LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
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Montgomery, Alabama 36130-1463
(334) 271-7700 ▪ FAX (334) 271-7950

MARCH 29, 2023

Daryl Williamson
CEO
Limestone County Water and Sewer Authority
Post Office Box 110
Athens, AL 35612

RE: Draft Permit
NPDES Permit No. AL0056545
Elkmont Rural Village WWTP
Limestone County, Alabama

Dear Mr. Williamson:

Transmitted herein is a draft of the referenced permit.

We would appreciate your comments on the permit within **30 days** of the date of this letter. Please direct any comments of a technical or administrative nature to the undersigned.

By copy of this letter and the draft permit, we are also requesting comments within the same time frame from EPA.

Please be aware that Parts I.C.1.c and I.C.2.e of your permit require participation in the Department's Alabama Environmental Permitting and Compliance System (AEPACS) for submittal of DMRs and SSOs upon issuance of this permit unless valid justification as to why you cannot participate is submitted in writing. SSO hotline notifications and hard copy Form 415 SSO reports may be used only with the written approval from the Department. AEPACS allows ADEM to electronically validate and acknowledge receipt of the data. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. Please note that all AEPACS users can create the electronic DMRs and SSOs; however, only AEPACS users with certifier permissions will be able to submit the electronic DMRs and SSOs to ADEM.

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

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

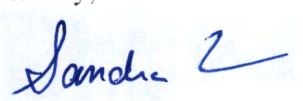
E2 users that met the above criteria will only need to establish an ADEM Web Portal account (https://prd.adem.alabama.gov/awp) under the same email address as their E2 account to have the same permissions in AEPACS as they did in E2. They will also automatically be linked to the same facilities they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

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

The Alabama Department of Environmental Management encourages you to voluntarily consider pollution prevention practices and alternatives at your facility. Pollution Prevention may assist you in complying with effluent limitations, and possibly reduce or eliminate monitoring requirements.

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

Sincerely,



Sandra Lee
Municipal Section
Water Division

Enclosure

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

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: LIMESTONE COUNTY WATER AND SEWER AUTHORITY
POST OFFICE BOX 110
ATHENS, AL 35612

FACILITY LOCATION: ELKMONT RURAL VILLAGE WWTP 0.15 MGD (0012), 0.30 MGD (0013)
18458 RURAL VILLAGE BACK WAY
ELKMONT, ALABAMA
LIMESTONE COUNTY

PERMIT NUMBER: AL0056545

RECEIVING WATERS: SULPHUR 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 0012: Municipal and Industrial Wastewater - 0.15 MGD

During the period beginning on the effective date of this permit and lasting through the completion of the facility expansion to 0.30 MGD, the Permittee is authorized to discharge from Outfall 0012, 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	2X Weekly	Grab	Not Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	2X Weekly	Grab	Not Seasonal
Solids, Total Suspended (00530) Effluent Gross Value	37.5 Monthly Average	56.2 Weekly Average	lbs/day	*****	30.0 Monthly Average	45.0 Weekly Average	mg/l	2X 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	2X Weekly	24-Hr Composite	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	12.5 Monthly Average	18.7 Weekly Average	lbs/day	*****	10.0 Monthly Average	15.0 Weekly Average	mg/l	2X Weekly	24-Hr Composite	Not Seasonal
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	S
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	24-Hr Composite	S
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	S
Flow, In Conduit or Thru Treatment Plant (50050) Effluent Gross Value	(Report) Monthly Average	(Report) Maximum Daily	MGD	*****	*****	*****	*****	Daily	Continuous	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.

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

DSN 0012 (Continued): Municipal and Industrial Wastewater - 0.15 MGD

During the period beginning on the effective date of this permit and lasting through the completion of the facility expansion to 0.30 MGD, the Permittee is authorized to discharge from Outfall 0012, 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)
Chlorine, Total Residual (50060) See notes (3) Effluent Gross Value	*****	*****	*****	*****	0.078 Monthly Average	0.135 Maximum Daily	mg/l	2X Weekly	Grab	Not Seasonal
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	548 Monthly Average	2507 Maximum Daily	col/100mL	2X Weekly	Grab	ECW
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	298 Maximum Daily	col/100mL	2X Weekly	Grab	ECS
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	31.2 Monthly Average	46.9 Weekly Average	lbs/day	*****	25.0 Monthly Average	37.5 Weekly Average	mg/l	2X Weekly	24-Hr Composite	Not Seasonal
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	2X 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

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

(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.

2. DSN 0013: Municipal and Industrial Wastewater - 0.30 MGD

During the period beginning on the completion of the facility expansion to 0.30 MGD and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0013, 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	2X Weekly	Grab	Not Seasonal
pH (00400) Effluent Gross Value	*****	*****	*****	6.0 Minimum Daily	*****	9.0 Maximum Daily	S.U.	2X Weekly	Grab	Not Seasonal
Solids, Total Suspended (00530) Effluent Gross Value	75 Monthly Average	112 Weekly Average	lbs/day	*****	30.0 Monthly Average	45.0 Weekly Average	mg/l	2X 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	2X Weekly	24-Hr Composite	Not Seasonal
Nitrogen, Ammonia Total (As N) (00610) Effluent Gross Value	24.2 Monthly Average	36.4 Weekly Average	lbs/day	*****	9.7 Monthly Average	14.5 Weekly Average	mg/l	2X Weekly	24-Hr Composite	Not Seasonal
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	S
Nitrite Plus Nitrate Total 1 Det. (As N) (00630) Effluent Gross Value	(Report) Monthly Average	(Report) Weekly Average	lbs/day	*****	(Report) Monthly Average	(Report) Weekly Average	mg/l	Monthly	24-Hr Composite	S
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	S
Bis (2-Ethylhexyl) Phthalate (39100) Effluent Gross Value	*****	*****	*****	*****	32.7 Monthly Average	*****	ug/l	Monthly	Grab	Not Seasonal

