/2019		10/22/2019	
Other (describe)	10/22 through 10/29/2019		10/22 through 10/29/2019		10/22 through 10/29/2019	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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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 2	Test Number 3
Test species	Pimephalus Promelas	Pimephalus Promelas	Pimephalus Promelas
Age at initiation of test	< 24 hrs	< 24 hrs	< 24 hrs
Outfall number	001T	001T	001T
Date sample collected	09/30/2019	10/02/2019	10/04/2019
Date test started	10/01/2019	10/03/2019	10/05/2019
Duration	7 day	7 day	7 day
Toxicity Test Methods			
Test method number	1000.0	1000.2	1000.0
Manual title	EPA Chronic Manual	EPA Chronic Manual	EPA Chronic Manual
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	141-151	141-151	141-151
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
Toxicity Type			
Indicate for each test whether the test was performed to asses acute or chronic toxicity, or both. (Check one response.)	☐ Acute ☑ Chronic ☐ Bcth	☐ Acute ☑ Chronic ☐ Both	☐ Acute ☑ Chronic ☐ Both

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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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 2	Test Number 3
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.	MHSF	MHSF	MHSF
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	NA %		NA %		NA %	
Control percent survival	100 %		100 %		90 %	
Other (describe)	NA		NA		NA	
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)?	10/22/2019		10/22/2019		10/22/2019	
Other (describe)	10/22 through 10/29/2019		10/22 through 10/29/2019		10/22 through 10/29/2019	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL 0020206	AL 0020206	Athens WWTP	001T

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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 2	Test Number 3
Test Information			
Test species	Ceriodaphnia Dubia	Ceriodaphnia Dubia	Ceriodaphnia Dubia
Age at initiation of test	< 24 hrs	< 24 hrs	< 24 hrs
Outfall number	001T	001T	001T
Date sample collected	08/10/2020	08/12/2020	08/14/2020
Date test started	08/11/2020	08/13/2020	08/15/2020
Duration	7 day 3 Brood	7 day 3 Brood	7 day 3 Brood
Toxicity Test Methods			
Test method number	1000.2	1000.2	1000.2
Manual title	EPA Chronic Manual	EPA Chronic Manual	EPA Chronic Manual
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	141-151	141-151	141-151
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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
AL 0020206	AL 0020206	Athens WWTP	001T

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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 2	Test Number 3
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.	MHSF	MHSF	MHSF
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		100 %	
IC_{25}	NA %		NA %		NA %	
Control percent survival	100 %		100 %		100 %	
Other (describe)	NA		NA		NA	
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)?	08/18/2020		08/18/2020		08/18/2020	
Other (describe)	8/18 through 8/25/2020		8/18 through 8/25/2020		8/18 through 8/25/2020	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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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 2	Test Number 3
Test Information			
Test species	Pimephalus Promelas	Pimephalus Promelas	Pimephalus Promelas
Age at initiation of test	< 24 hrs	< 24 hrs	< 24 hrs
Outfall number	001T	001T	001T
Date sample collected	08/10/2020	08/12/2020	08/14/2020
Date test started	08/11/2020	08/13/2020	08/15/2020
Duration	7 day	7 day	7 day
Toxicity Test Methods			
Test method number	1000.0	1000.2	1000.0
Manual title	EPA Chronic Manual	EPA Chronic Manual	EPA Chronic Manual
Edition number and year of publication	Fourth Edition, 2002	Fourth Edition, 2002	Fourth Edition, 2002
Page number(s)	141-151	141-151	141-151
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.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.	Immediately following U.V. Disinfection prior to the Cascade Aerator.
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
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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 2	Test Number 3
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.	MHSF	MHSF	MHSF
If receiving water, specify source.	NA	NA	NA
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.	100%	100%	100%

	Test Number 1		Test Number 2		Test Number 3	
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	NA %		NA %		NA %	
LC_{50}	NA		NA		NA	
95% confidence interval	NA %		NA %		NA %	
Control percent survival	NA %		NA %		NA %	

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 2		Test Number 3	
Acute Test Results Continued						
Other (describe)	NA		NA		NA	
Chronic Test Results						
NOEC	100 %		100 %		97.5 %	
IC_{25}	NA %		NA %		NA %	
Control percent survival	100 %		100 %		100 %	
Other (describe)	NA		NA		NA	
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)?	08/18/2020		08/18/2020		08/18/2020	
Other (describe)	8/18 through 8/25/2020		8/18 through 8/25/2020		8/18 through 8/25/2020	

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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 1	SIU 2	SIU 3
Name of SIU	American Leakless	Cast Products Incorporated	Federal Mogul
Mailing address (street or P.O. box)	136 Roy Long Road	18676 North Jefferson Street	1500 Freeman Avenue
City, state, and ZIP code	Athens, AL 35611	Athens, AL 35612	Athens, AL 35613
Description of all industrial processes that affect or contribute to the discharge.	Process wastewaters associated with coil coating operations	Process wastewaters associated with aluminum casting operations	Wastewater associated with the manufacture of automotive parts
List the principal products and raw materials that affect or contribute to the SIU's discharge.	The products that affect the wastewater are stainless and cold-rolled steel, which are the raw materials being coated	(AL356.1) Ingot Aluminum used for sand mold casting of OEM parts for marine, utility truck, trailer, emergency vehicle, and similar industrie.	Manufacturing of automotive and heavy engine gaskets and seals to include metal finishing and Zinc Phosphate Coating
Indicate the average daily volume of wastewater discharged by the SIU.	6353 gpd	4924 gpd	62000 gpd
How much of the average daily volume is attributable to process flow?	3000 gpd	2000 gpd	57000 gpd
How much of the average daily volume is attributable to non-process flow?	3353 gpd	2924 gpd	5000 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

RECEIVED

OCT 31 2022

MUNICIPAL SECTION

EPA Identification Number	NPDES Permit Number	Facility Name
AL 0020206	AL 0020206	Athens WWTP

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

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

	SIU 1	SIU 2	SIU 3
Under what categories and subcategories is the SIU subject?	40 CFR 465 Subpart A – Steel Basis Material Subcategory Pretreatment Standards for New Sources (PSNS)	40 CFR Part 464.16 A - Aluminum Casting Subcategory PSNS	40 CFR Part 433.15 Metal Finishing (PSES)
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
AL 0020206	AL 0020206	Athens WWTP

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

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

	SIU 4	SIU 5	SIU 0
Name of SIU	Indorama	Steelcase	
Mailing address (street or P.O. box)	1764 Wilkinson Street	214 Durham Drive	
City, state, and ZIP code	Athens, AL 35611	Athens, AL 35611	
Description of all industrial processes that affect or contribute to the discharge.	Process wastewaters associated with the production of polyethelene terephathalate (PET) flakes and pellets	Industrial wastewater resulting from metal finishing from operations	
List the principal products and raw materials that affect or contribute to the SIU's discharge.	The products that affect the wastewater are plastic chips and settleable plastics from ground drink bottles and etc.	The principle materials are sheet metal and coiled steel. Using more aluminum than in the past but still trying to grow that product line, a little galvanized steel, and mild detergent.	
Indicate the average daily volume of wastewater discharged by the SIU.	128000 gpd	62739 gpd	gpd
How much of the average daily volume is attributable to process flow?	74518 gpd	21000 gpd	gpd
How much of the average daily volume is attributable to non-process flow?	53482 gpd	41739 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

RECEIVED
OCT 31 2022
MUNICIPAL SECTION

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL 0020206	AL 0020206	Athens WWTP	

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

	SIU 4	SIU 5	SIU ___
Under what categories and subcategories is the SIU subject?	N/A	40 CFR Part 433.15 Metal Finishing PSES	
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.	We have received small floating plastic particles that pass through our screening systems, get into scum pits at the clarifiers, and cause issues with our treatment by doing so. We also have received settling plastics that clog our grit removal systems, prematurely fill our dumpsters, and make a mess if they pass through to the aeration systems.		

SOUTHERN ENVIRONMENTAL TESTING

June 02, 2022

Tim Norman
Athens WWTP
PO Box 1089
Athens, AL 35611

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
DC04238-01	Effluent Grab Outfall 0011	05/25/2022	05/25/2022

This cover page and the attached chain-of-custody record(s) are integral parts of your report. Southern Environmental Testing considers this report your official record. This information shall remain in Southern Environmental Testing's active database for a period of one (1) calendar year before archiving. Any replacement of this information after archiving may result in an administrative fee to cover the cost of retrieval.

If you have any questions or would like more information regarding these analyses, please call our Decatur facility at (256) 280-2567 or our Florence facility at (256) 740-5532.

Margaret Aiken

Margaret Aiken
Project Manager

Reviewed by:

3103 Northington Court
Florence, AL 35630
(256) 740-5532

PO Box 487
Florence, AL 35630
(256) 740-5529 Fax

2919 Fairgrounds Road SW
Decatur, AL 35603
(256) 280-2567

PO Box 2084
Decatur, AL 35602
(256) 350-0686 Fax

SAMPLE RESULTS REPORT

Report Date/Time: 06/02/2022 09:58

REPORT TO
Tim Norman Athens WWTP PO Box 1089 Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Effluent Grab Outfall 0	**Sample ID: DC04238-01**	**Collected: 05/25/2022**		**Submitted: 05/25/2022**
Inorganics				
Available Cyanide	<0.00200	mg/l		

SAMPLE RESULTS REPORT

Report Date/Time: 06/02/2022 09:58

REPORT TO
Tim Norman Athens WWTP PO Box 1089 Athens, AL 35611

All calculations are performed prior to rounding per EPA and *Standard Methods* requirements. Calibration data for field analyses conducted by SET or *ENERSOLV* personnel are available upon request.

Data Qualifiers

< Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DC04238-01	Available Cyanide	OIA-1677-09	SH	Decatur	05/25/2022 10:05	05/27/2022 09:30	

SET

SOUTHERN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2919 FAIRGROUND ROAD SW, DECATUR, AL 35603
3103 NORTHINGTON COURT, FLORENCE, AL 35630
(256) 350-0846 www.setesting.com

PAGE 1 of 1

Special Testing

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	76776	

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Tim Norman	PO Box 1089	Athens AL 35611

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
tnorman@athens-utilities.com	256-233-8774	

SAMPLE COLLECTED BY	EXPEDITED REPORT DELIVERY (SURCHARGE)
Virgil White Virgil White	DATE DUE (REQUIRED)

REQUESTED ANALYSES

SET LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	CN-A
DC04738-01	Effluent Grab Outfall 0011	5/25/2022	10:05	X		X

Comments:

Collector to complete shaded areas, as applicable

COMPOSITE SAMPLER INFO		FIELD INFORMATION								Qty	Type - Cool 6c	pH	Parameters
		SM 4500H+B		SM 4500-Cl G		SM 4500-O G		SM 2550B		1	60mL Amber Glass NaOH		CN-A
Start Date		pH su		TRC mg/l		DO mg/l		Temp deg C					
Start Time		Date		Date		Date		Date					
Stop Date		Time		Time		Time		Time					
Stop Time		Analyst		Analyst		Analyst		Analyst					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Virgil White	5/25/2022	10:59						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE TEMPERATURE RECEIVED @
Meghan Jones	5/25/22	1059	10.4

SET-001-FLD REV. 0

SOUTHERN ENVIRONMENTAL TESTING

June 15, 2022

Tim Norman
Athens WWTP
PO Box 1089
Athens, AL 35611

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
DC04651-01	Effluent Grab Outfall 0011	06/08/2022	06/08/2022

This cover page and the attached chain-of-custody record(s) are integral parts of your report. Southern Environmental Testing considers this report your official record. This information shall remain in Southern Environmental Testing's active database for a period of one (1) calendar year before archiving. Any replacement of this information after archiving may result in an administrative fee to cover the cost of retrieval.

If you have any questions or would like more information regarding these analyses, please call our Decatur facility at (256) 280-2567 or our Florence facility at (256) 740-5532.

Jimmy Wilson
Vice President Lab Operations

Reviewed by:

3103 Northington Court
Florence, AL 35630
(256) 740-5532

PO Box 487
Florence, AL 35630
(256) 740-5529 Fax

2919 Fairgrounds Road SW
Decatur, AL 35603
(256) 280-2567

PO Box 2084
Decatur, AL 35602
(256) 350-0686 Fax

SAMPLE RESULTS REPORT

Report Date/Time: 06/15/2022 11:45

REPORT TO
Tim Norman Athens WWTP PO Box 1089 Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Effluent Grab Outfall 0	**Sample ID: DC04651-01**	**Collected: 06/08/2022**		**Submitted: 06/08/2022**
Inorganics				
Available Cyanide	<0.00200	mg/l		

SAMPLE RESULTS REPORT

Report Date/Time: 06/15/2022 11:45

REPORT TO
Tim Norman Athens WWTP PO Box 1089 Athens, AL 35611

All calculations are performed prior to rounding per EPA and *Standard Methods* requirements. Calibration data for field analyses conducted by SET or *ENERSOLV* personnel are available upon request.

Data Qualifiers

< Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DC04651-01	Available Cyanide	OIA-1677-09	SH	Decatur	06/08/2022 10:32	06/14/2022 10:40	

SET

SOUTHERN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2919 FAIRGROUND ROAD SW, DECATUR, AL 35603
3103 NORTHINGTON COURT, FLORENCE, AL 35630
(256) 350-0846 www.setesting.com

Special Testing

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	76776	
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	PO Box 1089	Athens AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
	DATE DUE (REQUIRED)	

REQUESTED ANALYSES

SET LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	CN-A
0CC0465I-01	Effluent Grab Outfall 0011	WC/06/08/2022	10:32	X		X

Comments:

Collector to complete shaded areas, as applicable

COMPOSITE SAMPLER INFO		FIELD INFORMATION								Qty	Type - Cool 6c	pH	Parameters
		SM 4500H+B		SM 4500-Cl G		SM 4500-O G		SM 2550B		1	60mL Amber Glass NaOH		CN-A
Start Date		pH su		TRC mg/l		DO mg/l		Temp deg C					
Start Time		Date		Date		Date		Date					
Stop Date		Time		Time		Time		Time					
Stop Time		Analyst		Analyst		Analyst		Analyst					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Virgil White	WC/06/08/2022	10:37	Roger Miller	6/8/22	11:10			
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Roger Miller	6/8/2022							
RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	**DATE**	**TIME**						
Jennifer Jones	6/8/22	11:10						

SAMPLE TEMPERATURE RECEIVED @ 6.0

SOUTHERN ENVIRONMENTAL TESTING

June 30, 2022

Tim Norman
Athens WWTP
PO Box 1089
Athens, AL 35611

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
DC05071-01	Effluent Grab Outfall 0011	06/22/2022	06/22/2022

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If you have any questions or would like more information regarding these analyses, please call our Decatur facility at (256) 280-2567 or our Florence facility at (256) 740-5532.

Margaret Aiken

Margaret Aiken
Project Manager

Reviewed by:

3103 Northington Court
Florence, AL 35630
(256) 740-5532

PO Box 487
Florence, AL 35630
(256) 740-5529 Fax

2919 Fairgrounds Road SW
Decatur, AL 35603
(256) 280-2567

PO Box 2084
Decatur, AL 35602
(256) 350-0686 Fax

SAMPLE RESULTS REPORT

Report Date/Time: 06/30/2022 10:05

REPORT TO
Tim Norman Athens WWTP PO Box 1089 Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Effluent Grab Outfall 0	**Sample ID: DC05071-01**	**Collected: 06/22/2022**		**Submitted: 06/22/2022**
Inorganics				
Available Cyanide	<0.00200	mg/l		

SAMPLE RESULTS REPORT

Report Date/Time: 06/30/2022 10:05

REPORT TO
Tim Norman Athens WWTP PO Box 1089 Athens, AL 35611

All calculations are performed prior to rounding per EPA and *Standard Methods* requirements. Calibration data for field analyses conducted by SET or *ENERSOLV* personnel are available upon request.

Data Qualifiers

M Sample matrix precluded reliable matrix spike/matrix spike duplicate recovery and/or precision. Non-homogeneity of sample or presence of interfering substances may result in spike recoveries outside acceptance limits.

< Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DC05071-01	Available Cyanide	OIA-1677-09	LLW	Decatur	06/22/2022 08:35	06/23/2022 10:30	

SET

SOUTHERN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2919 FAIRGROUND ROAD SW, DECATUR, AL 35603
3103 NORTHINGTON COURT, FLORENCE, AL 35630
(256) 350-0846 www.setesting.com

PAGE 1 of 1

Special Testing

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	76776	
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	PO Box 1089	Athens AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
Virgil White	**DATE DUE (REQUIRED)**	

REQUESTED ANALYSES

SET LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	CN-A
0C05071-01	Effluent Grab outfall 0011	~~08:35~~ T.W. 06/22/22	08:35	X		X

Comments:

Collector to complete shaded areas, as applicable

COMPOSITE SAMPLER INFO		FIELD INFORMATION								Qty	Type - Cool 6c	pH	Parameters
		SM 4500H+B		SM 4500-Cl G		SM 4500-O G		SM 2550B		1	60mL Amber Glass NaOH		CN-A
Start Date		pH su		TRC mg/l		DO mg/l		Temp deg C					
Start Time		Date		Date		Date		Date					
Stop Date		Time		Time		Time		Time					
Stop Time		Analyst		Analyst		Analyst		Analyst					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Virgil White	06/06/22/22	13:15						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	
	~~06/06/22~~ 06/22/22	1315	**SAMPLE TEMPERATURE RECEIVED @ _____**

ESC
L·A·B S·C·I·E·N·C·E·S
a subsidiary of Pace Analytical

2220 Beltline Road SW
Decatur, AL 35601
256.350.0846
www.esclabsciences.com

March 20, 2018

Tim Norman
City of Athens WWTP
PO Box 1089
Athens, AL 35611

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

LabNumber	Sample Description	Date/Time Collected	Date Submitted
1803187-01	Effluent Permit Renewal Comp.	3/8/18 07:08	3/8/18
1803187-02	Effluent Permit Renewal Grab	3/8/18 07:16	3/8/18

ESC-Decatur is accredited to ISO/IEC 17025:2005 by ANSI-ASQ National Accreditation Board (ANAB) and to the TNI 2003 Standard by the Florida Department of Health. Our quality system also meets relevant quality system requirements of ISO 9001:2008. Not all tests performed by ESC-Decatur are covered by these accreditations. Tests within our scope of accreditation are indicated by an asterisk (*) in the Test Result section of this report. Tests not included in the accreditations are performed in accordance with ESC-Decatur's Standard Operating Procedures and the quality control program using, where applicable, USEPA methodology.

This cover page and the attached chain-of-custody record(s) are integral parts of your report. ESC-Decatur considers this report your official record. This information shall remain in ESC-Decatur's active database for a period of one (1) calendar year before archiving. Any replacement of this information after archiving may result in an administrative fee to cover the cost of retrieval.

If you have any questions or would like more information regarding these analyses, please call us at (256) 350-0846.

William D. Hollerman, Ph.D.

ESC LAB SCIENCES
a subsidiary of Pace Analytical

2220 Beltline Road SW
Decatur, AL 35601
256.350.0846
www.esclabsciences.com

SAMPLE RESULTS REPORT

Report Date/Time: 03/20/2018 09:41

REPORT TO

Tim Norman
City of Athens WWTP
PO Box 1089
Athens, AL 35611

NELAP Accredited Florida DOH #E871078

ESC-Decatur maintains National Environmental Laboratory Accreditation Program (NELAP) accreditation through Florida Department of Health (#E871078). Some tests included in this report may not be covered by this accreditation.

ESC-Decatur also maintains ISO/IEC 17025 accreditation through ANSI-ASQ Accreditation Board for the specific tests listed in ANAB Certificate #L2239 scope of accreditation.

Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

Tests within the scope of accreditation are indicated by an asterisk (*).

Analyte Name	Result	Units	Qual	Regulatory Limit
Sample Point: Effluent Permit Renewal Comp.	**Sample ID: 1803187-01**	**Collected: 03/08/2018**		**Submitted: 03/08/2018**
Anions by IC				
Nitrate plus Nitrite-Nitrogen	3.10	mg/l		
* Nitrate-Nitrogen CAS: 14797-55-8	2.43	mg/l		
* Nitrite-Nitrogen CAS: 14797-65-0	0.665	mg/l		
Inorganics				
Total Dissolved Solids	240	mg/l		
* Total Kjeldahl Nitrogen	1.74	mg/l		
* Total Phosphorus	2.02	mg/l		
Metals by ICP-MS				
Total Hardness	127	mg/l CaCO3		
Sample Point: Effluent Permit Renewal Grab	**Sample ID: 1803187-02**	**Collected: 03/08/2018**		**Submitted: 03/08/2018**
Inorganics				
Total Cyanide	0.00608	mg/l		

ESC LAB SCIENCES
a subsidiary of Pace Analytical

2220 Beltline Road SW
Decatur, AL 35601
256.350.0846
www.esclabsciences.com

SAMPLE RESULTS REPORT

Report Date/Time: 03/20/2018 09:41

REPORT TO

Tim Norman
City of Athens WWTP
PO Box 1089
Athens, AL 35611

NELAP Accredited Florida DOH #E871078

ESC-Decatur maintains National Environmental Laboratory Accreditation Program (NELAP) accreditation through Florida Department of Health (#E871078). Some tests included in this report may not be covered by this accreditation.

ESC-Decatur also maintains ISO/IEC 17025 accreditation through ANSI-ASQ Accreditation Board for the specific tests listed in ANAB Certificate #L2239 scope of accreditation.

Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

Tests within the scope of accreditation are indicated by an asterisk (*).

All calculations are performed prior to rounding per EPA and *Standard Methods* requirements.

Data Qualifiers:

< Less than reporting limit

Analysis Information

Lab Number	Analysis	SpecificMethod	Analyst	Analysis Start Date/Time	Analysis End Date/Time
)3187-01	Total Hardness	Calculation			
)3187-01	Nitrite-Nitrogen	EPA 300.0	LLW	03/08/2018 15:46	
1803187-01	Nitrate-Nitrogen	EPA 300.0	LLW	03/08/2018 15:46	
1803187-01	Nitrate plus Nitrite-Nitrogen	EPA 300.0	LLW	03/08/2018 15:46	
1803187-01	Total Phosphorus	EPA 365.3	JW	03/13/2018 09:30	
1803187-01	Total Dissolved Solids	SM 2540C	JW	03/09/2018 10:25	
1803187-01	Total Kjeldahl Nitrogen	SM 4500-Norg C	RAC	03/09/2018 06:00	
1803187-02	Total Cyanide	ASTM D7511-09	JW	03/15/2018 11:34	

The results contained in this report are only representative of the sample(s) received.

ANALYTICAL REPORT

March 19, 2018

ESC - Decatur Lab

Sample Delivery Group:	L976338
Samples Received:	03/09/2018
Project Number:	1803187
Description:	Effluent Permit Renewal Comp

Report To:

Mr. Bill Hollerman
2220 Beltline Road SW
Decatur, AL 35601

Entire Report Reviewed By:

Olivia Studebaker
Technical Service Representative

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

1803187-01 L976338-01 WW

			Collected by	Collected date/time	Received date/time
			J Bethig	03/08/18 07:08	03/09/18 11:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 200.7	WG1082965	1	03/10/18 10:31	03/12/18 15:28	ST
Metals (ICPMS) by Method 200.8	WG1083071	1	03/13/18 09:12	03/14/18 14:01	JPD
Metals (ICPMS) by Method 200.8	WG1084566	1	03/14/18 17:10	03/15/18 14:51	JPD

1803187-02 L976338-02 WW

			Collected by	Collected date/time	Received date/time
			J Bethig	03/08/18 07:16	03/09/18 11:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 1664A	WG1084787	1	03/15/18 09:40	03/15/18 17:30	JM
Wet Chemistry by Method 420.4	WG1083903	1	03/15/18 08:15	03/15/18 12:07	KK
Volatile Organic Compounds (GC/MS) by Method 624	WG1082946	1	03/10/18 09:26	03/10/18 09:26	BMB
Semi Volatile Organic Compounds (GC/MS) by Method 625	WG1083364	1	03/14/18 08:02	03/15/18 05:45	SR
Semi Volatile Organic Compounds (GC/MS) by Method 625	WG1083364	1	03/14/18 08:02	03/15/18 21:57	SR

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Olivia Studebaker
Technical Service Representative

Metals (ICP) by Method 200.7

	Result	Qualifier	RDL	Dilution	Analysis	Batch
yte	mg/l		mg/l		date / time	
ium	43.7		1.00	1	03/12/2018 15:28	WG1082965
Magnesium	4.27		1.00	1	03/12/2018 15:28	WG1082965

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Antimony	0.00225		0.00200	1	03/14/2018 14:01	WG1083071
Arsenic	ND		0.00100	1	03/14/2018 14:01	WG1083071
Beryllium	ND		0.00100	1	03/14/2018 14:01	WG1083071
Cadmium	ND		0.00100	1	03/14/2018 14:01	WG1083071
Chromium	ND		0.00100	1	03/14/2018 14:01	WG1083071
Copper	0.00332		0.00100	1	03/15/2018 14:51	WG1084566
Lead	ND		0.00100	1	03/15/2018 14:51	WG1084566
Nickel	0.00190		0.00100	1	03/14/2018 14:01	WG1083071
Selenium	ND		0.00200	1	03/14/2018 14:01	WG1083071
Silver	ND		0.00100	1	03/14/2018 14:01	WG1083071
Thallium	ND		0.00100	1	03/14/2018 14:01	WG1083071
Zinc	0.0270		0.0100	1	03/14/2018 14:01	WG1083071

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Grease (Hexane Extr)	ND		5.88	1	03/15/2018 17:30	WG1084787

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	03/15/2018 12:07	WG1083903

Volatile Organic Compounds (GC/MS) by Method 624

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acrolein	ND		0.0500	1	03/10/2018 09:26	WG1082946
Acrylonitrile	ND		0.0100	1	03/10/2018 09:26	WG1082946
Benzene	ND		0.00100	1	03/10/2018 09:26	WG1082946
Bromodichloromethane	ND		0.00100	1	03/10/2018 09:26	WG1082946
Bromoform	ND		0.00100	1	03/10/2018 09:26	WG1082946
Bromomethane	ND		0.00500	1	03/10/2018 09:26	WG1082946
Carbon tetrachloride	ND		0.00100	1	03/10/2018 09:26	WG1082946
Chlorobenzene	ND		0.00100	1	03/10/2018 09:26	WG1082946
Chlorodibromomethane	ND		0.00100	1	03/10/2018 09:26	WG1082946
Chloroethane	ND		0.00500	1	03/10/2018 09:26	WG1082946
2-Chloroethyl vinyl ether	ND		0.0500	1	03/10/2018 09:26	WG1082946
Chloroform	ND		0.00500	1	03/10/2018 09:26	WG1082946
Chloromethane	ND		0.00250	1	03/10/2018 09:26	WG1082946
1,1-Dichloroethane	ND		0.00100	1	03/10/2018 09:26	WG1082946
1,2-Dichloroethane	ND		0.00100	1	03/10/2018 09:26	WG1082946
:hloroethene	ND		0.00100	1	03/10/2018 09:26	WG1082946
trans-1,2-Dichloroethene	ND		0.00100	1	03/10/2018 09:26	WG1082946
1,2-Dichloropropane	ND		0.00100	1	03/10/2018 09:26	WG1082946
cis-1,3-Dichloropropene	ND		0.00100	1	03/10/2018 09:26	WG1082946
Ethylbenzene	ND		0.00100	1	03/10/2018 09:26	WG1082946
Methylene Chloride	ND		0.00500	1	03/10/2018 09:26	WG1082946
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/10/2018 09:26	WG1082946
Tetrachloroethene	ND		0.00100	1	03/10/2018 09:26	WG1082946
Toluene	0.00109		0.00100	1	03/10/2018 09:26	WG1082946
1,1,1-Trichloroethane	ND		0.00100	1	03/10/2018 09:26	WG1082946
1,1,2-Trichloroethane	ND		0.00100	1	03/10/2018 09:26	WG1082946
Trichloroethene	ND		0.00100	1	03/10/2018 09:26	WG1082946
Vinyl chloride	ND		0.00100	1	03/10/2018 09:26	WG1082946
(S) Toluene-d8	*108*		*80.0-120*		*03/10/2018 09:26*	WG1082946
(S) Dibromofluoromethane	*96.2*		*76.0-123*		*03/10/2018 09:26*	WG1082946
(S) a,a,a-Trifluorotoluene	*100*		*80.0-120*		*03/10/2018 09:26*	WG1082946
(S) 4-Bromofluorobenzene	*101*		*80.0-120*		*03/10/2018 09:26*	WG1082946

Semi Volatile Organic Compounds (GC/MS) by Method 625

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acenaphthene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Acenaphthylene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Anthracene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Benzidine	ND		0.0100	1	03/15/2018 21:57	WG1083364
Benzo(a)anthracene	ND		0.00100	1	03/15/2018 21:57	WG1083364
(b)fluoranthene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Benzo(k)fluoranthene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Benzo(g,h,i)perylene	ND		0.00100	1	03/15/2018 21:57	WG1083364

Semi Volatile Organic Compounds (GC/MS) by Method 625

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
-chlorethoxy)methane	ND		0.0100	1	03/15/2018 21:57	WG1083364
Bis(2-chloroethyl)ether	ND		0.0100	1	03/15/2018 21:57	WG1083364
Bis(2-chloroisopropyl)ether	ND		0.0100	1	03/15/2018 21:57	WG1083364
4-Bromophenyl-phenylether	ND		0.0100	1	03/15/2018 21:57	WG1083364
2-Chloronaphthalene	ND		0.00100	1	03/15/2018 21:57	WG1083364
4-Chlorophenyl-phenylether	ND		0.0100	1	03/15/2018 21:57	WG1083364
Chrysene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Dibenz(a,h)anthracene	ND		0.00100	1	03/15/2018 21:57	WG1083364
1,2-Dichlorobenzene	ND		0.0100	1	03/15/2018 21:57	WG1083364
1,3-Dichlorobenzene	ND		0.0100	1	03/15/2018 21:57	WG1083364
1,4-Dichlorobenzene	ND		0.0100	1	03/15/2018 21:57	WG1083364
3,3-Dichlorobenzidine	ND		0.0100	1	03/15/2018 21:57	WG1083364
2,4-Dinitrotoluene	ND		0.0100	1	03/15/2018 21:57	WG1083364
2,6-Dinitrotoluene	ND		0.0100	1	03/15/2018 21:57	WG1083364
1,2-Diphenylhydrazine	ND		0.0100	1	03/15/2018 05:45	WG1083364
Fluoranthene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Fluorene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Hexachlorobenzene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Hexachloro-1,3-butadiene	ND		0.0100	1	03/15/2018 21:57	WG1083364
Hexachlorocyclopentadiene	ND		0.0100	1	03/15/2018 21:57	WG1083364
Hexachloroethane	ND		0.0100	1	03/15/2018 21:57	WG1083364
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Isophorone	ND		0.0100	1	03/15/2018 21:57	WG1083364
Naphthalene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Nitrobenzene	ND		0.0100	1	03/15/2018 05:45	WG1083364
n-Nitrosodimethylamine	ND		0.0100	1	03/15/2018 21:57	WG1083364
osodiphenylamine	ND		0.0100	1	03/15/2018 21:57	WG1083364
osodi-n-propylamine	ND		0.0100	1	03/15/2018 21:57	WG1083364
Phenanthrene	ND		0.00100	1	03/15/2018 21:57	WG1083364
Benzylbutyl phthalate	ND		0.00300	1	03/15/2018 21:57	WG1083364
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	03/15/2018 21:57	WG1083364
Di-n-butyl phthalate	ND		0.00300	1	03/15/2018 21:57	WG1083364
Di-n-octyl phthalate	ND		0.00300	1	03/15/2018 21:57	WG1083364
Diethyl phthalate	ND		0.00300	1	03/15/2018 21:57	WG1083364
Dimethyl phthalate	ND		0.00300	1	03/15/2018 21:57	WG1083364
Pyrene	ND		0.00100	1	03/15/2018 21:57	WG1083364
1,2,4-Trichlorobenzene	ND		0.0100	1	03/15/2018 21:57	WG1083364
2,4,6-Trichlorophenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
4-Chloro-3-methylphenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
2-Chlorophenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
2,4-Dichlorophenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
2,4-Dimethylphenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
2,4-Dinitrophenol	ND	J3	0.0100	1	03/15/2018 21:57	WG1083364
2-Nitrophenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
4,6-Dinitro-2-methylphenol	ND	J3	0.0100	1	03/15/2018 21:57	WG1083364
4-Nitrophenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
Pentachlorophenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
Phenol	ND		0.0100	1	03/15/2018 21:57	WG1083364
(S) Nitrobenzene-d5	*50.2*		*10.0-126*		*03/15/2018 21:57*	WG1083364
(S) Nitrobenzene-d5	*61.7*		*10.0-126*		*03/15/2018 05:45*	WG1083364
(S) 2-Fluorobiphenyl	*66.4*		*22.0-127*		*03/15/2018 05:45*	WG1083364
(S) 2-Fluorobiphenyl	*61.8*		*22.0-127*		*03/15/2018 21:57*	WG1083364
(S) p-Terphenyl-d14	*62.5*		*29.0-141*		*03/15/2018 05:45*	WG1083364
p-Terphenyl-d14	*66.2*		*29.0-141*		*03/15/2018 21:57*	WG1083364
(S) Phenol-d5	*29.3*		*10.0-120*		*03/15/2018 21:57*	WG1083364
(S) Phenol-d5	*32.0*		*10.0-120*		*03/15/2018 05:45*	WG1083364

Semi Volatile Organic Compounds (GC/MS) by Method 625

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
?-Fluorophenol	41.9		10.0-120		03/15/2018 21:57	WG1083364
(S) 2-Fluorophenol	44.4		10.0-120		03/15/2018 05:45	WG1083364
(S) 2,4,6-Tribromophenol	87.4		10.0-153		03/15/2018 05:45	WG1083364
(S) 2,4,6-Tribromophenol	99.4		10.0-153		03/15/2018 21:57	WG1083364

Method Blank (MB)

(MB) R3293635-1 03/15/18 17:26

lyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Oil & Grease (Hexane Extr)	U		1.16	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3293635-2 03/15/18 17:26 • (LCSD) R3293635-3 03/15/18 17:26

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Oil & Grease (Hexane Extr)	40.0	37.6	37.6	94.0	94.0	78.0-114			0.000	20

Method Blank (MB)

(MB) R3293495-1 03/15/18 12:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Total Phenol by 4AAP	0.00957	J	0.00830	0.0400

L976381-04 Original Sample (OS) • Duplicate (DUP)

(OS) L976381-04 03/15/18 12:12 • (DUP) R3293495-6 03/15/18 12:13

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	ND	0.000	1	0.000		20

L976453-01 Original Sample (OS) • Duplicate (DUP)

(OS) L976453-01 03/15/18 12:17 • (DUP) R3293495-7 03/15/18 12:18

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3293495-2 03/15/18 12:03 • (LCSD) R3293495-3 03/15/18 12:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Total Phenol by 4AAP	0.500	0.532	0.526	106	105	90.0-110			1.13	20

L976338-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L976338-02 03/15/18 12:07 • (MS) R3293495-4 03/15/18 12:08 • (MSD) R3293495-5 03/15/18 12:09

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Total Phenol by 4AAP	1.00	ND	0.969	0.987	96.1	97.9	1	90.0-110			1.83	20

L976796-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L976796-02 03/15/18 12:22 • (MS) R3293495-8 03/15/18 12:22

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Total Phenol by 4AAP	1.00	0.0684	1.12	105	1	90.0-110	

Method Blank (MB)

(MB) R3292586-1 03/12/18 14:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium	U		0.100	1.00
Magnesium	0.0228	J	0.0168	1.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3292586-2 03/12/18 14:18 • (LCSD) R3292586-3 03/12/18 14:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Calcium	10.0	10.0	10.1	100	101	85.0-115			1.11	20
Magnesium	10.0	10.4	10.5	104	105	85.0-115			1.44	20

L976330-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L976330-01 03/12/18 14:23 • (MS) R3292586-5 03/12/18 14:28 • (MSD) R3292586-6 03/12/18 14:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10.0	274	284	285	105	109	1	70.0-130			0.140	20
Magnesium	10.0	8.45	18.6	18.4	102	99.9	1	70.0-130			0.863	20

L976336-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L976336-01 03/12/18 14:33 • (MS) R3292586-7 03/12/18 14:36 • (MSD) R3292586-8 03/12/18 14:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10.0	ND	9.87	9.97	98.7	99.7	1	70.0-130			1.01	20
Magnesium	10.0	ND	10.4	10.4	103	103	1	70.0-130			0.0127	20

Method Blank (MB)

(MB) R3293173-1 03/14/18 12:06

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony	U		0.000754	0.00200
Arsenic	U		0.000170	0.00100
Beryllium	U		0.000280	0.00100
Cadmium	U		0.000220	0.00100
Chromium	U		0.000320	0.00100
Nickel	U		0.000320	0.00100
Selenium	U		0.000320	0.00200
Silver	U		0.000180	0.00100
Thallium	U		0.000280	0.00100
Zinc	U		0.00191	0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3293173-2 03/14/18 12:10 • (LCSD) R3293173-3 03/14/18 12:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	0.0497	0.0490	99.3	98.1	85.0-115			1.26	20
Arsenic	0.0500	0.0487	0.0483	97.4	96.6	85.0-115			0.884	20
Beryllium	0.0500	0.0467	0.0467	93.4	93.4	85.0-115			0.0181	20
Cadmium	0.0500	0.0482	0.0479	96.5	95.8	85.0-115			0.722	20
Chromium	0.0500	0.0487	0.0491	97.4	98.2	85.0-115			0.813	20
Nickel	0.0500	0.0495	0.0512	98.9	102	85.0-115			3.45	20
Selenium	0.0500	0.0498	0.0490	99.7	98.1	85.0-115			1.66	20
Silver	0.0500	0.0501	0.0493	100	98.5	85.0-115			1.63	20
Thallium	0.0500	0.0491	0.0483	98.1	96.5	85.0-115			1.66	20
Zinc	0.0500	0.0522	0.0494	104	98.8	85.0-115			5.64	20

L974833-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L974833-02 03/14/18 12:18 • (MS) R3293173-5 03/14/18 12:26 • (MSD) R3293173-6 03/14/18 12:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	ND	0.0509	0.0516	100	101	1	70.0-130			1.27	20
Arsenic	0.0500	0.00161	0.0496	0.0509	95.9	98.6	1	70.0-130			2.68	20
Beryllium	0.0500	ND	0.0464	0.0461	92.1	91.4	1	70.0-130			0.722	20
Cadmium	0.0500	ND	0.0489	0.0498	97.3	99.0	1	70.0-130			1.73	20
Chromium	0.0500	ND	0.0481	0.0497	94.6	97.8	1	70.0-130			3.28	20
Nickel	0.0500	0.00240	0.0502	0.0512	95.5	97.7	1	70.0-130			2.12	20
Selenium	0.0500	ND	0.0516	0.0539	102	106	1	70.0-130			4.34	20

L974833-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L974833-02 03/14/18 12:18 • (MS) R3293173-5 03/14/18 12:26 • (MSD) R3293173-6 03/14/18 12:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Silver	0.0500	ND	0.0502	0.0506	99.8	101	1	70.0-130			0.751	20
Thallium	0.0500	ND	0.0502	0.0504	99.7	100	1	70.0-130			0.282	20
Zinc	0.0500	0.0169	0.0679	0.0671	102	100	1	70.0-130			1.22	20

L976448-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L976448-10 03/14/18 12:34 • (MS) R3293173-7 03/14/18 12:38 • (MSD) R3293173-8 03/14/18 12:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	ND	0.0512	0.0525	102	105	1	70.0-130			2.39	20
Arsenic	0.0500	0.00770	0.0560	0.0565	96.7	97.6	1	70.0-130			0.834	20
Beryllium	0.0500	ND	0.0456	0.0449	91.3	89.8	1	70.0-130			1.61	20
Cadmium	0.0500	ND	0.0491	0.0480	97.5	95.3	1	70.0-130			2.33	20
Chromium	0.0500	0.00295	0.0518	0.0524	97.7	98.9	1	70.0-130			1.17	20
Nickel	0.0500	ND	0.0495	0.0505	98.2	100	1	70.0-130			2.10	20
Selenium	0.0500	ND	0.0516	0.0516	102	102	1	70.0-130			0.00481	20
Silver	0.0500	ND	0.0512	0.0515	102	103	1	70.0-130			0.506	20
Thallium	0.0500	ND	0.0494	0.0476	97.9	94.3	1	70.0-130			3.78	20
Zinc	0.0500	ND	0.0511	0.0498	102	99.6	1	70.0-130			2.64	20

Method Blank (MB)

(MB) R3293605-1 03/15/18 13:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Copper	U		0.000270	0.00100
Lead	U		0.000260	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3293605-2 03/15/18 13:26 • (LCSD) R3293605-3 03/15/18 13:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Copper	0.0500	0.0508	0.0524	102	105	85.0-115			3.04	20
Lead	0.0500	0.0488	0.0492	97.5	98.5	85.0-115			0.958	20

L975957-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L975957-03 03/15/18 13:34 • (MS) R3293605-5 03/15/18 13:42 • (MSD) R3293605-6 03/15/18 13:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Copper	0.0500	0.00486	0.0541	0.0542	98.5	98.6	1	70.0-130			0.132	20
Lead	0.0500	ND	0.0491	0.0497	97.3	98.4	1	70.0-130			1.17	20

L977282-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L977282-01 03/15/18 13:50 • (MS) R3293605-7 03/15/18 13:54 • (MSD) R3293605-8 03/15/18 13:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Copper	0.0500	0.00340	0.0526	0.0540	98.5	101	1	70.0-130			2.65	20
Lead	0.0500	0.000538	0.0477	0.0497	94.4	98.4	1	70.0-130			4.13	20

Method Blank (MB)

(MB) R3292267-3 03/10/18 03:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
2-Chloroethyl vinyl ether	U		0.00301	0.0500
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
Ethylbenzene	U		0.000384	0.00100
Methylene Chloride	U		0.00100	0.00500
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000412	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Vinyl chloride	U		0.000259	0.00100
(S) Toluene-d8	*109*			*80.0-120*
(S) Dibromofluoromethane	*94.4*			*76.0-123*
(S) α,α,α-Trifluorotoluene	*97.2*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*80.0-120*

Laboratory Control Sample (LCS)