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

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

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

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

DSN 0013 (Continued): Municipal and Industrial Wastewater - 0.30 MGD

During the period beginning on the completion of the facility expansion to 0.30 MGD and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0013, 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)
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	*****	*****	*****	*****	0.045 Monthly Average	0.077 Maximum Daily	mg/l	2X Weekly	Grab	Not Seasonal
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	548 Monthly Average	2507 Maximum Daily	col/100mL	2X Weekly	Grab	ECW
E. Coli (51040) Effluent Gross Value	*****	*****	*****	*****	126 Monthly Average	298 Maximum Daily	col/100mL	2X Weekly	Grab	ECS
BOD, Carbonaceous 05 Day, 20C (80082) Effluent Gross Value	62.5 Monthly Average	93.8 Weekly Average	lbs/day	*****	25.0 Monthly Average	37.5 Weekly Average	mg/l	2X Weekly	24-Hr Composite	Not Seasonal
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	2X 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

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

(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.

3. DSN 001T: Toxicity

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Quantity or Loading		Units	Quality or Concentration			Units	Sample Freq See note (1)	Sample Type	Seasonal See note (2)
Toxicity, Ceriodaphnia Chronic (61426) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	24-Hr Composite	Mar, Jun, Sep, Dec
Toxicity, Pimephales Chronic (61428) Effluent Gross Value	*****	0 Single Sample	pass=0;fail=1	*****	*****	*****	*****	See Permit Requirements	24-Hr Composite	Mar, Jun, Sep, Dec

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.

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

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.

PART II: OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. **Facilities Operation and Maintenance**

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

2. **Best Management Practices**

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

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

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

3. **Certified Operator**

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

B. OTHER RESPONSIBILITIES

1. **Duty to Mitigate Adverse Impacts**

   The permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. **Right of Entry and Inspection**

   a. The permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:

      (1) Enter upon the permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;

      (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;

      (3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

      (4) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. **Bypass**

   a. Any bypass is prohibited except as provided in b. and c. below:

   b. A bypass is not prohibited if:

      (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;

(2) It enters the same receiving stream as the permitted outfall; and

(3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.

c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:

(1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and

(3) The permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.

d. The permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.

2. **Upset**

a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:

(1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and

(2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that:

(i) An upset occurred;

(ii) The Permittee can identify the specific cause(s) of the upset;

(iii) The Permittee's facility was being properly operated at the time of the upset; and

(iv) The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.

b. The permittee has the burden of establishing that each of the conditions of Provision II. C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES

1. **Duty to Comply**

a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.

b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a permittee in an enforcement action.

c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.

d. The permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.

e. Nothing in this permit shall be construed to preclude or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications,or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.

2. **Removed Substances**

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.

3. **Loss or Failure of Treatment Facilities**

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. **Compliance with Statutes and Rules**

a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059.

b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE

1. **Duty to Reapply or Notify of Intent to Cease Discharge**

a. If the permittee intends to continue to discharge beyond the expiration date of this permit, the permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the permittee does not intend to continue discharge beyond the expiration of this permit, the permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.

b. Failure of the permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. **Change in Discharge**

Prior to any facility expansion, process modification or any significant change in the method of operation of the permittee's treatment works, the permittee shall provide the Director with information concerning the planned expansion, modification or change. The permittee shall apply for a permit modification at least 180 days prior to any facility expansion, process modification, significant change in the method of operation of the permittee's treatment works, or other actions that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant or could result in an additional discharge point. This condition applies to pollutants that are or that are not subject to discharge limitations in this permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.

3. **Transfer of Permit**

This permit may not be transferred or the name of the permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership, or control of the permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to

be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership, or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. **Permit Modification and Revocation**

   a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:

      (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;

      (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or

      (3) If modification or revocation and reissuance is requested by the permittee and cause exists, the Director may grant the request.

   b. This permit may be modified during its term for cause, including but not limited to, the following:

      (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

      (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

      (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;

      (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;

      (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;

      (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;

      (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;

      (8) To agree with a granted variance under 30l(c), 30l(g), 30l(h), 30l(k), or 3l6(a) of the FWPCA or for fundamentally different factors;

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

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

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

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

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

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

5. **Termination**

   This permit may be terminated during its term for cause, including but not limited to, the following:

   a. Violation of any term or condition of this permit;

   b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the permittee's misrepresentation of any relevant facts at any time;

   c. Materially false or inaccurate statements or information in the permit application or the permit;

d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

e. The permittee's discharge threatens human life or welfare or the maintenance of water quality standards;

f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;

g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the permittee.

h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. **Suspension**

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

7. **Stay**

The filing of a request by the permittee for modification, suspension, or revocation of this permit, in whole or in part, does not stay any permit term or condition.

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the permittee and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit, or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition and the permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

1. The permittee shall not allow the introduction of wastewater, other than domestic wastewater, from a new direct discharger prior to approval and permitting, if applicable, of the discharge by the Department.

2. The permittee shall not allow an existing indirect discharger to increase the quantity or change the character of its wastewater, other than domestic wastewater, prior to approval and permitting, if applicable, of the increased discharge by the Department.

3. The permittee shall report to the Department any adverse impact caused or believed to be caused by an indirect discharger on the treatment process, quality of discharged water or quality of sludge. Such report shall be submitted within seven days of the permittee becoming aware of the adverse impacts.

H. PROHIBITIONS

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

1. Pollutants which create a fire or explosion hazard in the treatment works;

2. Pollutants which will cause corrosive structural damage to the treatment works, or dischargers with a pH lower than 5.0 s.u., unless the works are specifically designed to accommodate such discharges;

3. Solid or viscous pollutants in amounts which will cause obstruction of flow in sewers, or other interference with the treatment works;

4. Pollutants, including oxygen demanding pollutants, released in a discharge of such volume or strength as to cause interference in the treatment works;

5. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference or in such quantities that the temperature of the treatment plant influent exceeds 40 °C (104 °F) unless the treatment plant is designed to accommodate such heat;
6. Pollutants in amounts which exceed any applicable pretreatment standard under Section 307 of FWPCA or any approved revisions thereof.

PART III: ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. **Tampering**

   Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2. **False Statements**

   Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

3. **Permit Enforcement**

   a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA and as such any terms, conditions, or limitations of the permit are enforceable under state and federal law.

   b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes:

      (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;

      (2) An action for damages;

      (3) An action for injunctive relief; or

      (4) An action for penalties.

   c. If the permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the permittee has made a timely and complete application for reissuance of the permit:

      (1) Initiate enforcement action based upon the permit which has been continued;

      (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

      (3) Reissue the new permit with appropriate conditions; or

      (4) Take other actions authorized by these rules and AWPCA.

4. **Relief from Liability**

   Except as provided in Provision II. C. 1. (Bypass) and Provision II. C. 2. (Upset), nothing in this permit shall be construed to relieve the permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the FWPCA, 33 U.S.C. Section 1321.

C. PROPERTY AND OTHER RIGHTS

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, state, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.

D. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.
2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility, and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.
3. Construction has begun when the owner or operator has:
   a. Begun, or caused to begin as part of a continuous on-site construction program:
      (1) Any placement, assembly, or installation of facilities or equipment; or
      (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which are necessary for the placement, assembly, or installation of new source facilities or equipment; or
   b. Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.
4. Final plans and specifications for a waste treatment facility at a new source or new discharger, or a modification to an existing waste treatment facility must be submitted to and examined by the Department prior to initiating construction of such treatment facility by the permittee.
5. Upon completion of construction of waste treatment facilities and prior to operation of such facilities, the permittee shall submit to the Department a certification from a registered professional engineer, licensed to practice in the State of Alabama, that the treatment facilities have been built according to plans and specifications submitted to and examined by the Department.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. On the basis of the permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.
2. Compliance with permit terms and conditions notwithstanding, if the permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.
3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

G. GROUNDWATER

Unless specifically authorized under this permit, this permit does not authorize the discharge of pollutants to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the permittee undertake measures to abate any such discharge and/or contamination.

H. DEFINITIONS

1. **Average monthly discharge limitation** - means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. **Average weekly discharge limitation** - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
3. **Arithmetic Mean** – means the summation of the individual values of any set of values divided by the number of individual values.
4. **AWPCA** - means the Alabama Water Pollution Control Act.
5. **BOD** – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. **Bypass** - means the intentional diversion of waste streams from any portion of a treatment facility.
7. **CBOD** – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. **Daily discharge** - means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. **Daily maximum** - means the highest value of any individual sample result obtained during a day.
10. **Daily minimum** - means the lowest value of any individual sample result obtained during a day.
11. **Day** - means any consecutive 24-hour period.
12. **Department** - means the Alabama Department of Environmental Management.
13. **Director** - means the Director of the Department.
14. **Discharge** - means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).
15. **Discharge Monitoring Report (DMR)** - means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. **DO** – means dissolved oxygen.
17. **8HC** – means 8-hour composite sample, including any of the following:
    a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 1 hour over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
    b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. **EPA** - means the United States Environmental Protection Agency.
19. **FC** – means the pollutant parameter fecal coliform.
20. **Flow** – means the total volume of discharge in a 24-hour period.
21. **FWPCA** - means the Federal Water Pollution Control Act.
22. **Geometric Mean** – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).

23. **Grab Sample** – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.

24. **Indirect Discharger** – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.

25. **Industrial User** – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.

26. **MGD** – means million gallons per day.

27. **Monthly Average** – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.

28. **New Discharger** – means a person, owning or operating any building, structure, facility, or installation:

    a) From which there is or may be a discharge of pollutants;

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

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

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

30. **Notifiable sanitary sewer overflow** - means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:

    a) Reaches a surface water of the State; or

    b) May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.

31. **Permit application** - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.

32. **Point source** - means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).

33. **Pollutant** - includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.

34. **Privately Owned Treatment Works** – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".

35. **Publicly Owned Treatment Works (POTW)** – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.

36. **Receiving Stream** – means the "waters" receiving a "discharge" from a "point source".

37. **Severe property damage** - means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

38. **Significant Source** – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.

39. **TKN** – means the pollutant parameter Total Kjeldahl Nitrogen.

40. **TON** – means the pollutant parameter Total Organic Nitrogen.