(LCS) R3292267-1 03/10/18 02:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrolein	0.125	0.127	102	10.0-160	
Acrylonitrile	0.125	0.136	109	60.0-142	
Benzene	0.0250	0.0235	94.2	69.0-123	
Bromodichloromethane	0.0250	0.0234	93.7	76.0-120	
Bromoform	0.0250	0.0207	82.9	67.0-132	
Bromomethane	0.0250	0.0184	73.7	18.0-160	
2-Chloroethyl vinyl ether	0.125	0.104	83.2	10.0-160	
Carbon tetrachloride	0.0250	0.0223	89.2	63.0-122	
Chlorobenzene	0.0250	0.0261	104	79.0-121	
Chlorodibromomethane	0.0250	0.0251	101	75.0-125	
Chloroethane	0.0250	0.0244	97.6	47.0-152	
Chloroform	0.0250	0.0231	92.3	72.0-121	
Chloromethane	0.0250	0.0210	83.9	48.0-139	
1,1-Dichloroethane	0.0250	0.0238	95.4	70.0-126	
1,2-Dichloroethane	0.0250	0.0245	98.0	67.0-126	
1,1-Dichloroethene	0.0250	0.0202	80.7	64.0-129	
trans-1,2-Dichloroethene	0.0250	0.0211	84.2	71.0-121	
1,2-Dichloropropane	0.0250	0.0260	104	75.0-125	
cis-1,3-Dichloropropene	0.0250	0.0281	112	79.0-123	
Ethylbenzene	0.0250	0.0265	106	77.0-120	
Methylene Chloride	0.0250	0.0222	88.8	66.0-121	
1,1,2,2-Tetrachloroethane	0.0250	0.0254	102	71.0-122	
Tetrachloroethene	0.0250	0.0236	94.4	70.0-127	
Toluene	0.0250	0.0265	106	77.0-120	
1,1,1-Trichloroethane	0.0250	0.0232	92.8	68.0-122	
1,1,2-Trichloroethane	0.0250	0.0259	104	78.0-120	
Trichloroethene	0.0250	0.0244	97.8	78.0-120	
Vinyl chloride	0.0250	0.0259	103	64.0-133	
(S) Toluene-d8			*109*	*80.0-120*	
(S) Dibromofluoromethane			*94.2*	*76.0-123*	
(S) a,a,a-Trifluorotoluene			*98.0*	*80.0-120*	
(S) 4-Bromofluorobenzene			*101*	*80.0-120*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3293460-3 03/14/18 19:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.000316	0.00100
Acenaphthylene	U		0.000309	0.00100
Anthracene	U		0.000291	0.00100
Benzidine	U		0.00432	0.0100
Benzo(a)anthracene	U		0.0000975	0.00100
Benzo(b)fluoranthene	U		0.0000896	0.00100
Benzo(k)fluoranthene	U		0.000355	0.00100
Benzo(g,h,i)perylene	U		0.000161	0.00100
Bis(2-chlorethoxy)methane	U		0.000329	0.0100
Bis(2-chloroethyl)ether	U		0.00162	0.0100
Bis(2-chloroisopropyl)ether	U		0.000445	0.0100
4-Bromophenyl-phenylether	U		0.000335	0.0100
1,2-Dichlorobenzene	U		0.000340	0.0100
1,3-Dichlorobenzene	U		0.000365	0.0100
1,4-Dichlorobenzene	U		0.000322	0.0100
2-Chloronaphthalene	U		0.000330	0.00100
4-Chlorophenyl-phenylether	U		0.000303	0.0100
Chrysene	U		0.000332	0.00100
Dibenz(a,h)anthracene	U		0.000279	0.00100
3,3-Dichlorobenzidine	U		0.00202	0.0100
2,4-Dinitrotoluene	U		0.00165	0.0100
2,6-Dinitrotoluene	U		0.000279	0.0100
Fluoranthene	U		0.000310	0.00100
Fluorene	U		0.000323	0.00100
Hexachlorobenzene	U		0.000341	0.00100
Hexachloro-1,3-butadiene	U		0.000329	0.0100
Hexachlorocyclopentadiene	U		0.00233	0.0100
Hexachloroethane	U		0.000365	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000272	0.0100
Naphthalene	U		0.000372	0.00100
Nitrobenzene	U		0.000367	0.0100
n-Nitrosodimethylamine	U		0.00126	0.0100
1,2-Diphenylhydrazine	U		0.000318	0.0100
n-Nitrosodiphenylamine	U		0.000304	0.0100
n-Nitrosodi-n-propylamine	U		0.000403	0.0100
Phenanthrene	U		0.000366	0.00100
Benzylbutyl phthalate	U		0.000275	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300
Di-n-butyl phthalate	U		0.000266	0.00300

Method Blank (MB)

(MB) R3293460-3 03/14/18 19:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Diethyl phthalate	U		0.000282	0.00300
Dimethyl phthalate	U		0.000283	0.00300
Di-n-octyl phthalate	U		0.000278	0.00300
Pyrene	U		0.000330	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.0100
4-Chloro-3-methylphenol	U		0.000263	0.0100
2-Chlorophenol	U		0.000283	0.0100
2,4-Dichlorophenol	U		0.000284	0.0100
2,4-Dimethylphenol	U		0.000624	0.0100
4,6-Dinitro-2-methylphenol	U		0.00262	0.0100
2,4-Dinitrophenol	U		0.00325	0.0100
2-Nitrophenol	U		0.000320	0.0100
4-Nitrophenol	U		0.00201	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.000334	0.0100
2,4,6-Trichlorophenol	U		0.000297	0.0100
(S) Nitrobenzene-d5	*49.4*			*10.0-126*
(S) 2-Fluorobiphenyl	*55.4*			*22.0-127*
(S) p-Terphenyl-d14	*69.2*			*29.0-141*
(S) Phenol-d5	*18.0*			*10.0-120*
(S) 2-Fluorophenol	*31.2*			*10.0-120*
(S) 2,4,6-Tribromophenol	*115*			*10.0-153*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3293460-1 03/14/18 18:42 • (LCSD) R3293460-2 03/14/18 19:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.0380	0.0397	76.1	79.4	42.0-120			4.30	22
Acenaphthylene	0.0500	0.0383	0.0388	76.7	77.6	43.0-120			1.26	22
Anthracene	0.0500	0.0348	0.0356	69.5	71.2	44.0-120			2.37	20
Benzidine	0.0500	0.0148	0.0107	29.6	21.3	1.00-120			32.5	36
Benzo(a)anthracene	0.0500	0.0384	0.0423	76.8	84.6	44.0-120			9.67	20
Benzo(b)fluoranthene	0.0500	0.0378	0.0398	75.6	79.6	40.0-120			5.14	21
Benzo(k)fluoranthene	0.0500	0.0367	0.0397	73.4	79.3	41.0-120			7.73	22
Benzo(g,h,i)perylene	0.0500	0.0403	0.0433	80.6	86.6	45.0-121			7.16	20
Bis(2-chlorethoxy)methane	0.0500	0.0301	0.0304	60.1	60.8	36.0-120			1.09	25
Bis(2-chloroethyl)ether	0.0500	0.0275	0.0245	55.0	49.1	24.0-120			11.5	29
Bis(2-chloroisopropyl)ether	0.0500	0.0273	0.0246	54.6	49.2	32.0-120			10.3	29

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3293460-1 03/14/18 18:42 • (LCSD) R3293460-2 03/14/18 19:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Bromophenyl-phenylether	0.0500	0.0445	0.0485	89.1	97.0	42.0-121			8.48	21
2-Chloronaphthalene	0.0500	0.0364	0.0351	72.9	70.1	37.0-120			3.80	24
4-Chlorophenyl-phenylether	0.0500	0.0416	0.0417	83.3	83.4	44.0-120			0.156	21
1,2-Diphenylhydrazine	0.0500	0.0417	0.0439	83.4	87.8	37.0-125			5.21	20
Chrysene	0.0500	0.0371	0.0401	74.2	80.2	45.0-120			7.82	20
Dibenz(a,h)anthracene	0.0500	0.0399	0.0430	79.9	86.0	44.0-121			7.42	21
3,3-Dichlorobenzidine	0.0500	0.0447	0.0469	89.4	93.8	29.0-153			4.83	23
2,4-Dinitrotoluene	0.0500	0.0404	0.0438	80.7	87.6	47.0-127			8.20	21
2,6-Dinitrotoluene	0.0500	0.0386	0.0408	77.3	81.7	42.0-120			5.53	22
Fluoranthene	0.0500	0.0399	0.0418	79.8	83.6	46.0-121			4.67	20
Fluorene	0.0500	0.0389	0.0400	77.8	80.0	45.0-120			2.80	21
Hexachlorobenzene	0.0500	0.0499	0.0523	99.8	105	41.0-124			4.77	21
Hexachloro-1,3-butadiene	0.0500	0.0356	0.0309	71.2	61.9	26.0-120			14.1	31
Hexachlorocyclopentadiene	0.0500	0.0329	0.0309	65.7	61.9	10.0-120			6.03	31
Hexachloroethane	0.0500	0.0273	0.0235	54.6	46.9	22.0-120			15.1	34
Indeno(1,2,3-cd)pyrene	0.0500	0.0416	0.0441	83.3	88.2	45.0-123			5.72	21
Isophorone	0.0500	0.0339	0.0342	67.8	68.5	37.0-120			1.01	24
Naphthalene	0.0500	0.0291	0.0271	58.2	54.2	33.0-120			7.01	28
Nitrobenzene	0.0500	0.0354	0.0330	70.7	66.1	31.0-120			6.81	28
n-Nitrosodimethylamine	0.0500	0.0204	0.0190	40.8	37.9	10.0-120			7.37	34
n-Nitrosodiphenylamine	0.0500	0.0419	0.0443	83.8	88.5	44.0-120			5.42	21
1,2-Dichlorobenzene	0.0500	0.0294	0.0248	58.8	49.5	27.0-120			17.1	30
n-Nitrosodi-n-propylamine	0.0500	0.0373	0.0375	74.6	75.1	29.0-120			0.652	27
1,3-Dichlorobenzene	0.0500	0.0282	0.0245	56.4	49.0	26.0-120			14.2	31
Phenanthrene	0.0500	0.0381	0.0391	76.3	78.2	42.0-120			2.44	20
1,4-Dichlorobenzene	0.0500	0.0278	0.0235	55.6	46.9	26.0-120			17.0	30
Benzylbutyl phthalate	0.0500	0.0330	0.0357	65.9	71.4	36.0-123			8.02	22
Bis(2-ethylhexyl)phthalate	0.0500	0.0352	0.0381	70.5	76.2	37.0-121			7.83	21
Di-n-butyl phthalate	0.0500	0.0380	0.0398	75.9	79.6	43.0-122			4.77	21
Diethyl phthalate	0.0500	0.0427	0.0451	85.3	90.2	48.0-123			5.53	20
Dimethyl phthalate	0.0500	0.0423	0.0446	84.7	89.2	47.0-120			5.22	20
Di-n-octyl phthalate	0.0500	0.0372	0.0389	74.4	77.7	38.0-120			4.42	22
Pyrene	0.0500	0.0365	0.0394	72.9	78.7	43.0-120			7.71	21
1,2,4-Trichlorobenzene	0.0500	0.0310	0.0281	62.0	56.3	29.0-120			9.70	29
4-Chloro-3-methylphenol	0.0500	0.0343	0.0358	68.7	71.6	39.0-120			4.20	22
2-Chlorophenol	0.0500	0.0305	0.0271	60.9	54.3	28.0-120			11.6	29
2,4-Dichlorophenol	0.0500	0.0351	0.0334	70.3	66.9	37.0-120			4.99	26
2,4-Dimethylphenol	0.0500	0.0367	0.0349	73.5	69.9	35.0-120			4.99	25
4,6-Dinitro-2-methylphenol	0.0500	0.0428	0.0570	85.5	114	34.0-125		J3	28.5	27
2,4-Dinitrophenol	0.0500	0.0260	0.0448	52.0	89.6	10.0-120		J3	53.1	40

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3293460-1 03/14/18 18:42 • (LCSD) R3293460-2 03/14/18 19:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Nitrophenol	0.0500	0.0325	0.0317	64.9	63.3	35.0-120			2.45	28
4-Nitrophenol	0.0500	0.0143	0.0148	28.7	29.6	10.0-120			3.12	35
Pentachlorophenol	0.0500	0.0496	0.0534	99.2	107	20.0-126			7.34	32
Phenol	0.0500	0.0181	0.0171	36.2	34.2	10.0-120			5.75	34
2,4,6-Trichlorophenol	0.0500	0.0437	0.0446	87.4	89.3	40.0-122			2.15	24
(S) Nitrobenzene-d5				*66.6*	*65.1*	*10.0-126*				
(S) 2-Fluorobiphenyl				*74.8*	*79.2*	*22.0-127*				
(S) p-Terphenyl-d14				*62.8*	*68.2*	*29.0-141*				
(S) Phenol-d5				*31.3*	*28.9*	*10.0-120*				
(S) 2-Fluorophenol				*51.7*	*45.3*	*10.0-120*				
(S) 2,4,6-Tribromophenol				*124*	*124*	*10.0-153*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [5]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.

ESC LAB SCIENCES
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SUBCONTRACT ORDER

Sending Laboratory:

ESC - Decatur
2220 Beltline Road SW
Decatur, AL 35601
Phone: 256-350-0846
Fax: 256-350-0686

Subcontracted Laboratory:

ESC
12065 Lebanon Road
Mount Juliet, TN 37122
Phone: (615) 758-5858
Fax:

3.0

Work Order: 1803187

Analysis Code	Analysis Description	Due	Comments
Sample ID: 1803187-01 *Sampled: 03/08/2018*	Effluent Permit Renewal Comp.		Matrix: ***Wastewater*** L976538-01
PB ICPMS TR	Total Recoverable Lead	03/15/2018	
AS ICPMS TR	Total Recoverable Arsenic	03/15/2018	
BE ICPMS TR	Total Recoverable Beryllium	03/15/2018	
CA ICP	Total Calcium	03/15/2018	
CD ICPMS TR	Total Recoverable Cadmium	03/15/2018	
CR ICPMS TR	Total Recoverable Chromium	03/15/2018	
:PMS TR	Total Recoverable Copper	03/15/2018	
:PMS TR	Total Recoverable Silver	03/15/2018	
NI ICPMS TR	Total Recoverable Nickel	03/15/2018	
SB ICPMS TR	Total Recoverable Antimony	03/15/2018	
SE ICPMS TR	Total Recoverable Selenium	03/15/2018	
TL ICPMS TR	Total Recoverable Thallium	03/15/2018	
ZN ICPMS TR	Total Recoveable Zinc	03/15/2018	
MG ICP	Total Magnesium	03/15/2018	

F166

Containers Supplied: 1 ✓

Analysis Code	Analysis Description	Due	Comments
Sample ID: 1803187-02 *Sampled: 03/08/2018*	Effluent Permit Renewal Grab		Matrix: ***Wastewater*** 02
SV 625-PERMIT RENEWAL	BN/AE Semivolatiles	03/15/2018	Please see attached for required analytes
VOA 624 FORM2A	Volatile Organic Analytes	03/15/2018	Please see attached for required analytes
OG	HEM (Oil and Grease)	03/15/2018	
PHENOLICS	Phenolics (4AAP)	03/15/2018	

Containers Supplied: 9 ✓

The appropriate credentials and accreditations of the subcontract laboratory have been verified for the analyses to be performed on the samples included in this document as of the date samples were shipped to the subcontract laboratory.

Yes X No ____

Released By	Date	Received By		Date
[signature]	3.9.18	Susan Peach	1140	once 3-9-18
[signature] 11:40	3-9-18	[signature] 835	3/9/18	

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reade 10

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	MU MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

[redacted]

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	MD/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS											
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											

BENZO(A)PYRENE											

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											

1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	MU MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
(256) 350-0846

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Permit Renewal Comp

L976338

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
JBethig	**DATE DUE (REQUIRED)**	

ESC Lab Sciences LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	TRAG2, TRAS2, TRBE2	TRCD2, TRCR2, TRCU2	TRNI2, TRPB2, TRSB2	TRSE2, TRTL2, TRZN2	HARD	NO3NO2IC	P TOTAL	TDS	TKN					
1803187-01	Effluent Permit Renewal Comp	3-8-18	0708		X	X	X	X	X	X	X	X	X	X					-01

Comments: CBOD, TSS, NH3 to be performed by client
Hg performed quarterly
Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 0.1 C

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B		1	Poly Pint HNO3	A	Metals
Start Date	3-7-18	pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Qrt Cool 6c	B	TDS
Start Time	0708	Date		Date		Date		Date		1	Poly Pint H2SO4	C	P, TKN
Stop Date	3-8-18	Time		Time		Time		Time					
Stop Time	0708	Analyst		Analyst		Analyst		Analyst					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
JBethig	3-8-18	1147						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
						Faith 855	3/9/18	1149

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS
Shan G	3/8/18	1147	☑ Accepted ☐ Rejected ☐ Accepted with Exception

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2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
(256) 350-0846

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PAGE 1 of 1
Permit Renewal Grab

LG16338

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
JBatbig	**DATE DUE (REQUIRED)**	

ESC Lab Sciences LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	CN	OG	PHENOLICS	SV 625 PERMIT RENEW	VOA 624 FORM2A	PICKUP								
1803187-02	Effluent Permit Renewal Grab	3-8-18	0716	X		X	X	X	X	X									-02

Comments: EC and Field data to be performed by client

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.1

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B					
Start Date		pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Pint NAOH Cool 6c		CN
Start Time		Date		Date		Date		Date		2	Glass WM1000ml HCL Cool 6c		OG
Stop Date		Time		Time		Time		Time		1	Amb Gl 1000ml H2SO4 Cool 6c		Phenolics
Stop Time		Analyst		Analyst		Analyst		Analyst		1	Amb Glass 100ml Cool 6c		625
										3	VOA 40ml HCL Iced		624

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
JBatbig	3-8-18	1147						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
						Jacobs	3/9/18	1140

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
Jacobs	3-8-18	1147	☑ Accepted ☐ Rejected ☐ Accepted with Exception

ESC LAB SCIENCES
Cooler Receipt Form

Client: ENERSOLV	SDG#:	L976338	
Cooler Received/Opened On: 3/1 /18	Temperature:	3.0	
Received By: Ian White			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?		✓	
Preservation Correct / Checked?		✓	

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
(256) 350-0846

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PAGE 1 of 1
Permit Renewal Comp

COMPANY/CLIENT NAME	CLIENT P O NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
JBethig	**DATE DUE (REQUIRED)**	

ESC Lab Sciences LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	TRAG2, TRAS2, TRBE2	TRCD2, TRCR2, TRCU2	TRNI2, TRPB2, TRSB2	TRSE2, TRTL2, TRZN2	HARD	NO3NO2IC	P TOTAL	TDS	TKN
1803187-01	Effluent Permit Renewal Comp	3-8-18	0708		X	X	X	X	X	X	X	X	X	X

REQUESTED ANALYSES

Comments: CBOD, TSS, NH3 to be performed by client

Hg performed quarterly

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.1 C

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B		1	Poly Pint HNO3	A	Metals
Start Date	3-7-18	pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Qrt Cool 6c	B	TDS
Start Time	0708	Date		Date		Date		Date		1	Poly Pint H2SO4	C	P, TKN
Stop Date	3-8-18	Time		Time		Time		Time					
Stop Time	0708	Analyst		Analyst		Analyst		Analyst					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Jennifer Bethig	3-8-18	1147						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
Shan G	3-8-18	1147	☑ Accepted ☐ Rejected ☐ Accepted with Exception

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
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Permit Renewal Grab

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
JBathig	**DATE DUE (REQUIRED)**	

ESC Lab Sciences LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	CN	OG	PHENOLICS	SV 625 PERMIT RENEW	VOA 624 FORM2A	PICKUP								
1803187-02	Effluent Permit Renewal Grab	3-8-18	0716	X		X	X	X	X	X									

REQUESTED ANALYSES

Comments: EC and Field data to be performed by client

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.1°C

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B					
Start Date		pH SU		TRC mg/l		DO mg/l		Temp deg C		2	Glass WM1000ml HCL Cool 6c		CN
Start Time		Date		Date		Date		Date		1	Amb Gl 1000ml H2SO4 Cool 6c		OG
Stop Date		Time		Time		Time		Time		1	Amb Glass 100ml Cool 6c		Phenolics
Stop Time		Analyst		Analyst		Analyst		Analyst		3	VOA 40ml HCL Iced		625
													624

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Jennifer Bathig	3-8-18	1147						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
[signature]	3-8-18	1147	☑ Accepted ☐ Rejected ☐ Accepted with Exception

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

December 16, 2019

Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 GI
7 Al
8 Sc

City of Athens WWTP

Sample Delivery Group:	L1167849
Samples Received:	12/06/2019
Project Number:	
Description:	Permit Renewal
Report To:	Tim Norman
	PO Box 1089
	Athens, AL 35611

Entire Report Reviewed By:

Kelly Mercer
Project Manager

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

EFF. P. RENEWAL COMP L1167849-01 WW

Collected by: CLIENT | Collected date/time: 12/05/19 22:24 | Received date/time: 12/06/19 13:05

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1392763	1	12/08/19 18:20	12/08/19 18:20	CCE	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1393360	1	12/09/19 07:53	12/10/19 07:45	JDR	Decatur, AL
Wet Chemistry by Method 300.0	WG1392123	1	12/06/19 17:26	12/06/19 17:26	LLW	Decatur, AL
Wet Chemistry by Method 4500-Norg C	WG1394002	1	12/10/19 06:15	12/10/19 10:00	BMW	Decatur, AL
Wet Chemistry by Method EPA 365.3	WG1395482	1	12/11/19 09:00	12/11/19 16:30	JTM	Decatur, AL
Metals (ICP) by Method 200.7	WG1392763	1	12/07/19 16:44	12/08/19 18:20	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1392770	1	12/08/19 09:35	12/08/19 23:22	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1392770	1	12/08/19 09:35	12/08/19 23:48	LD	Mt. Juliet, TN