41. **TRC** – means Total Residual Chlorine.

42. **TSS** – means the pollutant parameter Total Suspended Solids.

43. **24HC** – means 24-hour composite sample, including any of the following:

    a) The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;

    b) A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected;

    c) A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.

44. **Upset** - means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

45. **Waters** - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.

46. **Week** - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

47. **Weekly (7-day and calendar week) Average** – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

I. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART IV: SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. SLUDGE MANAGEMENT PRACTICES

1. **Applicability**

   a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.

   b. Provisions of Provision IV.A. do not apply to:

      (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.

      (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.

2. **Submitting Information**

   a. If applicable, the Permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:

      (1) Type of sludge stabilization/digestion method;

      (2) Daily or annual sludge production (dry weight basis);

      (3) Ultimate sludge disposal practice(s).

   b. The Permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.

   c. The Permittee shall give prior notice to the Director of at least 30 days of any change planned in the Permittee's sludge disposal practices.

3. **Reopener or Modification**

   a. Upon review of information provided by the Permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.

   b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit. This permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The Permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR CHRONIC TOXICITY – OUTFALL 001

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 for 0.15 MGD is **15 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. The samples shall be diluted using appropriate control water to the Instream Waste Concentration (IWC) which for 0.30 MGD is **25 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.

   d. 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 until the completion of the facility expansion to 0.30 MGD in the month of SEPTEMBER. Should results from the Annual Toxicity test indicate that Outfall 0012 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 MARCH, JUNE, SEPTEMBER, and DECEMBER. Prior to the facility expansion to 0.30 MGD, the Permittee shall enter *9 for the months toxicity monitoring is not applicable.

e. After completion of the facility expansion to 0.30 MGD, toxicity tests shall be conducted during the months of MARCH, JUNE, SEPTEMBER, and DECEMBER. Should results from the Toxicity test indicate that Outfall 0013 exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, should the results of four consecutive testing periods after the facility expansion to 0.30 MGD indicate that Outfall 0013 does not exhibit chronic toxicity, the Permittee may request that testing be reduced to annually in the month of SEPTEMBER. If monitoring is not applicable during the monitoring period, enter *9 on the toxicity DMR.

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.

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0056545** Date: February 13, 2023

Permit Applicant: Limestone County Water and Sewer Authority
Post Office Box 110
Athens, AL 35612

Location: **Elkmont Rural Village WWTP**
18458 Rural Village Back Way
Elkmont, AL 35620

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

Basis for Limitations: Water Quality Model: $CBOD_5$, NH_3N, DO
Reissuance with no modification: 0012: pH, DO, TSS, NH_3N, $CBOD_5$, E. Coli
Instream calculation at 7Q10: 0012: ~15%
0013: ~25%
Toxicity based: TRC
Secondary Treatment Levels: TSS, TSS Percent Removal, $CBOD_5$ Percent Removal
Other (described below): pH, E. Coli, Bis (2-Ethylhexyl) Phthalate (0013)

Design Flow in Million Gallons per Day: 0.15 MGD, 0.30 MGD

Major: No

Description of Discharge:

Feature ID	Description	Receiving Water	WBC	303(d)	TMDL
001	Municipal and Industrial Wastewater	Sulphur Creek	Fish and Wildlife (F&W)	No	No

Discussion: This permit is a reissuance due to expiration.

At the request of the Permittee, this permit will be tiered for Design Flows of 0.15 MGD and 0.30 MGD. The Permittee will be expanding the 0.15 MGD mechanical plant to a 0.30 MGD mechanical plant. The limitations for the 0.15 MGD facility will be applicable from the issuance date of this permit until after construction for the 0.30 MGD facility expansion is completed. The limitations for the 0.30 MGD facility will be applicable starting once construction for the 0.30 MGD facility expansion is completed through the permit expiration.

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, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

The receiving stream is Sulphur Creek, a Tier I waterbody. The stream is not on the current 303(d) list for impaired waterbodies. There are no approved TMDLs for Sulphur Creek.

Outfall 0012 – 0.15 MGD

The limits for Five Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Total Ammonia as Nitrogen (NH_3-N), and Dissolved Oxygen (DO) are based on the Waste Load Allocation (WLA) model that was completed by ADEM's Water Quality Branch on January 20, 2023. The monthly average limit for $CBOD_5$ is 25.0 mg/L. The monthly average limit for NH_3-N is 10.0 mg/L. The limit for daily minimum DO is 6.0 mg/L.

The limits for Total Suspended Solids (TSS), TSS percent removal, and $CBOD_5$ percent removal are 30.0 mg/L, 85.0%, and 85.0%, respectively. These limits are based on requirements of 40 CFR part 133.102 regarding Secondary Treatment.

The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since Sulphur Creek is classified as Fish & Wildlife, the limits for May through October are 126 col/100ml (monthly average) and 298 col/100ml (daily maximum), while the limits for November through April are 548 col/100ml (monthly average) and 2507 col/100ml (daily maximum).

The pH limits were developed in accordance with the Water-Use designation of the receiving stream and to be consistent with the Department's permitting approach and procedures. The minimum pH limit of 6.0 S.U. and a maximum limit of 9.0 S.U. are imposed.

The Total Residual Chlorine (TRC) limits of 0.078 mg/L (monthly average) and 0.135 mg/L (maximum daily) are based on EPA's recommended water quality value and on the current Toxicity Rationale, which considers the available dilution and should be protective of acute and chronic criteria in the receiving stream. Monitoring for TRC is only applicable if chlorine is utilized for disinfection purposes. That is, if chlorine disinfection is not utilized, monitoring would not be applicable during the monitoring period, and "*9" should be entered on the monthly DMR.

This permit imposes monitoring during the summer season (April-October) for the following nutrient-related parameters: Total Kjeldahl Nitrogen (TKN), Nitrite plus Nitrate as Nitrogen (NO2+NO3-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.

Chronic toxicity testing with two species (Ceriodaphnia and Pimephales) is being imposed in this permit. Toxicity testing is imposed for both survival and life-cycle impairment (i.e. growth and reproduction). Chronic testing at the IWC of 15 percent is required during the month of September.

Since this facility receives industrial wastewater, the Department completed a numeric reasonable potential analysis (RPA) of the discharge based on laboratory data provided in the Permittee's application. Background data appropriate for use in the RPA for Sulphur Creek was not available for development of the analysis. The RPA indicates whether pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream water quality standards. Based on the RPA, it does not appear that there is reasonable potential to cause in-stream water quality criteria exceedances at this time.

Monitoring will be conducted twice per week for most parameters. Percent removal for $CBOD_5$ and TSS will be calculated once per month. Monitoring for nutrient-related parameters will be once per month during the summer season. Flow will be monitored continuously, 7 days per week.

Outfall 0013 – 0.30 MGD

The limits for Five Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Total Ammonia as Nitrogen (NH_3-N), and Dissolved Oxygen (DO) are based on the Waste Load Allocation (WLA) model that was completed by ADEM's Water Quality Branch on January 20, 2023. The monthly average limit for $CBOD_5$ is 25.0 mg/L. The monthly average limit for NH_3-N is 9.7 mg/L. The limit for daily minimum DO is 6.0 mg/L.

The limits for Total Suspended Solids (TSS), TSS percent removal, and $CBOD_5$ percent removal are 30.0 mg/L, 85.0%, and 85.0%, respectively. These limits are based on requirements of 40 CFR part 133.102 regarding Secondary Treatment.

The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since Sulphur Creek is classified as Fish & Wildlife, the limits for May through October are 126 col/100ml (monthly average) and 298 col/100ml (daily maximum), while the limits for November through April are 548 col/100ml (monthly average) and 2507 col/100ml (daily maximum).

The pH limits were developed in accordance with the Water-Use designation of the receiving stream and to be consistent with the Department's permitting approach and procedures. The minimum pH limit of 6.0 S.U. and a maximum limit of 9.0 S.U. are imposed.

The Total Residual Chlorine (TRC) limits of 0.045 mg/L (monthly average) and 0.077 mg/L (maximum daily) are based on EPA's recommended water quality value and on the current Toxicity Rationale, which considers the available dilution and should be protective of acute and chronic criteria in the receiving stream. 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. Monitoring for TRC is only applicable if chlorine is utilized for disinfection purposes. If chlorine disinfection is not utilized, monitoring would not be applicable during the monitoring period, and "*9" should be entered on the monthly DMR.

This permit imposes monitoring during the summer season (April-October) for the following nutrient-related parameters: Total Kjeldahl Nitrogen (TKN), Nitrite plus Nitrate as Nitrogen (NO2+NO3-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.

Chronic toxicity testing with two species (Ceriodaphnia and Pimephales) is being imposed in this permit. Toxicity testing is imposed for both survival and life-cycle impairment (i.e. growth and reproduction). Chronic testing at the IWC of 25 percent is required during the months of March, June, September, and December.

Since this facility receives industrial wastewater, the Department completed a numeric reasonable potential analysis (RPA) of the discharge based on laboratory data provided in the Permittee's application. Background data appropriate for use in the RPA for Sulphur Creek was not available for development of the analysis. The RPA indicates whether pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream water quality standards. Based on the RPA, it appears that there is reasonable potential to cause in-stream water quality criteria exceedances for Bis (2-Ethylhexyl) Phthalate. Bis (2-Ethylhexyl) Phthalate will have a monthly average limitation of 32.7 ug/L.

A narrative RPA was conducted regarding the effluent contributions expected from the treatment facility with design capacity of 0.30 MGD. The Department has determined that, based on a review of the facility's current levels of nutrients in the discharge and based on current stream conditions, it is appropriate to include monthly monitoring for nutrients during the summer season. Nutrient monitoring is imposed in the reissuance so that sufficient information will be available regarding nutrient contributions for the purpose of TMDL development. The Department is in the process of gathering nutrient data for the purpose of developing a TMDL for the Wheeler Lake (Elk River) watershed that includes the discharge.

Monitoring will be conducted twice per week for most parameters. Percent removal for $CBOD_5$ and TSS will be calculated once per month. Monitoring for nutrient-related parameters will be once per month during the summer season. Bis (2-Ethylhexyl) Phthalate will be monitored once per month. Flow will be monitored continuously, 7 days per week.