EFF. P. RENEWAL GRAB L1167849-02 WW

Collected by: CLIENT | Collected date/time: 12/05/19 22:24 | Received date/time: 12/06/19 13:05

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 1664A	WG1394456	1	12/11/19 06:38	12/11/19 12:11	AMG	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1394072	1	12/10/19 14:17	12/13/19 13:59	SDL	Mt. Juliet, TN
Wet Chemistry by Method ASTM D7511-12	WG1394039	1	12/10/19 14:22	12/10/19 14:22	SDH	Decatur, AL
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1395215	1	12/12/19 09:19	12/12/19 09:19	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1394830	1	12/11/19 17:01	12/13/19 15:33	LEA	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Kelly Mercer
Project Manager

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
ness (calculated) as CaCO3	147		2.50	1	12/08/2019 18:20	WG1392763

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Dissolved Solids	253		1.00	1	12/10/2019 07:45	WG1393360

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Nitrate-Nitrite	6.13		0.0600	1	12/06/2019 17:26	WG1392123

Wet Chemistry by Method 4500-Norg C

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Kjeldahl Nitrogen, TKN	ND		1.50	1	12/10/2019 10:00	WG1394002

Wet Chemistry by Method EPA 365.3

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Phosphorus	3.19		1.00	1	12/11/2019 16:30	WG1395482

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Calcium	50.1		1.00	1	12/08/2019 18:20	WG1392763
Magnesium	5.43		1.00	1	12/08/2019 18:20	WG1392763

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Antimony	ND		0.00200	1	12/08/2019 23:22	WG1392770
Arsenic	ND		0.00100	1	12/08/2019 23:22	WG1392770
Beryllium	ND		0.00100	1	12/08/2019 23:48	WG1392770
Cadmium	ND		0.00100	1	12/08/2019 23:22	WG1392770
Chromium	ND		0.00100	1	12/08/2019 23:22	WG1392770
Copper	0.00376		0.00100	1	12/08/2019 23:22	WG1392770
Lead	ND		0.00100	1	12/08/2019 23:22	WG1392770
Nickel	0.00141		0.00100	1	12/08/2019 23:22	WG1392770
Selenium	ND		0.00200	1	12/08/2019 23:22	WG1392770
Silver	ND		0.00100	1	12/08/2019 23:22	WG1392770
Thallium	ND		0.00100	1	12/08/2019 23:22	WG1392770
Zinc	0.0214		0.0100	1	12/08/2019 23:22	WG1392770

Wet Chemistry by Method 1664A

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
[illegible]rease (Hexane Extr)	ND		5.62	1	12/11/2019 12:11	WG1394456

Wet Chemistry by Method 420.4

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND		0.0400	1	12/13/2019 13:59	WG1394072

Wet Chemistry by Method ASTM D7511-12

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Cyanide	ND		0.00500	1	12/10/2019 14:22	WG1394039

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acrolein	ND		0.0500	1	12/12/2019 09:19	WG1395215
Acrylonitrile	ND		0.0100	1	12/12/2019 09:19	WG1395215
Benzene	ND		0.00100	1	12/12/2019 09:19	WG1395215
Bromoform	ND		0.00100	1	12/12/2019 09:19	WG1395215
Carbon tetrachloride	ND		0.00100	1	12/12/2019 09:19	WG1395215
Chlorobenzene	ND		0.00100	1	12/12/2019 09:19	WG1395215
Chlorodibromomethane	ND		0.00100	1	12/12/2019 09:19	WG1395215
Chloroethane	ND		0.00500	1	12/12/2019 09:19	WG1395215
2-Chloroethyl vinyl ether	ND		0.0500	1	12/12/2019 09:19	WG1395215
[illegible]form	ND		0.00500	1	12/12/2019 09:19	WG1395215
[illegible]dichloromethane	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,1-Dichloroethane	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,2-Dichloroethane	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,1-Dichloroethene	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,2-Dichloropropane	ND		0.00100	1	12/12/2019 09:19	WG1395215
cis-1,3-Dichloropropene	ND		0.00100	1	12/12/2019 09:19	WG1395215
trans-1,3-Dichloropropene	ND		0.00100	1	12/12/2019 09:19	WG1395215
Ethylbenzene	ND		0.00100	1	12/12/2019 09:19	WG1395215
Bromomethane	ND		0.00500	1	12/12/2019 09:19	WG1395215
Chloromethane	ND		0.00250	1	12/12/2019 09:19	WG1395215
Methylene Chloride	ND		0.00500	1	12/12/2019 09:19	WG1395215
1,1,2,2-Tetrachloroethane	ND		0.00100	1	12/12/2019 09:19	WG1395215
Tetrachloroethene	ND		0.00100	1	12/12/2019 09:19	WG1395215
Toluene	ND		0.00100	1	12/12/2019 09:19	WG1395215
trans-1,2-Dichloroethene	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,1,1-Trichloroethane	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,1,2-Trichloroethane	ND		0.00100	1	12/12/2019 09:19	WG1395215
Trichloroethene	ND		0.00100	1	12/12/2019 09:19	WG1395215
Vinyl chloride	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,2-Dichlorobenzene	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,3-Dichlorobenzene	ND		0.00100	1	12/12/2019 09:19	WG1395215
1,4-Dichlorobenzene	ND		0.00100	1	12/12/2019 09:19	WG1395215
(S) Toluene-d8	*106*		*80.0-120*		*12/12/2019 09:19*	WG1395215
(S) 4-Bromofluorobenzene	*104*		*80.0-120*		*12/12/2019 09:19*	WG1395215
(S) 1,2-Dichloroethane-d4	*103*		*70.0-130*		*12/12/2019 09:19*	WG1395215

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
aphthene	ND		0.00100	1	12/13/2019 15:33	WG1394830
aphthylene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Anthracene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Benzidine	ND		0.0100	1	12/13/2019 15:33	WG1394830
Benzo(a)anthracene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Benzo(a)pyrene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Benzo(b)fluoranthene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Benzo(g,h,i)perylene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Benzo(k)fluoranthene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Bis(2-chlorethoxy)methane	ND		0.0100	1	12/13/2019 15:33	WG1394830
Bis(2-chloroethyl)ether	ND		0.0100	1	12/13/2019 15:33	WG1394830
Bis(2-chloroisopropyl)ether	ND		0.0100	1	12/13/2019 15:33	WG1394830
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	12/13/2019 15:33	WG1394830
4-Bromophenyl-phenylether	ND		0.0100	1	12/13/2019 15:33	WG1394830
Benzylbutyl phthalate	ND		0.00300	1	12/13/2019 15:33	WG1394830
2-Chloronaphthalene	ND		0.00100	1	12/13/2019 15:33	WG1394830
4-Chlorophenyl-phenylether	ND		0.0100	1	12/13/2019 15:33	WG1394830
Chrysene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Dibenz(a,h)anthracene	ND		0.00100	1	12/13/2019 15:33	WG1394830
3,3-Dichlorobenzidine	ND		0.0100	1	12/13/2019 15:33	WG1394830
Diethyl phthalate	ND		0.00300	1	12/13/2019 15:33	WG1394830
Dimethyl phthalate	ND		0.00300	1	12/13/2019 15:33	WG1394830
Di-n-butyl phthalate	ND		0.00300	1	12/13/2019 15:33	WG1394830
2,4-Dinitrotoluene	ND		0.0100	1	12/13/2019 15:33	WG1394830
2,6-Dinitrotoluene	ND		0.0100	1	12/13/2019 15:33	WG1394830
Di-n-octyl phthalate	ND		0.00300	1	12/13/2019 15:33	WG1394830
ohenylhydrazine	ND		0.0100	1	12/13/2019 15:33	WG1394830
nthene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Fluorene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Hexachlorobenzene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Hexachloro-1,3-butadiene	ND		0.0100	1	12/13/2019 15:33	WG1394830
Hexachloroethane	ND		0.0100	1	12/13/2019 15:33	WG1394830
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Isophorone	ND		0.0100	1	12/13/2019 15:33	WG1394830
Naphthalene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Nitrobenzene	ND		0.0100	1	12/13/2019 15:33	WG1394830
n-Nitrosodimethylamine	ND		0.0100	1	12/13/2019 15:33	WG1394830
n-Nitrosodi-n-propylamine	ND		0.0100	1	12/13/2019 15:33	WG1394830
n-Nitrosodiphenylamine	ND		0.0100	1	12/13/2019 15:33	WG1394830
Phenanthrene	ND		0.00100	1	12/13/2019 15:33	WG1394830
Pyrene	ND		0.00100	1	12/13/2019 15:33	WG1394830
1,2,4-Trichlorobenzene	ND		0.0100	1	12/13/2019 15:33	WG1394830
2-Chlorophenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
2,4-Dichlorophenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
2,4-Dimethylphenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
4,6-Dinitro-2-methylphenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
2,4-Dinitrophenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
2-Nitrophenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
4-Nitrophenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
4-Chloro-3-methylphenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
Pentachlorophenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
Phenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
2,4,6-Trichlorophenol	ND		0.0100	1	12/13/2019 15:33	WG1394830
-Fluorophenol	*34.7*		*10.0-120*		*12/13/2019 15:33*	WG1394830
henol-d5	*22.9*		*8.00-424*		*12/13/2019 15:33*	WG1394830
(S) Nitrobenzene-d5	*51.8*		*15.0-314*		*12/13/2019 15:33*	WG1394830

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
?-Fluorobiphenyl	57.3		22.0-127		12/13/2019 15:33	WG1394830
(S) 2,4,6-Tribromophenol	84.5		10.0-153		12/13/2019 15:33	WG1394830
(S) p-Terphenyl-d14	77.5		29.0-141		12/13/2019 15:33	WG1394830

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

[1] Cp
[2] Tc
[3] Ss
[4] Cn
[5] Sr
[6] Gl
[7] Al
[8] Sc

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

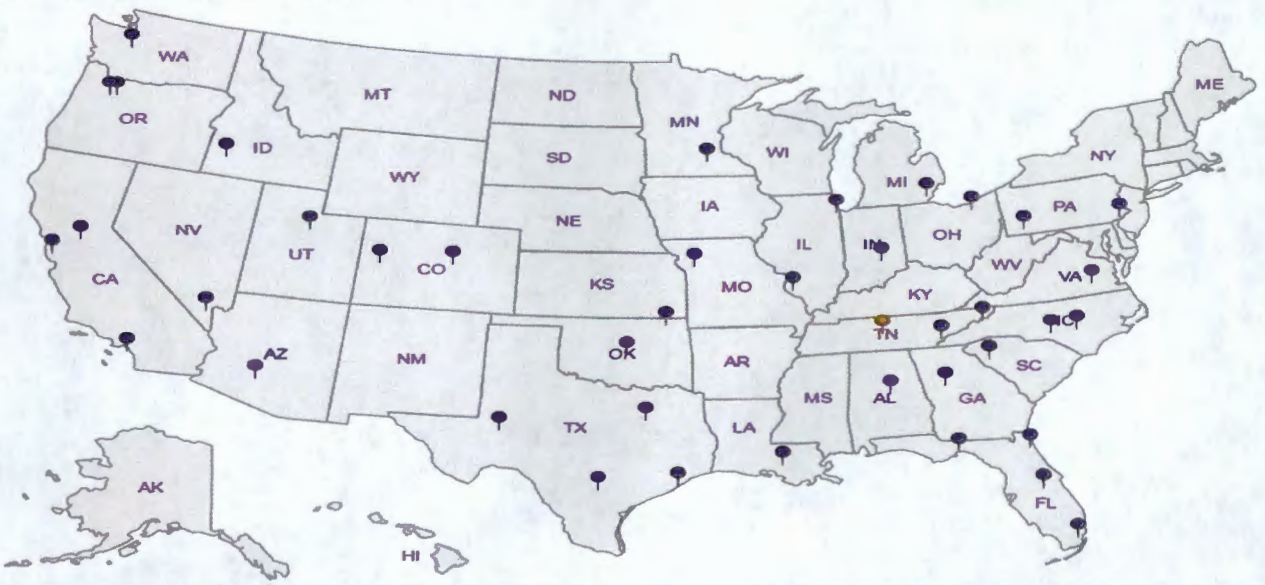
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
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T157484 | PAGE 1 of 1 | Permit Renewal Comp | ATHWWAAL

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	70506	
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
Tim Norman	**DATE DUE (REQUIRED)**	

Pace Analytical LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	AGG, ASG, BEG MJ	CDG, CRG, CUG MJ	NIG, PBG, SBG MJ	SEG, TLG, ZNG MJ	HARDMETALS MJ	CAICP, MGICP MJ	DECNO3NO2	DECPT	DECTDS	DECTKN
L1167849-01	Effluent Permit Renewal Comp				X	X	X	X	X	X	X	X	X	X	X

Comments: CBOD, TSS, NH3 to be performed by client
Hg performed quarterly
Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.7

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B					
Start Date	12/4/19	pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Pint HNO3	CL	Metals
Start Time	22:12 ~~10:44~~ TU	Date		Date		Date		Date		1	Poly Qrt Cool 6c		N/N, TDS
Stop Date	12/5/19	Time		Time		Time		Time		1	Poly Pint H2SO4	CL	P, TKN
Stop Time	22:24	Analyst		Analyst		Analyst		Analyst					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Tim Norman	12/5/19	23:00	Josh Blankenship	12/6/19	07:00	Josh Blankenship	12/06/2019	13:05
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Josh Blankenship	12/5/19	23:00	Josh Blankenship	12/06/2019	07:00			

RECEIVED FOR LABORATORY USE BY (SIGNATURE)	DATE	TIME	SAMPLE STATUS
Kimberly Olsen	12-6-19	1305	☒ Accepted ☐ Rejected ☐ Accepted with Exception

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T57484 | PAGE 1 of 1 | Permit Renewal Grab ATHWWAAL

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	70506	
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
Josh Blankenship	**DATE DUE (REQUIRED)**	

Pace Analytical LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	DECCN	OGHEX MJ	PHT MJ	625.1F2C MJ	V624.1F2C MJ	PICKUP
L1167849-02	Effluent Permit Renewal Grab	12/04/2019	12:08	X		X	X	X	X	X	

REQUESTED ANALYSES

Comments: EC and Field data to be performed by client

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.7

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B					
Start Date		pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Pint NAOH Cool 6c	712	CN
Start Time		Date		Date		Date		Date		2	GL WM1000ml HCL Cool 6c		OG
Stop Date		Time		Time		Time		Time		1	Amber Liter H2SO4 Cool 6c	L2	Phenolics
Stop Time		Analyst		Analyst		Analyst		Analyst		1	Amber 100ml Cool 6c		625
										3	VOA 40ml Vials Iced		624

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Josh Blankenship	12/04/2019	13:05						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
Kenneth Olsen	12-6-19	1305	☒ Accepted ☐ Rejected ☐ Accepted with Exception

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ANALYTICAL REPORT

July 28, 2020

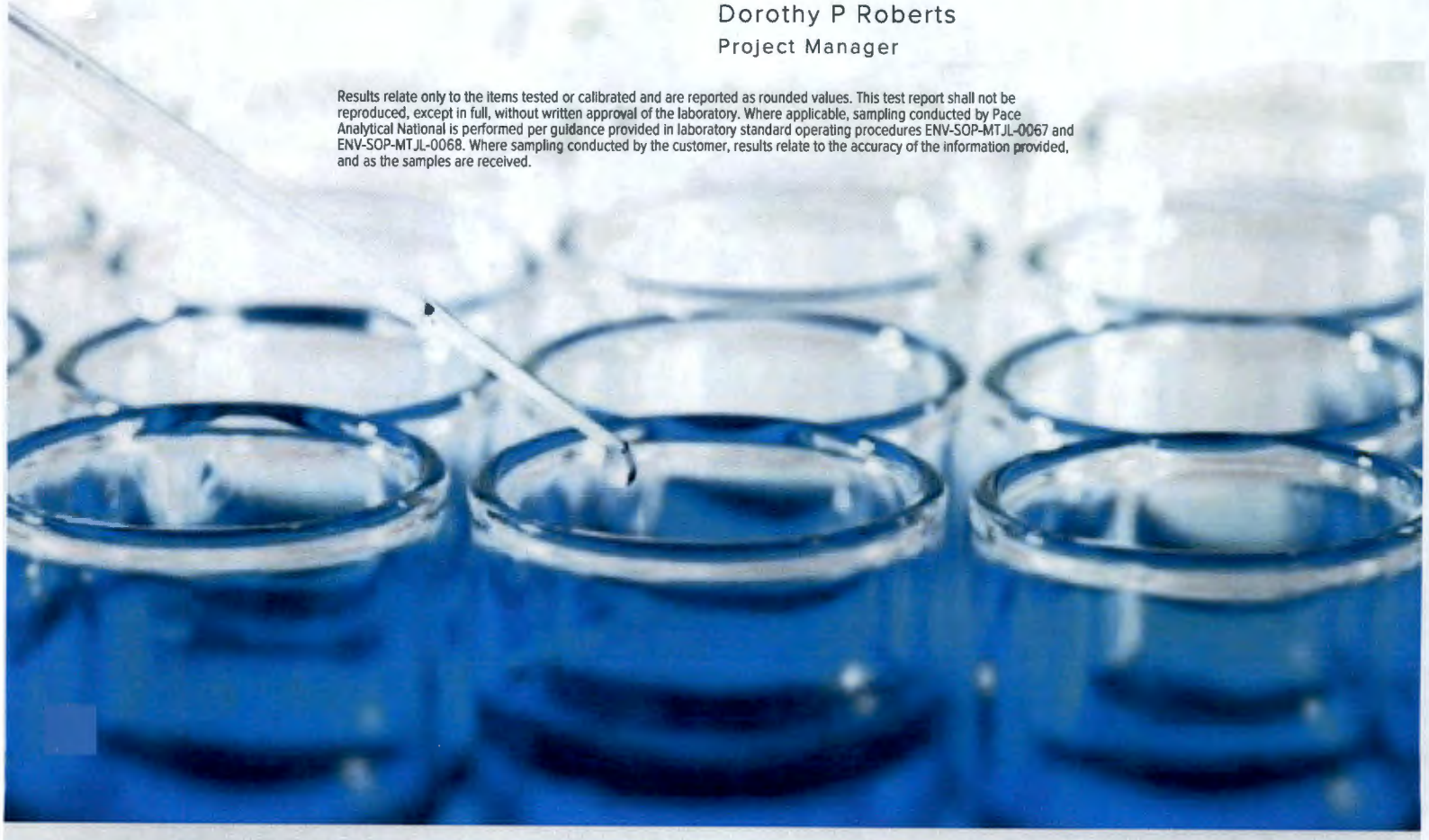
City of Athens WWTP

Sample Delivery Group:	L1241468
Samples Received:	07/20/2020
Project Number:	
Description:	

Report To: Tim Norman
PO Box 1089
Athens, AL 35611

Entire Report Reviewed By: Dorothy P Roberts

Dorothy P Roberts
Project Manager



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ONE LAB. NATIONWIDE.

EFFLUENT PERMIT RENEWAL L1241468-01 WW

Collected by: CLIENT | Collected date/time: 07/20/20 00:03 | Received date/time: 07/20/20 13:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1512257	1	07/22/20 08:32	07/22/20 08:32	TRB	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1514054	1	07/23/20 12:52	07/27/20 07:11	JDR	Decatur, AL
Wet Chemistry by Method 300.0	WG1512042	1	07/20/20 16:36	07/20/20 16:36	LLW	Decatur, AL
Wet Chemistry by Method 4500-Norg C	WG1513249	1	07/22/20 08:45	07/22/20 08:45	JDR	Decatur, AL
Wet Chemistry by Method EPA 365.3	WG1514836	1	07/24/20 10:25	07/24/20 15:20	JTM	Decatur, AL
Metals (ICP) by Method 200.7	WG1512257	1	07/21/20 16:44	07/22/20 08:32	TRB	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1512353	1	07/21/20 15:44	07/22/20 02:02	TM	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1512353	1	07/21/20 15:44	07/22/20 09:36	JPD	Mt. Juliet, TN

EFFLUENT PERMIT RENEWAL L1241468-02 WW

Collected by: CLIENT | Collected date/time: 07/20/20 08:02 | Received date/time: 07/20/20 13:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 1664A	WG1513455	1	07/22/20 17:57	07/23/20 09:08	DLH	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1513604	1	07/22/20 20:00	07/23/20 15:13	SDL	Mt. Juliet, TN
Wet Chemistry by Method ASTM D7511-12	WG1512308	1	07/21/20 09:13	07/21/20 09:13	JDR	Decatur, AL
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1513239	1	07/22/20 16:40	07/22/20 16:40	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1514147	1	07/24/20 00:41	07/24/20 11:53	AO	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Dorothy P Roberts

Dorothy P Roberts
Project Manager

Calculated Results

	Result	Qualifier	RDL	Dilution	Analysis	Batch
te	mg/l		mg/l		date / time	
ness (calculated) as CaCO3	160		2.50	1	07/22/2020 08:32	WG1512257

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	313		1.00	1	07/27/2020 07:11	WG1514054

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Nitrate-Nitrite	4.54		0.0600	1	07/20/2020 16:36	WG1512042

Wet Chemistry by Method 4500-Norg C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Kjeldahl Nitrogen, TKN	3.67		1.50	1	07/22/2020 08:45	WG1513249

Wet Chemistry by Method EPA 365.3

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Phosphorus	ND		1.00	1	07/24/2020 15:20	WG1514836

Metals (ICP) by Method 200.7

	Result	Qualifier	RDL	Dilution	Analysis	Batch
e	mg/l		mg/l		date / time	
Calcium	55.2		1.00	1	07/22/2020 08:32	WG1512257
Magnesium	5.30		1.00	1	07/22/2020 08:32	WG1512257

Metals (ICPMS) by Method 200.8

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Antimony	ND		0.00500	1	07/22/2020 09:36	WG1512353
Arsenic	ND		0.00100	1	07/22/2020 02:02	WG1512353
Beryllium	ND		0.00100	1	07/22/2020 02:02	WG1512353
Cadmium	ND		0.00100	1	07/22/2020 02:02	WG1512353
Chromium	ND		0.0200	1	07/22/2020 02:02	WG1512353
Copper	0.00472		0.00100	1	07/22/2020 02:02	WG1512353
Lead	ND		0.00200	1	07/22/2020 02:02	WG1512353
Nickel	0.00332		0.00200	1	07/22/2020 02:02	WG1512353
Selenium	ND		0.00200	1	07/22/2020 02:02	WG1512353
Silver	ND		0.00100	1	07/22/2020 02:02	WG1512353
Thallium	ND		0.00100	1	07/22/2020 02:02	WG1512353
Zinc	0.0527		0.0200	1	07/22/2020 02:02	WG1512353

Wet Chemistry by Method 1664A

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
te						
Grease (Hexane Extr)	ND		5.44	1	07/23/2020 09:08	WG1513455

Wet Chemistry by Method 420.4

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND	J6	0.0400	1	07/23/2020 15:13	WG1513604

Wet Chemistry by Method ASTM D7511-12

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Cyanide	ND		0.00500	1	07/21/2020 09:13	WG1512308

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acrolein	ND		0.0500	1	07/22/2020 16:40	WG1513239
Acrylonitrile	ND		0.0100	1	07/22/2020 16:40	WG1513239
Benzene	ND		0.00100	1	07/22/2020 16:40	WG1513239
Bromoform	ND		0.00100	1	07/22/2020 16:40	WG1513239
Carbon tetrachloride	ND		0.00100	1	07/22/2020 16:40	WG1513239
Chlorobenzene	ND		0.00100	1	07/22/2020 16:40	WG1513239
Chlorodibromomethane	ND		0.00100	1	07/22/2020 16:40	WG1513239
Chloroethane	ND		0.00500	1	07/22/2020 16:40	WG1513239
2-Chloroethyl vinyl ether	ND		0.0500	1	07/22/2020 16:40	WG1513239
)form	ND		0.00500	1	07/22/2020 16:40	WG1513239
)dichloromethane	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,1-Dichloroethane	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,2-Dichloroethane	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,1-Dichloroethene	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,2-Dichloropropane	ND		0.00100	1	07/22/2020 16:40	WG1513239
cis-1,3-Dichloropropene	ND		0.00100	1	07/22/2020 16:40	WG1513239
trans-1,3-Dichloropropene	ND		0.00100	1	07/22/2020 16:40	WG1513239
Ethylbenzene	ND		0.00100	1	07/22/2020 16:40	WG1513239
Bromomethane	ND		0.00500	1	07/22/2020 16:40	WG1513239
Chloromethane	ND		0.00250	1	07/22/2020 16:40	WG1513239
Methylene Chloride	ND		0.00500	1	07/22/2020 16:40	WG1513239
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/22/2020 16:40	WG1513239
Tetrachloroethene	ND		0.00100	1	07/22/2020 16:40	WG1513239
Toluene	ND		0.00100	1	07/22/2020 16:40	WG1513239
trans-1,2-Dichloroethene	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,1,1-Trichloroethane	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,1,2-Trichloroethane	ND		0.00100	1	07/22/2020 16:40	WG1513239
Trichloroethene	ND		0.00100	1	07/22/2020 16:40	WG1513239
Vinyl chloride	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,2-Dichlorobenzene	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,3-Dichlorobenzene	ND		0.00100	1	07/22/2020 16:40	WG1513239
1,4-Dichlorobenzene	ND		0.00100	1	07/22/2020 16:40	WG1513239
(S) Toluene-d8	*111*		*80.0-120*		*07/22/2020 16:40*	WG1513239
(S) 4-Bromofluorobenzene	*110*		*80.0-120*		*07/22/2020 16:40*	WG1513239
(S) 1,2-Dichloroethane-d4	*94.1*		*70.0-130*		*07/22/2020 16:40*	WG1513239

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
aphthene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Acenaphthylene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Anthracene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Benzidine	ND		0.0100	1	07/24/2020 11:53	WG1514147
Benzo(a)anthracene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Benzo(a)pyrene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Benzo(b)fluoranthene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Benzo(g,h,i)perylene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Benzo(k)fluoranthene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Bis(2-chlorethoxy)methane	ND		0.0100	1	07/24/2020 11:53	WG1514147
Bis(2-chloroethyl)ether	ND		0.0100	1	07/24/2020 11:53	WG1514147
2,2-Oxybis(1-Chloropropane)	ND		0.0100	1	07/24/2020 11:53	WG1514147
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	07/24/2020 11:53	WG1514147
4-Bromophenyl-phenylether	ND		0.0100	1	07/24/2020 11:53	WG1514147
Benzylbutyl phthalate	ND		0.00300	1	07/24/2020 11:53	WG1514147
2-Chloronaphthalene	ND		0.00100	1	07/24/2020 11:53	WG1514147
4-Chlorophenyl-phenylether	ND		0.0100	1	07/24/2020 11:53	WG1514147
Chrysene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Dibenz(a,h)anthracene	ND		0.00100	1	07/24/2020 11:53	WG1514147
3,3-Dichlorobenzidine	ND		0.0100	1	07/24/2020 11:53	WG1514147
Diethyl phthalate	ND		0.00300	1	07/24/2020 11:53	WG1514147
Dimethyl phthalate	ND		0.00300	1	07/24/2020 11:53	WG1514147
Di-n-butyl phthalate	ND		0.00300	1	07/24/2020 11:53	WG1514147
2,4-Dinitrotoluene	ND		0.0100	1	07/24/2020 11:53	WG1514147
2,6-Dinitrotoluene	ND		0.0100	1	07/24/2020 11:53	WG1514147
Di-n-octyl phthalate	ND		0.00300	1	07/24/2020 11:53	WG1514147
henylhydrazine	ND		0.0100	1	07/24/2020 11:53	WG1514147
nthene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Fluorene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Hexachlorobenzene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Hexachloro-1,3-butadiene	ND		0.0100	1	07/24/2020 11:53	WG1514147
Hexachloroethane	ND		0.0100	1	07/24/2020 11:53	WG1514147
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Isophorone	ND		0.0100	1	07/24/2020 11:53	WG1514147
Naphthalene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Nitrobenzene	ND		0.0100	1	07/24/2020 11:53	WG1514147
n-Nitrosodimethylamine	ND		0.0100	1	07/24/2020 11:53	WG1514147
n-Nitrosodi-n-propylamine	ND		0.0100	1	07/24/2020 11:53	WG1514147
n-Nitrosodiphenylamine	ND		0.0100	1	07/24/2020 11:53	WG1514147
Phenanthrene	ND		0.00100	1	07/24/2020 11:53	WG1514147
Pyrene	ND		0.00100	1	07/24/2020 11:53	WG1514147
1,2,4-Trichlorobenzene	ND		0.0100	1	07/24/2020 11:53	WG1514147
2-Chlorophenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
2,4-Dichlorophenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
2,4-Dimethylphenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
4,6-Dinitro-2-methylphenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
2,4-Dinitrophenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
2-Nitrophenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
4-Nitrophenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
4-Chloro-3-methylphenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
Pentachlorophenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
Phenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
Trichlorophenol	ND		0.0100	1	07/24/2020 11:53	WG1514147
-Fluorophenol	*20.5*		*10.0-120*		*07/24/2020 11:53*	WG1514147
(S) Phenol-d5	*15.6*		*8.00-424*		*07/24/2020 11:53*	WG1514147
(S) Nitrobenzene-d5	*32.0*		*15.0-314*		*07/24/2020 11:53*	WG1514147

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
2-Fluorobiphenyl	39.5		22.0-127		07/24/2020 11:53	WG1514147
(S) 2,4,6-Tribromophenol	61.7		10.0-153		07/24/2020 11:53	WG1514147
(S) p-Terphenyl-d14	62.2		29.0-141		07/24/2020 11:53	WG1514147

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

[1] Cp
[2] Tc
[3] Ss
[4] Cn
[5] Sr
[6] Gl
[7] Al
[8] Sc

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

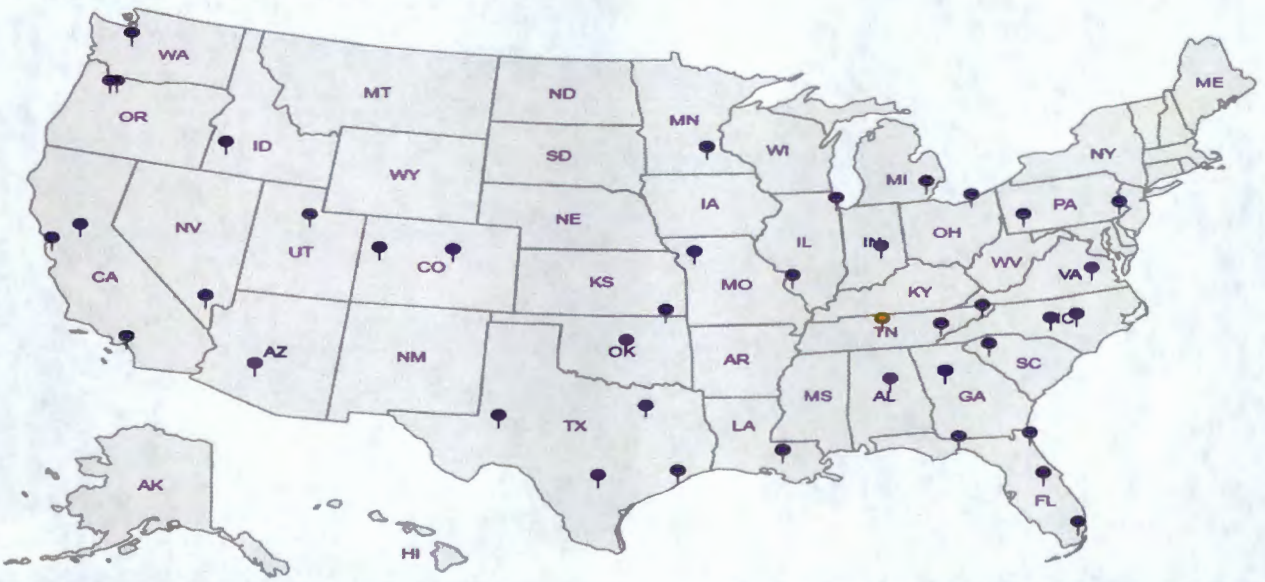
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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	PAGE	1	of 1
Permit Renewal Comp			
ATHWWAAL			

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	72738	
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
	DATE DUE (REQUIRED)	

Pace Analytical LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	AGG, ASG, BEG	CDG, CRG, CUG	NIG, PBG, SBG	SEG, TLG, ZNG	HARDMETALS	CAICP, MGICP	DECNO3NO2	DECPT	DECTDS	DECTKN
L1241408-1	Effluent Permit Renewal Comp	07/07/20	07:45		X	X	X	X	X	X	X	X	X	X	X

REQUESTED ANALYSES

Comments: **CBOD, TSS, NH3 to be performed by client**

Hg performed quarterly

Collector to complete shaded areas, as applicable

pH strip. (0 5-5.0)
Lot#20C20377
IR Code. 0313

SAMPLE TEMPERATURE RECEIVED @ 5.5

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B					
Start Date	54/07/19/20	pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Pint HNO3	<2	Metals
Start Time	00:03	Date		Date		Date		Date		1	Poly Qrt Cool 6c		N/N, TDS
Stop Date	07/07/20/20	Time		Time		Time		Time		1	Poly Pint H2SO4	L2	P, TKN
Stop Time	00:03	Analyst		Analyst		Analyst		Analyst					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Virgil White	07/07/20/20	12:26	Eric Mull	Mon 7/20/20	1330	[signature]	7/20/20	1700
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Eric Mull	Mon 7/20/20	12:26	[signature]	7/20/20	1330			

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
[signature]	7-20-20	1330	☑ Accepted ☐ Rejected ☐ Accepted with Exception

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
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(256) 350-0846

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PAGE	1	of	1
Permit Renewal Grab ATHWWAAL			

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	72738	
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
	DATE DUE (REQUIRED)	

Pace Analytical LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	DECCN	OGHEX	PHT	625.1F2C	V624.1F2C	PICKUP
L124A08-2	Effluent Permit Renewal Grab	mo 7/20/20	08:02	X		X	X	X	X	X	

REQUESTED ANALYSES

Comments: EC and Field data to be performed by client

pH strip (9.5-13)
Lot# 19L06664
IR Code: 0313

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 5.5

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type		Parameters
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B					
Start Date		pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Pint NAOH Cool 6c	7/2	CN
Start Time		Date		Date		Date		Date		2	GL WM1000ml HCL Cool 6c		OG
Stop Date		Time		Time		Time		Time		1	Amber Liter H2SO4 Cool 6c		Phenolics
Stop Time		Analyst		Analyst		Analyst		Analyst		1	Amber 100ml Cool 6c		625
										3	VOA 40ml Vials Iced		624

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Virgil White	mo 07/20/20	12:26	Eric Morell	Mon 7/20/20	1330		7/20/20	1700
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Eric Morell	Mon 7/20/20	12:26		7/20/20	1330			
RECEIVED FOR LABORATORY USE BY: (SIGNATURE)			**DATE**	**TIME**	**SAMPLE STATUS:**			
			7/20/20	1330	☒ Accepted	☐ Rejected	☐ Accepted with Exception	

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(256) 350-0846

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COMPANY/CLIENT NAME	CLIENT P.O NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	72738	

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**

SAMPLE COLLECTED BY	EXPEDITED REPORT DELIVERY (SURCHARGE)
	DATE DUE (REQUIRED)

Pace Analytical LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	DECCN	OGHEX	PHT	625.1F2C
L124A08-2	Effluent Permit Renewal Grab	7/07/20/20	08:02	X		X	X	X	X

Comments: EC and Field data to be performed by client

pH strip (9.5-13)
Lot# 19L06664
IR Code 0313

Collector to complete shaded areas, as applicable

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B			
Start Date		pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Pint NAOH Coc
Start Time		Date		Date		Date		Date		2	GL WM1000ml HCL C
Stop Date		Time		Time		Time		Time		1	Amber Liter H2SO4 C
Stop Time		Analyst		Analyst		Analyst		Analyst		1	Amber 100ml Cool
										3	VOA 40ml Vials Ic

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RELINQUISHED
Virgil White	7/07/20/20	12:26	Eric Mann	MON 7/20/20	1330	
RECEIVED BY (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY**
Eric Mann	MON 7/20/20	12:26			1330	

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS
		1330	☑ Accepted ☐ Rejected

JSA 7-21-20 COC

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

2220 BELTLINE ROAD SW DECATUR, AL MA 35601
(256) 350-0846

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COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Athens WWTP	72738	

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Tim Norman	942 E. Sanderfer Road	Athens, AL 35611

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
tnorman@athens-utilities.com	256-233-8774	**Permit Renewal**

SAMPLE COLLECTED BY	EXPEDITED REPORT DELIVERY (SURCHARGE)
	DATE DUE (REQUIRED)

Pace Analytical LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	AGG, ASG, BEG	CDG, CRG, CUG	NIG, PBG, SBG	SEG, TLG, ZNG
U241408-1	Effluent Permit Renewal Comp	mo/07/07/20	07:45		X	X	X	X	X

Comments: CBOD, TSS, NH3 to be performed by client

Hg performed quarterly

Collector to complete shaded areas, as applicable

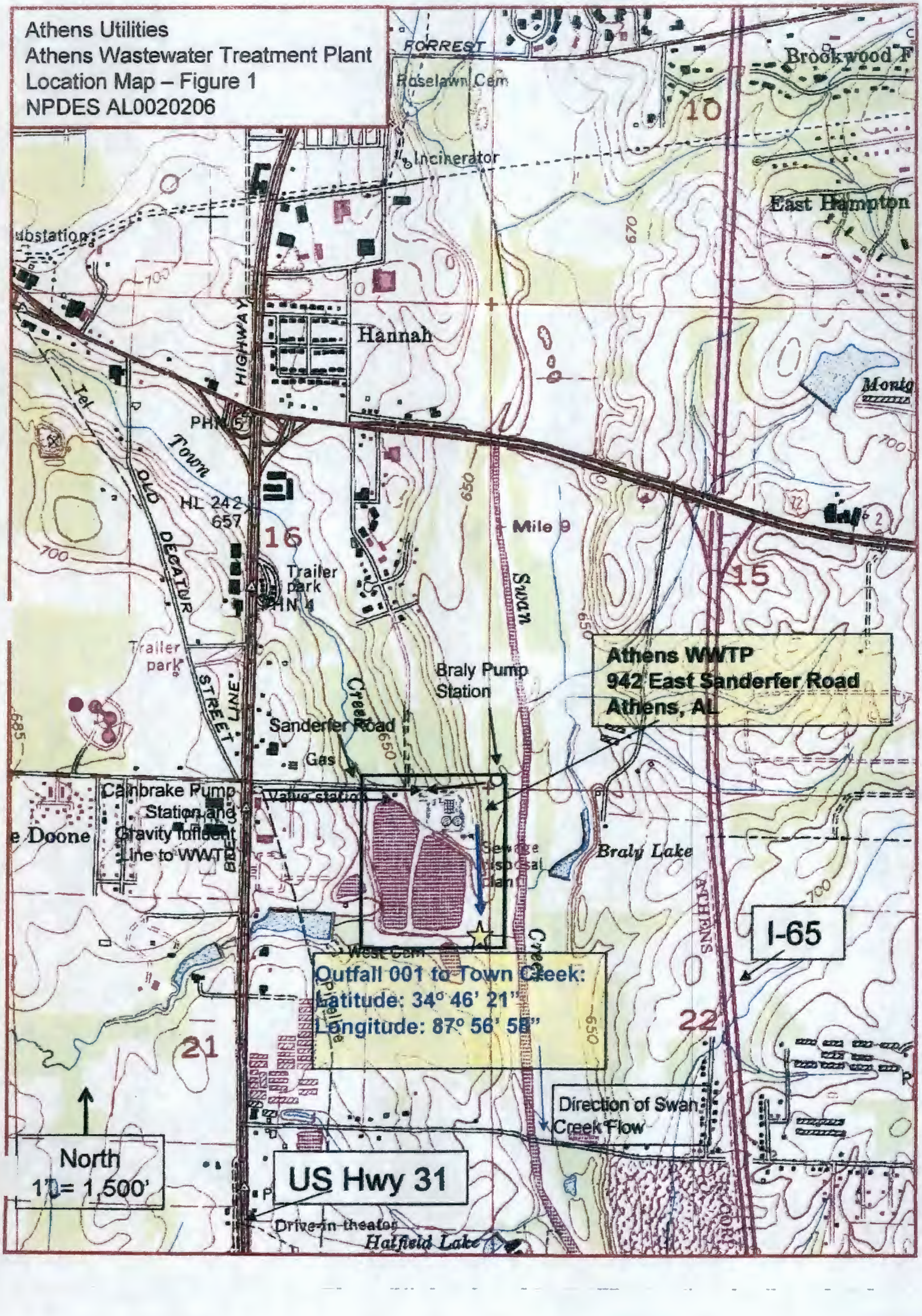
pH strip: (0.5
Lot#20C20
IR Code: 0

SAMPLER INFORMATION		FIELD INFORMATION								Qty	Type
		SM 4500H+B		SM 4500-Cl D		SM 4500-O G		SM 2550B			
Start Date	5M/07/19/20	pH SU		TRC mg/l		DO mg/l		Temp deg C		1	Poly Pint HNO3
Start Time	00:03	Date		Date		Date		Date		1	Poly Qrt Cool 6
Stop Date	mo/07/20/20	Time		Time		Time		Time		1	Poly Pint H2SO4
Stop Time	00:03	Analyst		Analyst		Analyst		Analyst			

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED
Virgil White	mo/07/20/20	12:26	Eric Mull	Mon 7/20/20	1330	
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY:**
Eric Mull	Mon 7/20/20	12:26		7/20/20	1330	

RECEIVED FOR LABORATORY USE BY (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
	7-20-20	1330	☑ Accepted ☐ Rejected