Prepared by: Sandra Lee

Waste Load Allocation Summary

REQUEST INFORMATION

Request Number: 3919

From:	Sandy Lee	In Branch/Section	Municipal		
Date Submitted	11/8/2022	Date Required	12/8/2022	FUND Code	605
Date Permit application received by NPDES program	10/3/2022				
Receiving Waterbody	Sulphur Creek				
Previous Stream Name					
Facility Name	Elkmont Rural Village WWTP	(Name of Discharger-WQ will use to file)			
		Previous Discharger Name			
River Basin	Tennessee	Outfall Latitude	34.908986	(decimal degrees)	
*County	Limestone	Outfall Longitude	-86.999231	(decimal degrees)	
Permit Number	AL0056545	Permit Type	Permit Reissuance		
		Permit Status	Active		
		Type of Discharger	MUNICIPAL		

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

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

Existing Discharge Design Flow	0.15	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: 2008

Response ID Number: 1936

Lat/Long Method: GPS

12 Digit HUC Code	060300040403		
Use Classification	F&W		
Site Visit Completed?	☑ Yes ☐ No	Date of Site Visit	1/13/2023
Waterbody Impaired?	☐ Yes ☑ No	Date of WLA Response	1/20/2023
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	7.11	Miles	Date of Allocation	1/20/2023	
Name of Model Used	SWQM		Allocation Type	Annual	
Model Completed by	James Mooney		Type of Model Used	Desk-top	
Allocation Developed by	Water Quality Branch				

Waste Load Allocation Summary

Annual Effluent Limits		
Qw	0.15	MGD
CBOD5	25	mg/L
NH3-N	10	mg/L
TKN		
D.O.	6	mg/L

Conventional Parameters				Other Parameters			
Qw	MGD	Qw	MGD	Qw	MGD	Qw	MGD
Season		Season		Season		Season	
From		From		From		From	
Through		Through		Through		Through	
CBOD5		CBOD5		TP		TP	
NH3-N		NH3-N		TN		TN	
TKN		TKN		TSS		TSS	
D.O.		D.O.					

"Monitor Only" Parameters for Effluent:

Parameter	Frequency	Parameter	Frequency
TP	Monthly(Apr-Oct)		
TKN	Monthly(Apr-Oct)		
NO2+NO3-N	Monthly(Apr-Oct)		

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	2	mg/l	2	mg/l
NH3-N	0.11	mg/l	0.11	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	6.76	sq mi	
	Stream 7Q10	1.42	cfs	Bingham Equation
	Stream 1Q10	1.07	cfs	75%of 7Q10
	Stream 7Q2	3.21	cfs	Bingham Equation
	Annual Average	11.39	cfs	ADEM Estimate w/USGS Gage Data

Comments and/or Notations

Limits above are for the existing 0.15 MGD discharge to Sulphur Creek. The Elkmont Rural Village WWTP also requested an additonal WLA for the proposed expanded flowrate of 0.3 MGD at the same outfall location.

NH3N Limit not toxicity based.

Waste Load Allocation Summary

REQUEST INFORMATION

Request Number: 3918

From:	Sandy Lee	In Branch/Section	Municipal		
Date Submitted	11/8/2022	Date Required	12/8/2022	FUND Code	605
Date Permit application received by NPDES program	10/3/2022				
Receiving Waterbody	Sulphur Creek				
Previous Stream Name					
Facility Name	Elkmont Rural Village WWTP	(Name of Discharger-WQ will use to file)			
		Previous Discharger Name			
River Basin	Tennessee	Outfall Latitude	34.908986	(decimal degrees)	
*County	Limestone	Outfall Longitude	-86.999231	(decimal degrees)	
Permit Number	AL0056545	Permit Type	Permit Reissuance		
		Permit Status	Active		
		Type of Discharger	MUNICIPAL		
Do other discharges exist that may impact the model?	☐ Yes ☑ No				
If yes, impacting dischargers names.		Impacting dischargers permit numbers.			
Existing Discharge Design Flow	0.15 MGD	Note: The flow rates given should be those requested for modeling.			
Proposed Discharge Design Flow	0.3 MGD				
Comments Included	☑ Yes ☐ No	Information Verified By	JJM	Year File Was Created	2008
				Response ID Number	1935
				Lat/Long Method	GPS
12 Digit HUC Code	060300040403				
Use Classification	F&W				
Site Visit Completed?	☑ Yes ☐ No	Date of Site Visit	1/13/2023		
Waterbody Impaired?	☐ Yes ☑ No	Date of WLA Response	1/20/2023		
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	7.11	Miles	Date of Allocation	1/20/2023	
Name of Model Used	SWQM		Allocation Type	Annual	
Model Completed by	James Mooney		Type of Model Used	Desk-top	
Allocation Developed by	Water Quality Branch				

Waste Load Allocation Summary

Annual Effluent Limits		
Qw	0.3	MGD
CBOD5	25	mg/L
NH3-N	9.7	mg/L
TKN		
D.O.	6	mg/L

Conventional Parameters			
Qw	MGD	Qw	MGD
Season		Season	
From		From	
Through		Through	
CBOD5		CBOD5	
NH3-N		NH3-N	
TKN		TKN	
D.O.		D.O.	

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

"Monitor Only" Parameters for Effluent:

Parameter	Frequency	Parameter	Frequency
TP	Monthly(Apr-Oct)		
TKN	Monthly(Apr-Oct)		
NO2+NO3-N	Monthly(Apr-Oct)		

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	2	mg/l	2	mg/l
NH3-N	0.11	mg/l	0.11	mg/l
Temperature	28	°C	18	°C
pH	7	su	7	su

Drainage Area Qualifier: Exact

Hydrology at Discharge Location

			Method Used to Calculate
Drainage Area	6.76	sq mi	
Stream 7Q10	1.42	cfs	Bingham Equation
Stream 1Q10	1.07	cfs	75%of 7Q10
Stream 7Q2	3.21	cfs	Bingham Equation
Annual Average	11.39	cfs	ADEM Estimate w/USGS Gage Data

Comments and/or Notations: Limits above are for the proposed expanded 0.3 MGD discharge to Sulphur Creek. An additonal WLA was completed for the existing effluent flowrate of 0.15 MGD.