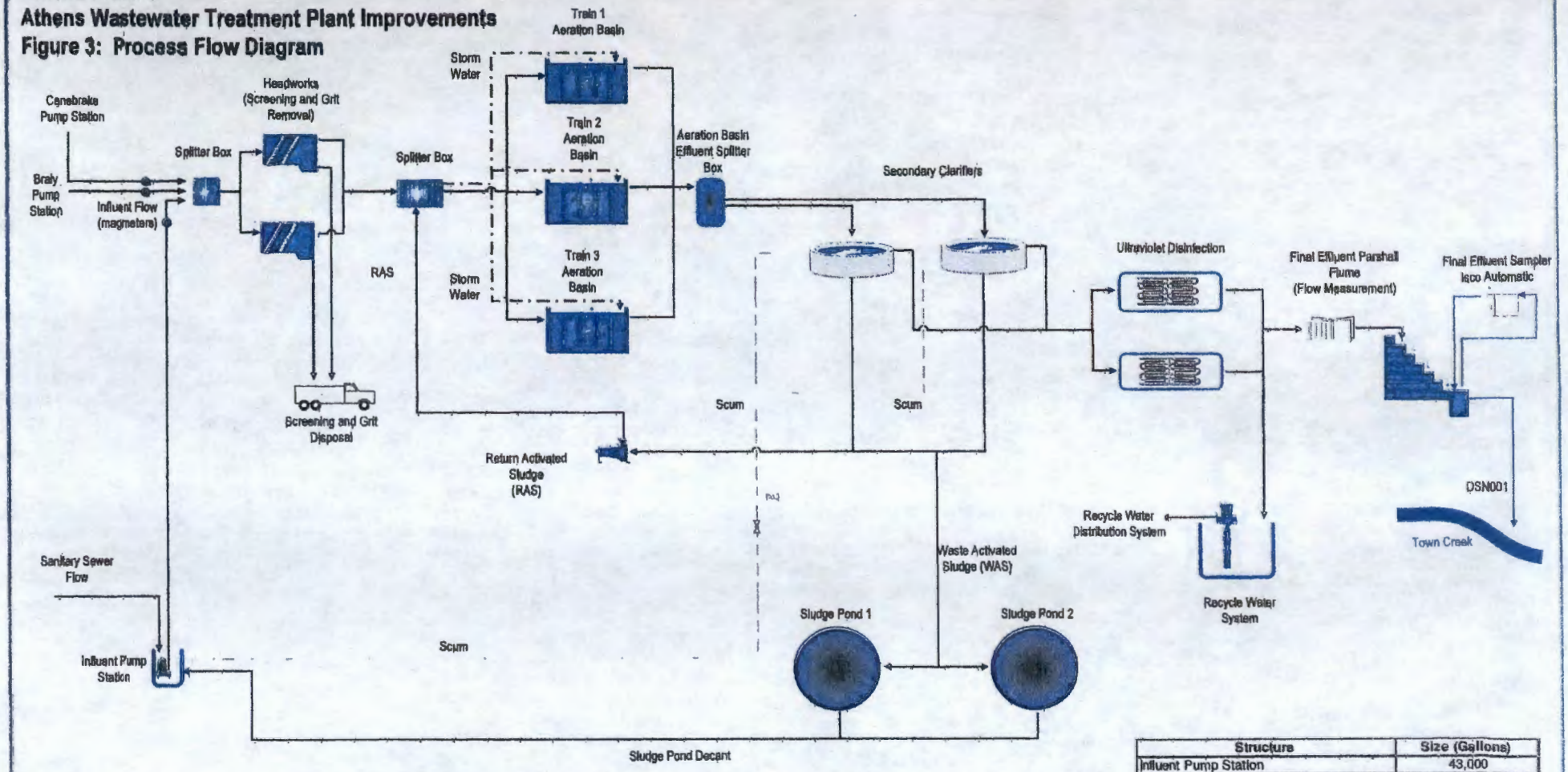
7-21-20


Athens Utilities
Athens Wastewater Treatment Plant
Location Map – Figure 1
NPDES AL0020206
FORREST
Roselawn Cem
Brookwood
10
Incinerator
East Hampton
Substation
670
700
HIGHWAY
Hannah
Monte
PHN 5
Town
OLD DECATUR STREET
HL 242
657
16
Mile 9
650
Swan
Trailer park
PHN 4
15
Trailer park
Creek
Braly Pump Station
Athens WWTP
942 East Sanderfer Road
Athens, AL
685
LINE
Sanderfer Road
Gas
Cainbrake Pump Station and Gravity Influent Line to WWTP
Valve station
Doone
Sewage Disposal Plant
Braly Lake
I-65
West Cem
Outfall 001 to Town Creek:
Latitude: 34° 46' 21"
Longitude: 87° 56' 58"
ATHENS
22
21
Direction of Swan Creek Flow
North
1" = 1,500'
US Hwy 31
Drive-in theater
Hatfield Lake

Athens Utilities

Athens Wastewater Treatment Plant Improvements

Figure 3: Process Flow Diagram

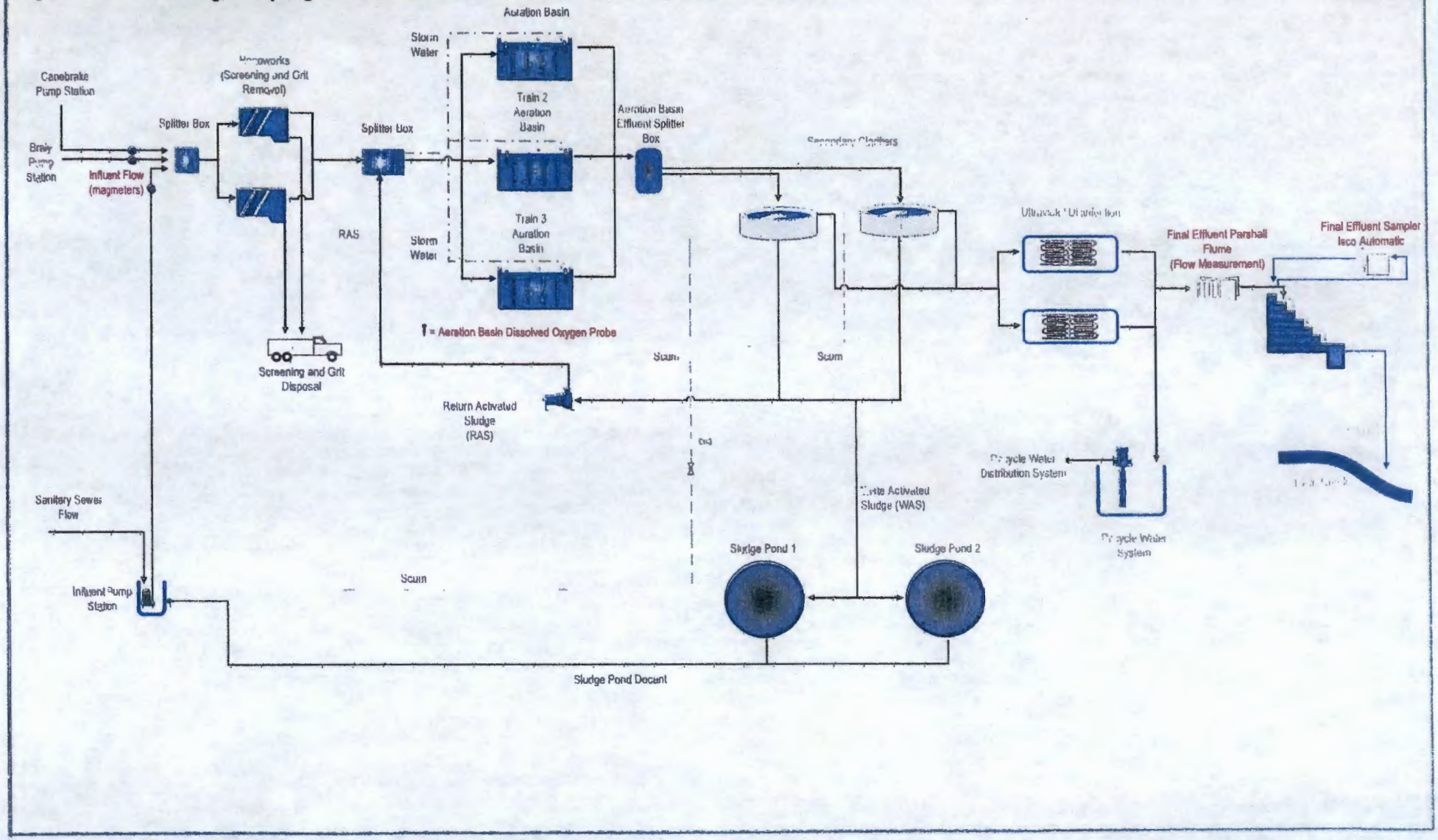


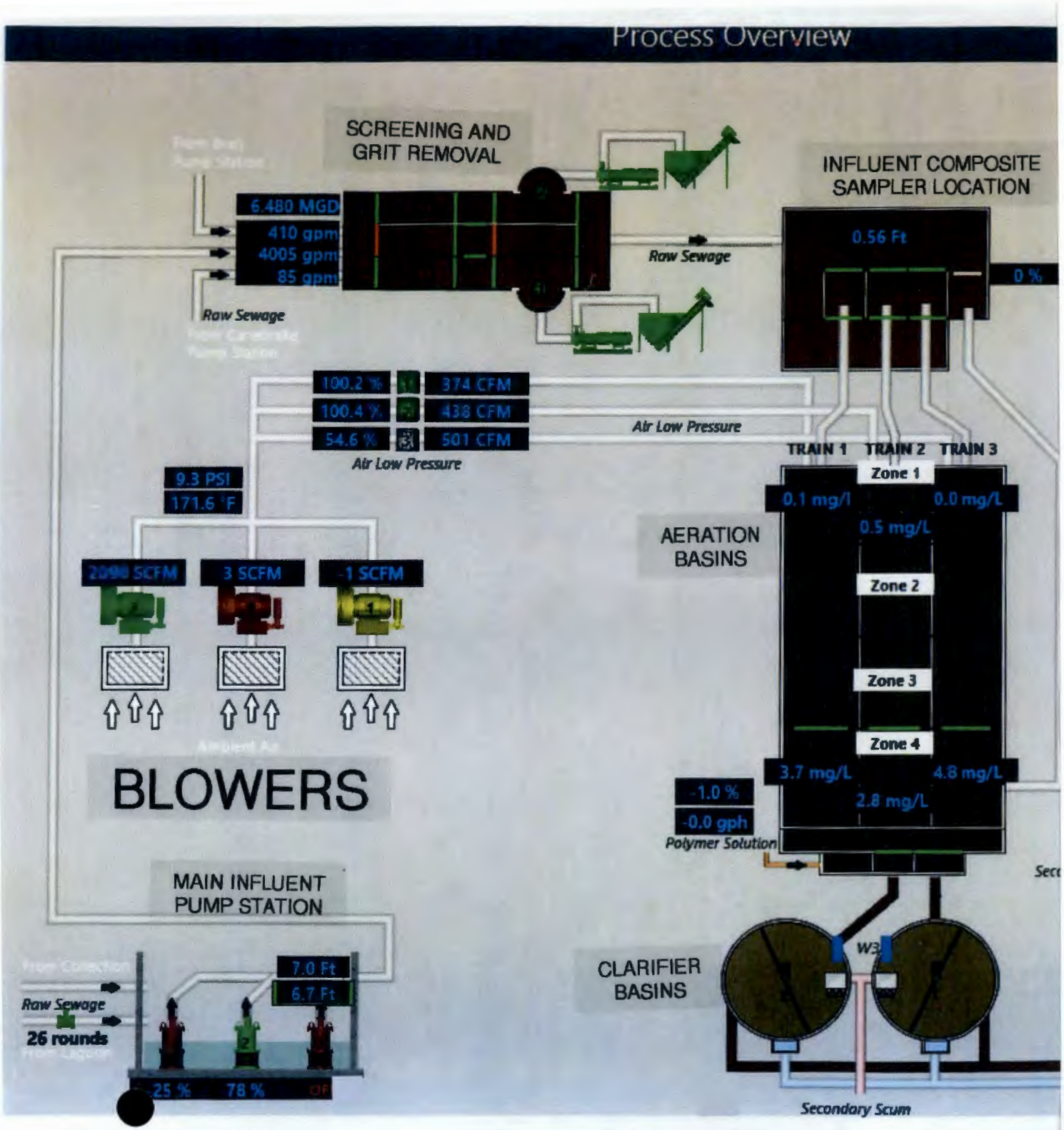
Structure	Size (Gallons)
Influent Pump Station	43,000
Splitter Box	1,000
Headworks (Screening and Grit Removal)	39,000
Splitter Box	3,000
Train 1 Aeration Basin	835,000
Train 2 Aeration Basin	835,000
Train 3 Aeration Basin	835,000
Aeration Basin Effluent Splitter	5,970
Secondary Clarifiers (Total Capacity)	2,390,000
Ultraviolet Disinfection	10,000
Sludge Ponds	39,000,000

Athens Utilities

Athens Wastewater Treatment Plant Improvements

Figure 4: Flow Metering, Sampling and On Line Instrument Locations within Plant Process Flow




Process Overview
SCREENING AND GRIT REMOVAL
6.480 MGD
410 gpm
4005 gpm
85 gpm
Raw Sewage
Raw Sewage
INFLUENT COMPOSITE SAMPLER LOCATION
0.56 Ft
0 %
100.2 %
374 CFM
100.4 %
438 CFM
54.6 %
501 CFM
Air Low Pressure
Air Low Pressure
9.3 PSI
171.6 °F
2090 SCFM
3 SCFM
-1 SCFM
BLOWERS
TRAIN 1
TRAIN 2
TRAIN 3
Zone 1
0.1 mg/l
0.0 mg/L
0.5 mg/L
AERATION BASINS
Zone 2
Zone 3
Zone 4
3.7 mg/L
4.8 mg/L
2.8 mg/L
-1.0 %
-0.0 gph
Polymer Solution
MAIN INFLUENT PUMP STATION
7.0 Ft
6.7 Ft
Raw Sewage
26 rounds
25 %
78 %
CLARIFIER BASINS
Secondary Scum

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

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

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

RECEIVED
MAR 01 2021
MUNICIPAL SECTION

PURPOSE OF THIS APPLICATION

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

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

SECTION A – GENERAL INFORMATION

1. Facility Name: Athens Wastewater Treatment Plant Facility County: Limestone

   a. Operator Name: City of Athens Utilities

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

   If No, provide the following information:

   Operator Name: NA

   Operator Address (Street or PO Box): NA

   City: NA NA Zip: NA

   Phone Number: NA Email Address: NA

   Operator Status:

   ☐ Public-federal ☐ Public-state ☒ Public-other (please specify): Municipal
   ☐ Private ☐ Other (please specify): NA

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

   NA

   c. Name of Permittee* if different than Operator: NA

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

2. NPDES Permit Number: AL 0020206 (Not applicable if initial permit application)

3. Facility Location (Front Gate): Latitude: 34° 46' 28" Longitude: 86° 57' 9"

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

   Name and Title: Jimmy Junkin, Water Services Department Manager

   Address: 1806 Wilkinson Street (PO Box 1089)

   City: Athens State: AL Zip: 35612

   Phone Number: 256-232-1440 Email Address: jjunkin@athens-utilities.com

5. Designated Facility/DMR Contact:

Name: Virgil White Title: Wastewater Treatment Plant Superintendent

Phone Number: 256-497-7451 Email Address: vwhite@athens-utilities.com

6. Designated Emergency Contact:

Name: Jimmy Junkin Title: Water Services Department Manager

Phone Number: 256-232-1440 Email Address: jjunkin@athens-utilities.com

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

Name: NA Title: NA

Address: NA

City: NA State: NA Zip: NA

Phone Number: NA Email Address: NA

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

Facility Name	Permit Number	Type of Action	Date of Action
Athens Wastewater Treatment Plant	AL0020206	TSS Excursion	March 2017
Athens Wastewater Treatment Plant	AL0020206	Ecoli Max Daily Excursion	June 2017
Athens Wastewater Treatment Plant	AL0020206	Ecoli Max Daily Excursion	July 2018
Athens Wastewater Treatment Plant	AL0020206	Consent Order	November, 2019

SECTION B – WASTEWATER DISCHARGE INFORMATION

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

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

For each shared outfall, provide the following:

Applicant's Outfall No.	Name of Other Permittee/Facility	NPDES Permit No.	Where is sample collected by Applicant?
NA	NA	NA	NA
NA	NA	NA	NA
NA	NA	NA	NA

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

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

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

As part of an I&I reduction plan we have recently started to develop, we will plan to install both permanent and portable flow monitoring equipment in different locations within our sewer collection system. Engineers are currently working to determine those locations.

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

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

New lift stations are currently planned or proposed at Huntsville-Brownsferry Road, Hatfield Lake Road, Nature's Cove, Lindsay Lane Christian Academy, Lucas Ferry Farms, Brookhill Landing/Cottage, Pepper Road, and Athens Preserve. Total expected flow of about 0.3 to 1.0 MGD.

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

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

Description of Waste	Description of Storage Location
Wasted Activated Sludge	East Sludge Storage Lagoon on WWTP grounds
Wasted Activated Sludge	West Sludge Storage Lagoon on WWTP grounds

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

SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS

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

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit?
American Leakless	Process wastewaters associated with coil coating operations	Existing	0.003	☒ Yes ☐ No
Cast Products Incorporated	Process wastewaters associated with aluminum casting operations	Existing	0.002	☒ Yes ☐ No
Federal Mogul	Wastewater associated with the manufacture of automotive parts	Existing	0.062	☒ Yes ☐ No
Steelcase	Industrial wastewater resulting from metal finishing from operations	Existing	0.021	☒ Yes ☐ No
Indorama	Process wastewaters associated with the production of polyethelene terephathalate (PET) flakes and pellets	Existing	0.075	☒ Yes ☐ No
				☐ Yes ☒ No
				☐ Yes ☐ No
				☐ Yes ☐ No
				☐ Yes ☐ No

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

If yes, please attach a copy of the ordinance.

SECTION E – COASTAL ZONE INFORMATION

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

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

SECTION F – ANTI-DEGRADATION EVALUATION

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

1. Is this a new or increased discharge that began after April 3, 1991? ☐ Yes ■ No
   If yes, complete F.2 below. If no, go to Section G.

2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in F.1? ☐ Yes ☐ No

   If yes, do not complete this section.

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

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

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

   NA

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

NA

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

NA

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

NA

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

NA

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

NA

SECTION G – EPA Application Forms

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

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

SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS

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

SECTION I– RECEIVING WATERS

Outfall No.	Receiving Water(s)	303(d) Segment?	Included in TMDL?*
001	Town Creek - approx 100 yds before Swan Creek which is on 303(d)	■ Yes ☐ No	■ Yes ☐ No
		☐ Yes ☐ No	☐ Yes ☐ No
		☐ Yes ☐ No	☐ Yes ☐ No

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

(1) Justification for the requested Compliance Schedule (e.g. time for design and installation of control equipment, etc.);

(2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be submitted as available);

(3) Requested interim limitations, if applicable;

(4) Date of final compliance with the TMDL limitations; and,

(5) Any other additional information available to support requested compliance schedule.

SECTION J – APPLICATION CERTIFICATION

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

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

Signature of Responsible Official: Jimmy Junkin Date Signed: 8/25/22

Name: Jimmy Junkin Title: Water Services Department Manager

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

Mailing Address: 1806 Wilkinson Street (PO Box 1089)

City: Athens State: Alabama Zip: 35612

Phone Number: 256-232-1440 Email Address: jjunkin@athens-utilities.com

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

(1) The application for an NPDES permit shall be signed by a responsible official, as indicated below:

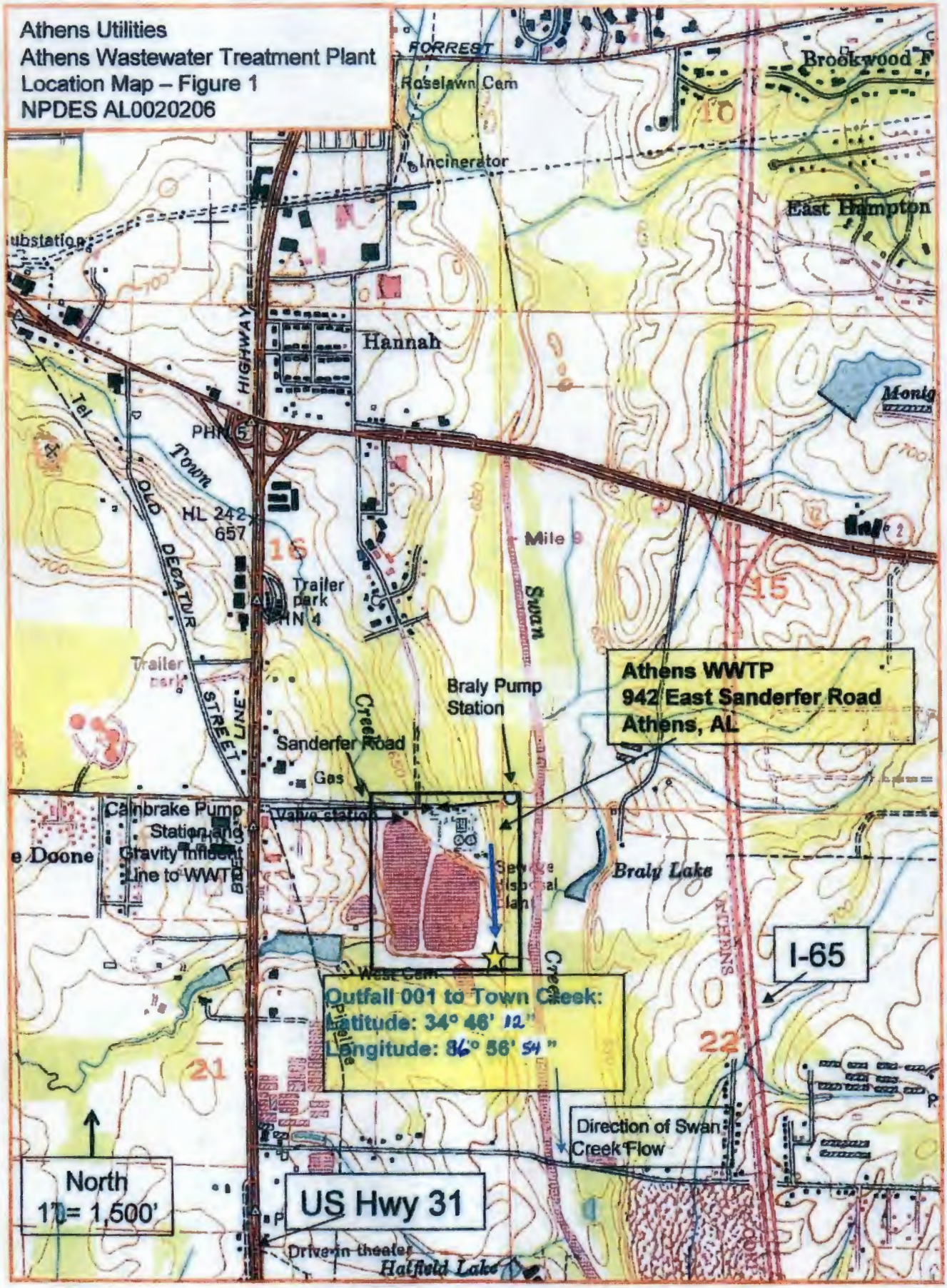
(a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;

(b) In the case of a partnership, by a general partner;

(c) In the case of a sole proprietorship, by the proprietor; or

(d) In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official.

Outfall GPS Coordinates corrected August 2022.



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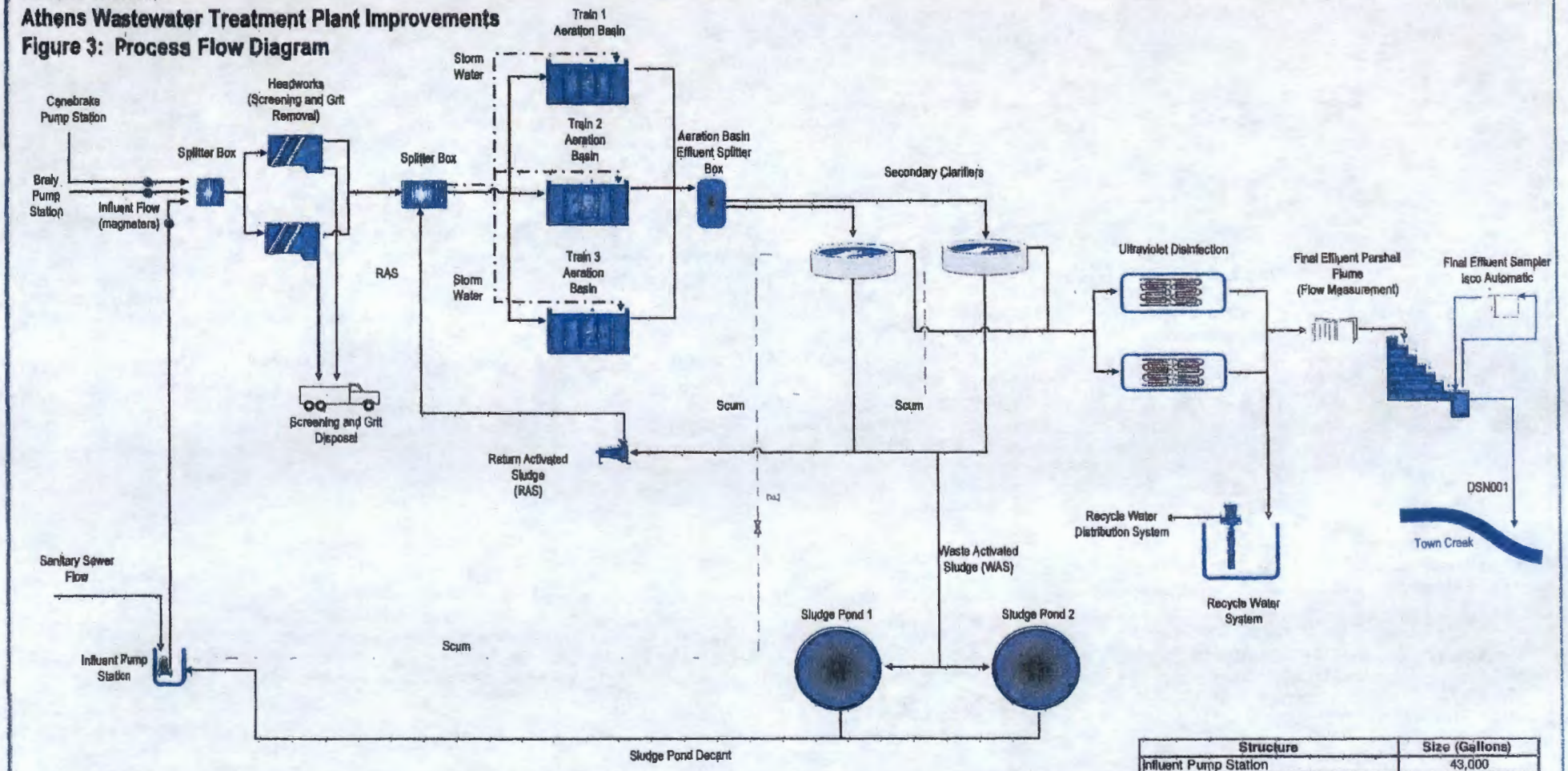
MUNICIPAL SECTION

Athens Utilities

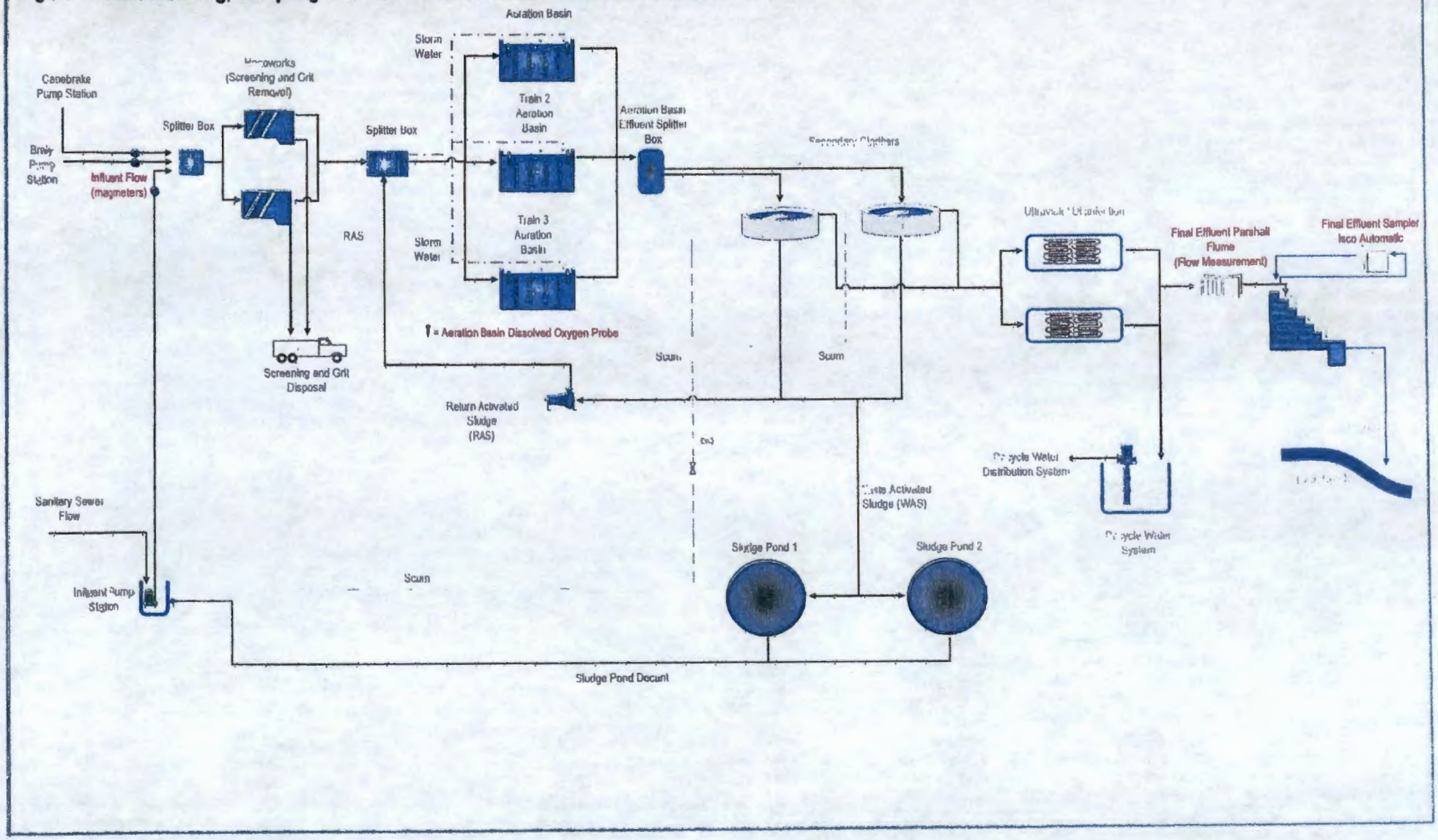
Athens Wastewater Treatment Plant Improvements

Figure 3: Process Flow Diagram



Structure	Size (Gallons)
Influent Pump Station	43,000
Splitter Box	1,000
Headworks (Screening and Grit Removal)	39,000
Splitter Box	3,000
Train 1 Aeration Basin	835,000
Train 2 Aeration Basin	835,000
Train 3 Aeration Basin	835,000
Aeration Basin Effluent Splitter	5,970
Secondary Clarifiers (Total Capacity)	2,390,000
Ultraviolet Disinfection	10,000
Sludge Ponds	39,000,000

Athens Utilities
Athens Wastewater Treatment Plant Improvements
Figure 4: Flow Metering, Sampling and On Line Instrument Locations within Plant Process Flow

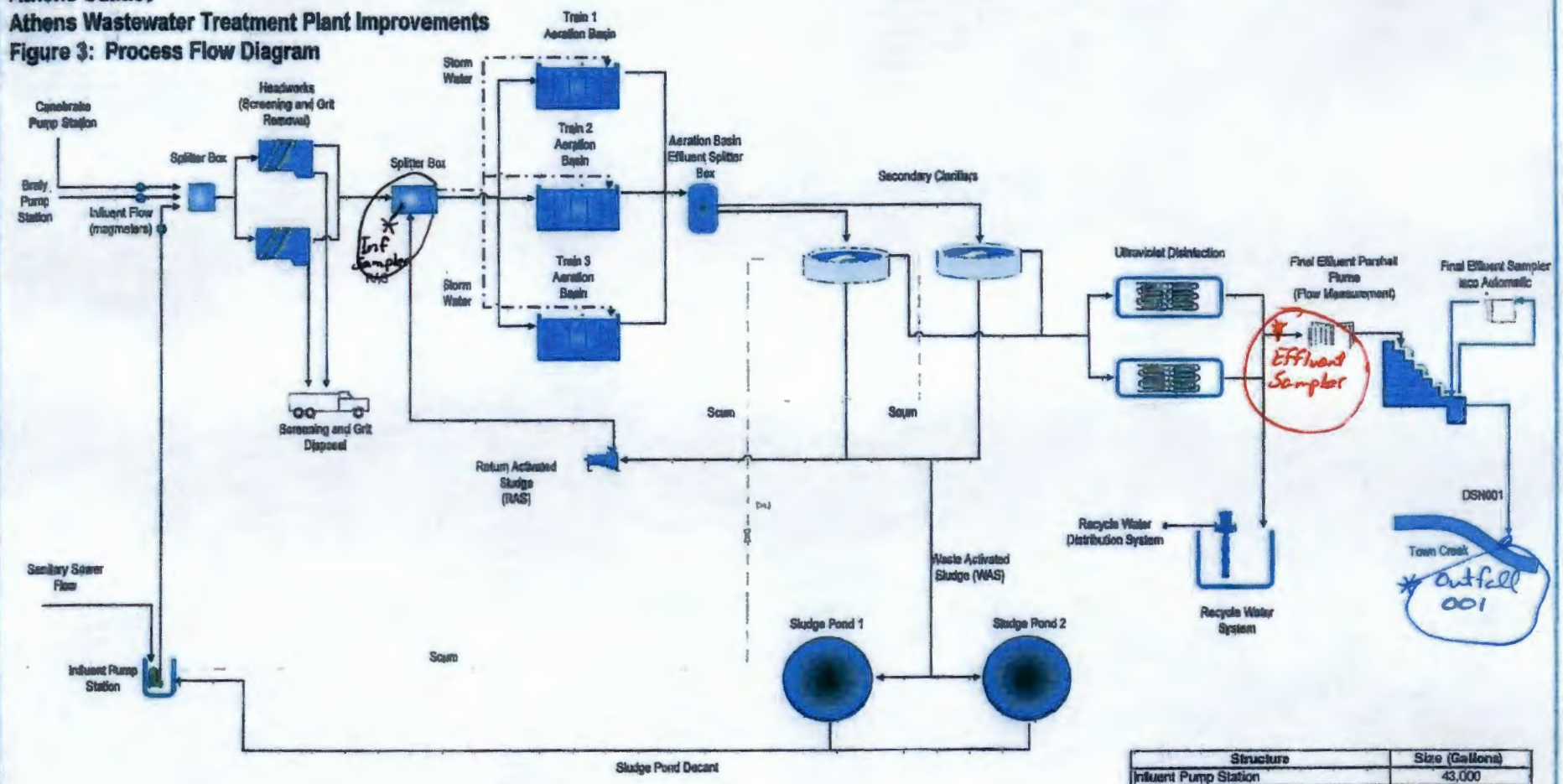


* Influent Composite Sampler
34° 46' 28" N
86° 56' 58" W

* Effluent Composite Sampler.
34° 46' 26" N
86° 57' 19" W

* Outfall 001 Location
34° 46' 12" N
86° 56' 54" W
Enters Town Creek before Swan Creek

Athens Utilities
Athens Wastewater Treatment Plant Improvements
Figure 3: Process Flow Diagram



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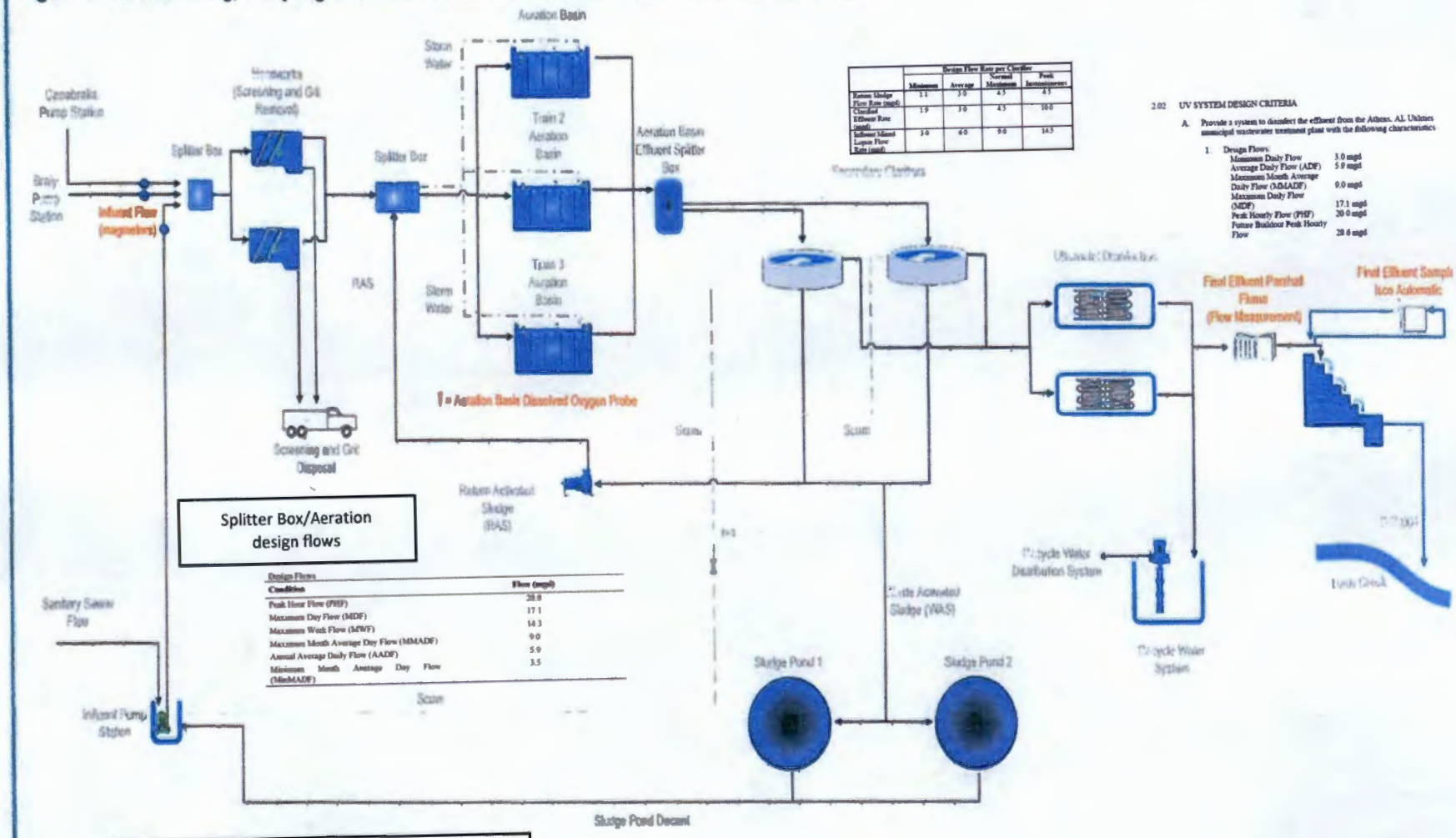
Athens Utilities

Athens Wastewater Treatment Plant Improvements

Figure 4: Flow Metering, Sampling and On Line Instrument Locations within Plant Process Flow



Design Flows	Flow (mgd)
Peak Hour Flow (PHF)	28.8
Maximum Day Flow (MDF)	17.1
Maximum Week Flow (MWF)	14.3
Maximum Month Average Day Flow (MMADF)	9.0
Annual Average Daily Flow (AADF)	5.9
Minimum Month Average Day Flow (MinMADF)	3.5

	Design Flow Rate per Clarifier			
	Minimum	Average	Normal Maximum	Peak Instantaneous
Return Sludge Flow Rate (mgd)	1.1	3.0	4.5	4.5
Clarified Effluent Rate (mgd)	1.9	3.0	4.5	10.0
Influent Mixed Liquor Flow Rate (mgd)	3.0	6.0	9.0	14.5

2.02 UV SYSTEM DESIGN CRITERIA

A. Provide a system to disinfect the effluent from the Athens, AL Utilities municipal wastewater treatment plant with the following characteristics

1. Design Flows:

Minimum Daily Flow	3.0 mgd
Average Daily Flow (ADF)	5.9 mgd
Maximum Month Average Daily Flow (MMADF)	9.0 mgd
Maximum Daily Flow (MDF)	17.1 mgd
Peak Hourly Flow (PHF)	20.0 mgd
Future Buildout Peak Hourly Flow	28.6 mgd

The screen and grit section of the plant is designed for 28 MGD max flow at 14 MGD per screen and grit channel.

Narrative Description No. 1
Introduction and Process Facilities Overview

PREPARED FOR: Athens Utilities
Athens, Alabama

DATE: April 2007

CH2M HILL PN: 349135

Introduction

On various occasions from March 2002 to November 2003, the Athens Wastewater Treatment Plant experienced excursions above the plant's National Pollutant Discharge Elimination System (NPDES) permit limitations. The exceeded parameters included fecal coliform, dissolved oxygen (DO), ammonia-nitrogen (NH_3-N), and total suspended solids (TSS). As a result of these permit excursions, Athens Utilities entered into a Consent Decree with ADEM in March 2006. An engineering report and compliance plan was prepared and submitted to ADEM in accordance with the requirements of the Consent Decree. A facility plan, *Athens Wastewater Treatment Facility Plan* (CH2M HILL 2006) was prepared with options and a recommendation for necessary process improvements to comply with the NDPES permit and Consent Decree stipulations.

The Athens WWTP Improvements Project is based on providing a plant capacity rating of 9.0 million gallons per day (mgd) at the current NPDES effluent requirements. The Site layout utilizes the available area on higher ground with room for future plant expansions to be constructed in the areas vacated after the abandonment of existing facilities.

The major improvements proposed for the Athens WWTP are:

- New headworks facility with influent screening and grit removal.
- New aeration basin with fine-bubble diffused aeration.
- New disinfection system using ultraviolet light.
- New cascade aeration and a new outfall.
- Two new secondary clarifiers.
- New RAS/WAS pump station.
- New operations building.
- New maintenance building.
- New entrance road from the North.
- New security cameras and gates at the entrances on both new and existing roads and connect the security fencing around the site.
- Modification of the existing secondary clarifiers for flood protection and for use during wet weather flows.
- Modification of the existing sludge pump station facility for use with the existing clarifiers during wet weather flows.