NH3N Limit is toxicity based.

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	**Elkmont Rural Village WWTP**	
NPDES Permit Number:	**AL0056545**	
Receiving Stream:	**Sulphur Creek**	
Facility Design Flow (Q_w):	**0.150 MGD**	
Receiving Stream $7Q_{10}$:	**1.420 cfs**	
Receiving Stream $1Q_{10}$:	**1.070 cfs**	
Winter Headwater Flow (WHF):	**3.21 cfs**	
Summer Temperature for CCC:	**28 deg. Celsius**	
Winter Temperature for CCC:	**18 deg. Celsius**	
Headwater Background NH_3-N Level:	**0.11 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.

$$\text{Stream Dilution Ration (SDR)} = \frac{Qw}{7Q10 + Qw} = \textbf{14.05\%}$$

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.

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

= **14.05%** **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**

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

= **17.0 mg/l NH3-N at 7Q10**

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

= **N./A.**

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

	DO-based NH3-N limit	Toxicity-based NH3-N limit
Summer	**10.00 mg/l NH3-N**	**17.00 mg/l NH3-N**
Winter	**N./A.**	**N./A.**

Summer: The DO based limit of 10.00 mg/l NH3-N applies.
Winter limits are not applicable.

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) = $\frac{Qw}{7Q10 + Qw}$ = **14.05%**

Note: This number will be rounded up for toxicity testing purposes.

DISINFECTION REQUIREMENTS

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

See the attached Disinfection Guidance for applicable stream standards.

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

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

MAXIMUM ALLOWABLE CHLORINATION LIMITS

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

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

Maximum allowable TRC in effluent:	0.078 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	0.135 mg/l (acute)	(0.019)/(SDR)

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

Prepared By: Sandra Lee Date: 3/8/2023

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	**Elkmont Rural Village WWTP**	
NPDES Permit Number:	**AL0056545**	
Receiving Stream:	**Sulphur Creek**	
Facility Design Flow (Q_w):	**0.300 MGD**	
Receiving Stream $7Q_{10}$:	**1.420 cfs**	
Receiving Stream $1Q_{10}$:	**1.070 cfs**	
Winter Headwater Flow (WHF):	**3.21 cfs**	
Summer Temperature for CCC:	**28 deg. Celsius**	
Winter Temperature for CCC:	**18 deg. Celsius**	
Headwater Background NH_3-N Level:	**0.11 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.

$$\text{Stream Dilution Ration (SDR)} = \frac{Qw}{7Q10 + Qw} = \textbf{24.64\%}$$

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.

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

= **24.64%** **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**

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

= **9.72**

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

= **N./A.**

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	**9.7 mg/l NH3-N**	**9.7 mg/l NH3-N**
Winter	**N./A.**	**N./A.**

Summer: The toxicity based limit of 9.70 mg/l NH3-N applies.
Winter limits are not applicable.

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) = $\frac{Qw}{7Q10 + Qw}$ = **24.64%**

Note: This number will be rounded up for toxicity testing purposes.

DISINFECTION REQUIREMENTS

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

See the attached Disinfection Guidance for applicable stream standards.

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

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

MAXIMUM ALLOWABLE CHLORINATION LIMITS

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

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

Maximum allowable TRC in effluent:	0.045 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	0.077 mg/l (acute)	(0.019)/(SDR)