- Miscellaneous sitework, yard piping, and electrical to support the above elements.
- Demolition of certain existing plant components including the Orbal unit.
- Repair the bank erosion of the existing sludge treatment ponds and the east sludge pond distribution piping valve area.
- Reclaim the portion of the lagoons around the existing Orbal.

This report is organized in the following sections.

Process Facilities Overview

The proposed treatment process will consist of screening, grit removal, activated sludge treatment, secondary clarification, disinfection, and effluent discharge. The process flow diagram for the overall treatment process is shown in the attached figure in the Drawings section. Detailed descriptions of improvements, including process flow diagrams (PFDs), layouts, design criteria, and process control narratives, are included in the subsequent sections.

Screening and Grit Removal

Raw sewage will be pumped from the WWTP influent pump station, Canebrake Pump Station and the Braly Pump Station in separate lines to the headworks facility, where it will be screened and de-gritted. Screening will be accomplished by two new mechanically cleaned screens operating in parallel with one manual bypass channel. Grit removal will be accomplished with two vortex-type grit chambers in parallel. Screenings and grit will be discharged to a dumpster for disposal. A flow splitter box will be provided at the end of the headworks to route peak wastewater flows above a set point to the last zone of the aeration basin and to distribute baseload flow to online aeration basin trains.

Activated Sludge

The aeration basin will be rectangular, with three parallel activated sludge process trains. Each process train consists of four aereated zones separated by baffle walls. The basin will normally treat wastewater flows through each of the 4 zones for oxidation of CBOD5 and NH-3-N nitrification. During a storm event, peak wastewater above a set point, normally twice the AADF or 11.8 mgd will be routed to the last zone for treatment and oxidation of CBOD5. RAS will be split with weirs and routed to the first zone of each parallel train. Effluent mixed liquor from the aeration basin will flow to a channel with two fixed weirs to split flow between the new North clarifiers and one downward-acting weir gate to route flow to the South Clarifers. Piping between the aeration basin and new North clarifiers will be sized to allow the full peak flow and associated RAS (Peak flow + RAS = 29 mgd) to flow to the north clarifiers if needed.

Secondary Clarification

Mixed liquor from the aeration basin will be settled in the secondary clarifiers. The two new North clarifiers will be center feed circular clarifiers. The clarifiers are served by three vertical dry-pit centrifugal RAS pumps (firm 9 mgd capacity). WAS is accomplished by gravity flow using an automated valve with flow meter control.

The existing South clarifiers will be used for peak wastewater flow. The existing South RAS/WAS Pump Station will be converted to a RAS/WAS/Effluent Pump Station. Two new pumps will be provided to pump RAS from the South clarifiers to the RAS headbox at the aeration basin. Three new effluent pumps with 8.2 mgd capacity will be provided to pump South Clarifier effluent flow to the new UV disinfection system where it will mix with the effluent from the two North clarifiers.

Disinfection

Flow from the North and South clarifiers will combine and flow to the UV Disinfection system. The UV system will be low pressure/high intensity system with two channels. Each channel will have 2 banks of horizontally-oriented lamps and will be capable of treating the MMADF of 9.0 mgd, and hydraulically passing a PWF of 14.3 mgd. Disinfected effluent will flow through the UV disinfection channel to a Parshall flume.

Effluent Discharge

After the Parshall flume, treated effluent will flow down the steps of the cascade aerator and into a 36-inch diameter outfall leading to Swan Creek.

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.

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL 0020206	AL 0020206	Athens WWTP	

Form 2F NPDES

EPA

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	Town Creek	34° 46′ 18″ N	86° 56′ 55″ 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
AL 0020206	AL 0020206	Athens WWTP	

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	one	*specify units* acre	five	*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 Athens WWTP receives and treats wastewater from its collection system. No significant materials have been received, stored, or dispensed in a manner to allow exposure to stormwater. All treatment processes are either under cover (i.e., not exposed to stormwater) or are designed so that stormwater enters and assimilates into the treatment process and is not allowed to exit the site via the stormwater outfall.

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	Majority of flow to outfall 002S is overland flow.	4-A

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AL 0020206	AL 0020206	Athens WWTP	

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
Jimmy Junkin	Water Services Department Manager
Signature: Jimmy Junkin	Date signed: 8/25/22

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
002S	e-CFR Wastewater methods for required testing	02/28/2017	Yes
002S	e-CFR Wastewater methods for required testing	2/22/2018	Yes
002S	e-CFR Wastewater methods for required testing	5/9/2019	Yes
002S	e-CFR Wastewater methods for required testing	1/23/2020	Yes

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

Significant Leaks or Spills

6.1 Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years.

No significant leaks or spills of toxic or hazardous pollutants have occurred at the Athens WWTP in the 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

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MUNICIPAL SECTION

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, Decatur		
Laboratory address	220 Beltline Road, SW Decatur, AL 35601		
Phone number	(256) 350-0846		
Pollutant(s) analyzed	Oil & Grease Total Nitrogen Total Kjeldahl Nitrogen Total Phosphorus		

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
Jimmy Junkin	Water Services Department Manager
Signature: Jimmy Junkin	Date signed: 2/11/2021

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AL 0020206	AL 0020206	Athens WWTP	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	7.14 mg/L		< 6.07 mg/L		4	
2.	Biochemical oxygen demand (BOD_5) CBOD5	8.3 mg/L		6.4 mg/L		4	
3.	Chemical oxygen demand (COD)						
4.	Total suspended solids (TSS)	418 mg/L		175 mg/L		4	
5.	Total phosphorus	3.46 mg/L		1.6 mg/L		4	
6.	Total Kjeldahl nitrogen (TKN)	4.6 mg/L		3.4 mg/L		4	
7.	Total nitrogen (as N)	0.63 mg/L		0.43 mg/L		4	
8.	pH (minimum)	6.9 S.U.		7.5 S.U.		4	
	pH (maximum)	8.5 S.U.		7.5 S.U.		4	

[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
AL 0020206	AL 0020206	Athens WWTP	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
AL 0020206	AL 0020206	Athens WWTP	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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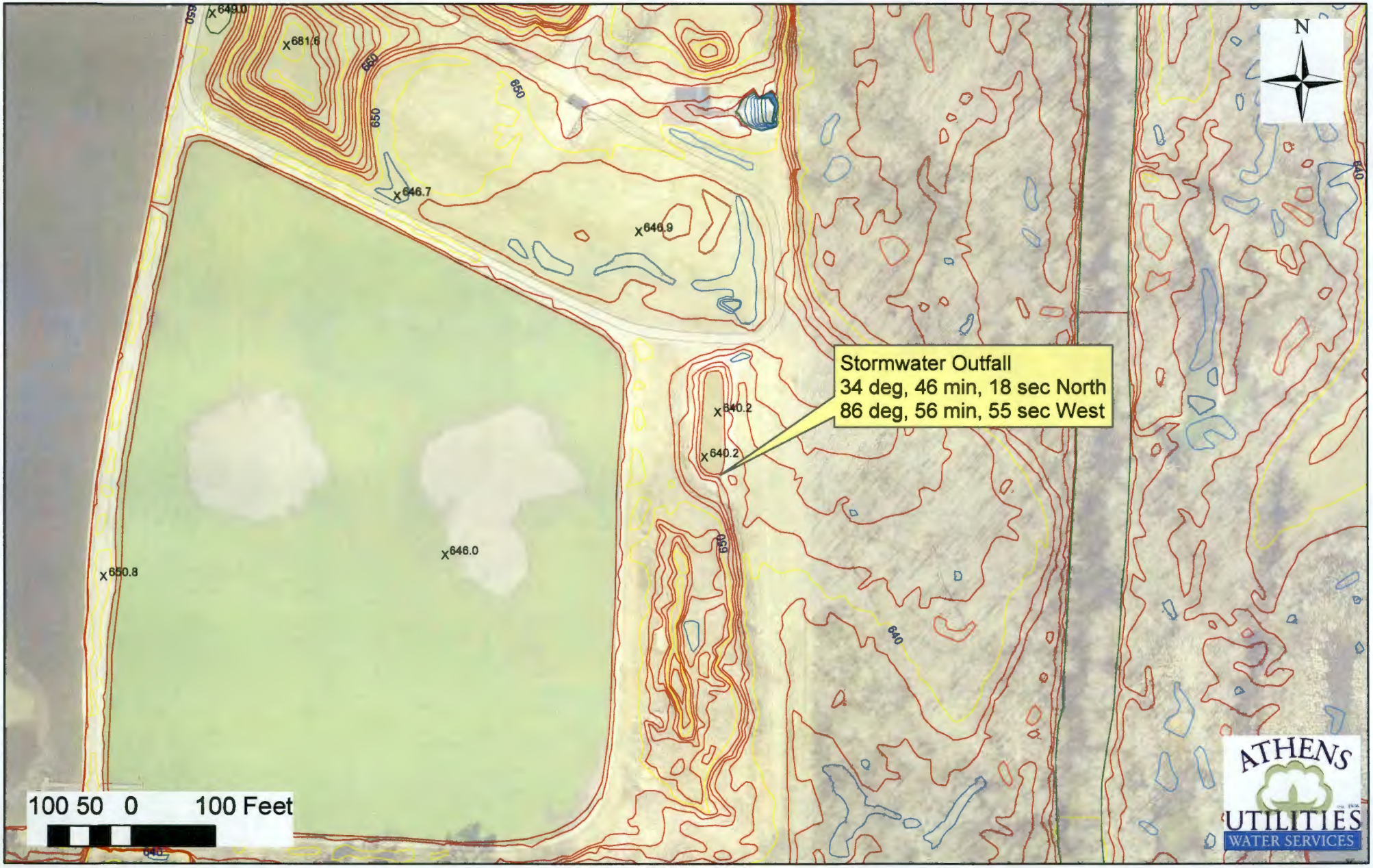
TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

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

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

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

Our permit only requires grab samples for stormwater discharge analyses and doesn't require composite stormwater samples.


Stormwater Outfall
34 deg, 46 min, 18 sec North
86 deg, 56 min, 55 sec West
N
100 50 0 100 Feet
ATHENS
UTILITIES
WATER SERVICES

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL 0020206	Athens WWTP	

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))

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MUNICIPAL SECTION

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
	AL 0020206	Athens WWTP	

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
City of Athens Wastewater Treatment Plant

Mailing address (street or P.O. box)
P.O. Box 1089

City or town	State	ZIP code	Phone number
Athens	AL	35612	(256) 233-8774

Contact name (first and last)	Title	Email address
Virgil White	Superintendent	vwhite@athens-utilities.com

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
942 East Sanderfer Road

City or town	State	ZIP code
Athens	AL	35611

1.2 Is this facility a Class I sludge management facility?
☐ Yes ☑ No

1.3 **Facility Design Flow Rate** — 9.0 million gallons per day (mgd)

1.4 **Total Population Served** — 25000 to 30000

1.5 **Ownership Status**
☐ Public—federal ☐ Public—state ☑ Other public (specify) Municipal
☐ 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
Ctiy of Athens Utilities

Applicant mailing address (street or P.O. box)
PO Box 1089

City or town	State	ZIP code
Athens	AL	35612

Contact name (first and last)	Title	Phone number	Email address
Jimmy Junkin	Water Services Manager	(256) 232-1440	jjunkin@athens-utilities.co

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)

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MUNICIPAL SECTION

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.	AL 0020206

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			

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	NA		
Cadmium	NA		
Chromium	NA		
Copper	NA		
Lead	NA		
Mercury	NA		
Molybdenum	NA		
Nickel	NA		
Selenium	NA		
Zinc	NA		

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
Jimmy Junkin	Water Services Department Manager
Signature Jimmy Junkin	Date signed 2/11/2021
Telephone number (256) 232-1440	

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
	AL 0020206	Athens WWTP	

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: 1585

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:

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			
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

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
	☐ 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.

Our sludge is wasted to and stored in two sludge storage lagoons where it is allowed to naturally breakdown beneath the surface of the water while the supernatant water flows back into the main influent pump station of the treatment plant. This has been our practice for at least the past 16 years.

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: _____

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
	AL 0020206	Athens WWTP	

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

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 Land Application Site (see instructions)

Latitude	Longitude
° ' "	° ' "

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?

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.

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)	

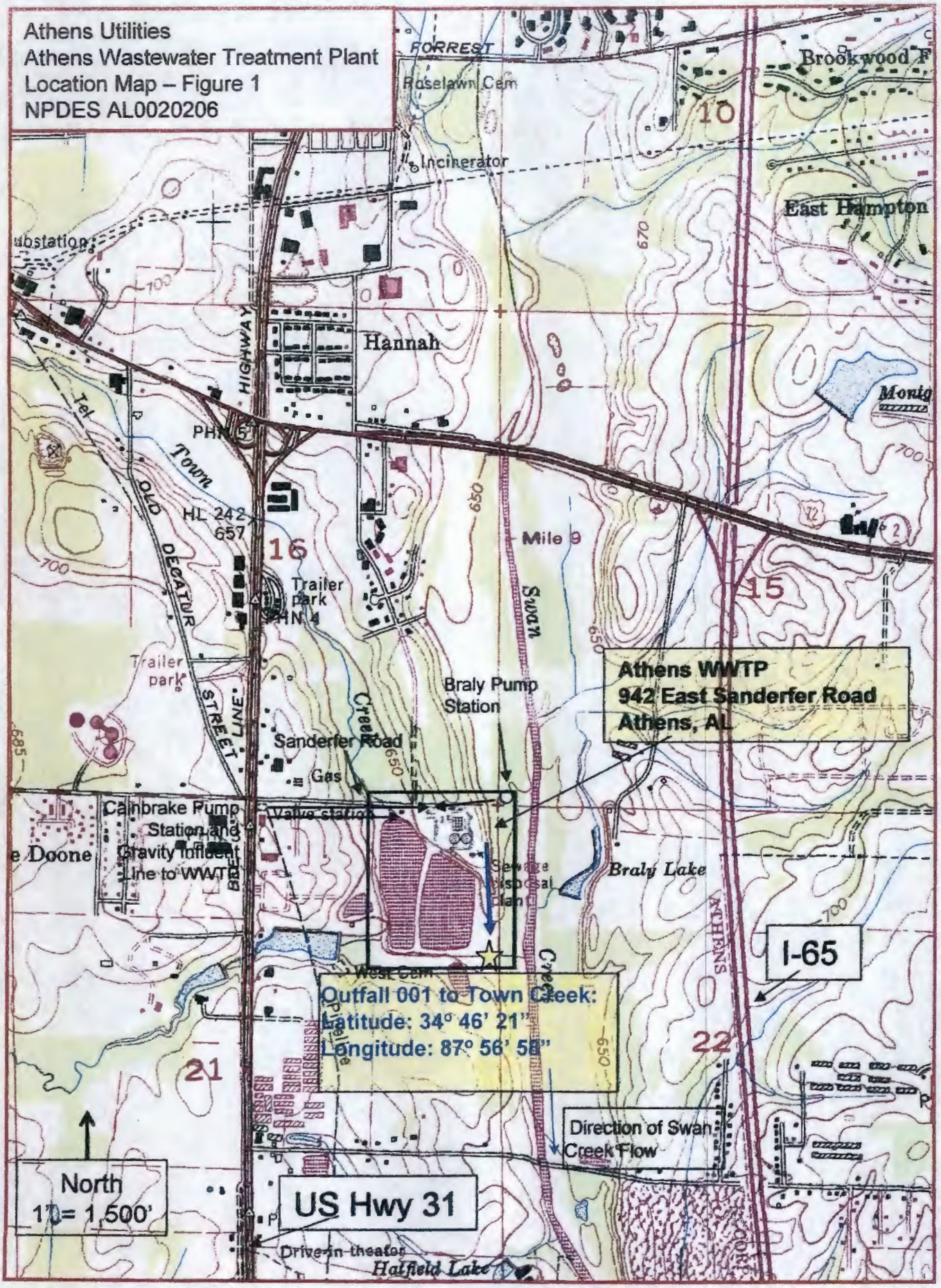
Air Pollution Control Equipment

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

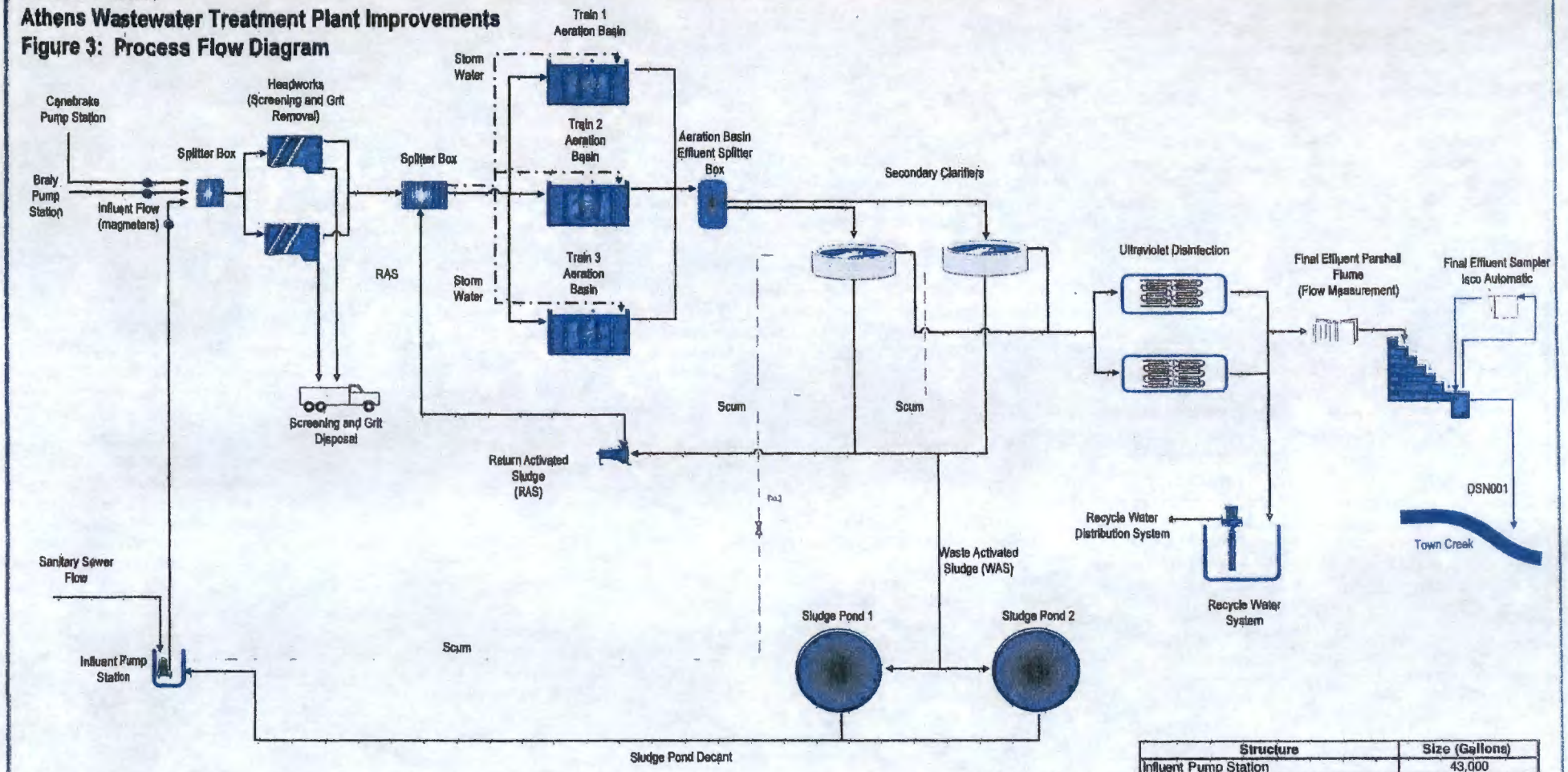
Submit completed application package to your NPDES permitting authority.


Athens Utilities
Athens Wastewater Treatment Plant
Location Map – Figure 1
NPDES AL0020206
FORREST
Roselawn Cem
Brookwood F
Incinerator
East Hampton
Hannah
HIGHWAY
Tel
Town
OLD DECATUR
HL 242
657
16
Trailer park
Trailer park
STREET LINE
Mile 9
Swan
15
Athens WWTP
942 East Sanderfer Road
Athens, AL
Braly Pump Station
Sanderfer Road
Gas
Cainbrake Pump Station and Gravity Influent line to WWTP
Braly Lake
West Cem
Outfall 001 to Town Creek:
Latitude: 34° 46' 21"
Longitude: 87° 56' 58"
I-65
21
22
Direction of Swan Creek Flow
North
1" = 1,500'
US Hwy 31
Drive-in theater
Hatfield Lake

Athens Utilities

Athens Wastewater Treatment Plant Improvements

Figure 3: Process Flow Diagram



Structure	Size (Gallons)
Influent Pump Station	43,000
Splitter Box	1,000
Headworks (Screening and Grit Removal)	39,000
Splitter Box	3,000
Train 1 Aeration Basin	835,000
Train 2 Aeration Basin	835,000
Train 3 Aeration Basin	835,000
Aeration Basin Effluent Splitter	5,970
Secondary Clarifiers (Total Capacity)	2,390,000
Ultraviolet Disinfection	10,000
Sludge Ponds	39,000,000

Athens Utilities

Athens Wastewater Treatment Plant Improvements

Figure 4: Flow Metering, Sampling and On Line Instrument Locations within Plant Process Flow