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

Prepared By: Sandra Lee Date: 3/8/2023

Facility Name: **Elkmont Rural Village WWTP**

NPDES No.: **AL0066645**

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	5.63	1.88	-
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	5	1.67	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.206
9	Mercury**		Metals	0	0	0	0	0.00073	0.000663	0.302
10	Nickel**		Metals	0	0	0	0	9.18	8.5	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	16.2	15.5	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	0	0	130000	123000	-
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	**Chlorodibroma-Methane***	YES	VOC	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	-
29	**Chloroform***	YES	VOC	0	0	0	0	0	0	-
30	**4,4'-DDD**	YES	VOC	0	0	0	0	0	0	-
31	**4,4'-DDE**	YES	VOC	0	0	0	0	0	0	-
32	**4,4'-DDT**	YES	VOC	0	0	0	0	0	0	-
33	**Dichlorobromo-Methane***	YES	VOC	0	0	0	0	0	0	-
34	1, 1-Dichloroethane		VOC	0	0	0	0	0	0	-
35	**1, 2-Dichloroethane***	YES	VOC	0	0	0	0	0	0	-
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	-
37	**1, 1-Dichloroethylene***	YES	VOC	0	0	0	0	0	0	-
38	1, 2-Dichloropropane		VOC	0	0	0	0	0	0	-
39	1, 3-Dichloro-Propylene		VOC	0	0	0	0	0	0	-
40	**Dieldrin**	YES	VOC	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	0	-
44	**Methylene Chloride***	YES	VOC	0	0	0	0	0	0	-
45	**1, 1, 2, 2-Tetrachloro-Ethane***	YES	VOC	0	0	0	0	0	0	-
46	**Tetrachloro-Ethylene***	YES	VOC	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	-
48	**Toxaphene**	YES	VOC	0	0	0	0	0	0	-
49	**Tributyltine (TBT)**	YES	VOC	0	0	0	0	0	0	-
50	1, 1, 1-Trichloroethane		VOC	0	0	0	0	0	0	-
51	**1, 1, 2-Trichloroethane***	YES	VOC	0	0	0	0	0	0	-
52	**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-Dintro-2-methylophenol**	YES	Acids	0	0	0	0	0	0	-
61	**Dioxin (2,3,7,8-TCDD)**	YES	Acids	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-
64	**Pentachlorophenol***	YES	Acids	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	-
66	**2, 4, 6-Trichlorophenol***	YES	Acids	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	-
70	Benzidine		Bases	0	0	0	0	0	0	-
71	**Benzo(A)Anthracene***	YES	Bases	0	0	0	0	0	0	-
72	**Benzo(A)Pyrene***	YES	Bases	0	0	0	0	0	0	-
73	3, 4 Benzo-Fluoranthene		Bases	0	0	0	0	0	0	-
74	Benzo(Ghi)Perylene		Bases	0	0	0	0	0	0	-
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	-
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	-
77	**Bis (2-Chloroethyl)-Ether***	YES	Bases	0	0	0	0	0	0	-
78	Bis (2-Chloroiso-Propyl) Ether		Bases	0	0	0	0	0	0	-
79	**Bis (2-Ethylhexyl) Phthalate***	YES	Bases	0	0	0	0	25.8	8.6	-
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	Heptachlor	YES	Bases	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-
106	**Hexachlorobenzene***	YES	Bases	0	0	0	0	0	0	-
107	**Hexachlorobutadiene***	YES	Bases	0	0	0	0	0	0	-
108	**Hexachlorocyclohexan (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	-

v 07/2020

0.15	Enter Q_d = wastewater discharge flow from facility (MGD)
0.23208435	Q_d = wastewater discharge flow (cfs) (this value is caluclated 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)
1.42	Enter 7Q10, Q_s = background stream flow in cfs above point of discharge
1.07	Enter or estimated, 1Q10, Q_s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
11.39	Enter **Mean Annual Flow**, Q_s = background stream flow in cfs above point of discharge
3.21	Enter 7Q2, Q_s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter in i.e 5	Enter C_s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q_d +Qd2+Q_s	Q_r = resultant in-stream flow, after discharge
Calculated on other	C_r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
100	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

February 13, 2023

Facility Name: Elkmont Rural Village WWTP

NPDES No.: AL0065548

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_{max})	Water Quality Criteria (C_T)	Draft Permit Limit (C_{max})	20% of Draft Permit Limit	RP?	Background from upstream source (Cd2) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{avg})	Water Quality Criteria (C_T)	Draft Permit Limit (C_{avg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_T)	Draft Permit Limit (C_{avg})	20% of Draft Permit Limit	RP?
1	Antimony			0	5.63	-	-	-	-	0	1.88	-	-	-	-	[illegible]	2.66E+03	5.32E+02	No
2	Arsenic		YES	0	0	[illegible]	3323.229	664.646	No	0	0	[illegible]	1660.226	372.045	No	3.03E-01	1.52E+01	3.03E+00	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	[illegible]	47.872	9.574	No	0	0	[illegible]	7.420	1.484	No	-	-	-	-
5	Chromium/ Chromium III			0	0	[illegible]	15221.890	3044.378	No	0	0	[illegible]	2512.294	502.459	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	[illegible]	89.766	17.953	No	0	0	[illegible]	78.303	15.661	No	-	-	-	-
7	Copper			0	5	[illegible]	194.327	38.865	No	0	1.67	[illegible]	164.307	32.861	No	-	-	-	-
8	Lead			0	0	[illegible]	1758.869	351.774	No	0	0	[illegible]	86.864	17.393	No	-	-	-	-
9	Mercury			0	0.00073	[illegible]	13.465	2.693	No	0	0.000863	[illegible]	0.085	0.017	No	4.24E-02	3.02E-01	6.04E-02	No
10	Nickel			0	9.18	[illegible]	5201.964	1040.391	No	0	8.5	[illegible]	733.083	146.617	No	9.93E+02	7.07E+03	1.41E+03	No
11	Selenium			0	0	[illegible]	112.206	22.442	No	0	0	[illegible]	35.592	7.118	No	[illegible]	1.73E+04	3.46E+03	No
12	Silver			0	0	[illegible]	18.047	3.609	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.95E+00	3.89E-01	No
14	Zinc			0	16.2	[illegible]	1992.207	398.441	No	0	15.5	[illegible]	2548.389	509.678	No	1.49E+04	1.08E+05	2.12E+04	No
15	Cyanide			0	0	[illegible]	123.429	24.686	No	0	0	[illegible]	37.016	7.403	No	[illegible]	6.84E+04	1.33E+04	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	130000	-	-	-	-	0	123000	-	-	-	-	-	-	-	-
18	Acrolein			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.86E+01	7.73E+00	No
19	Acrylonitrile		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.21E+00	1.44E+00	No
20	Aldrin		YES	0	0	[illegible]	16.831	3.366	No	0	0	-	-	-	-	[illegible]	1.47E-03	2.94E-04	No
21	Benzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.75E+02	1.55E+02	No
22	Bromoform		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.84E+03	7.69E+02	No
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.79E+01	9.59E+00	No
24	Chlordane		YES	0	0	[illegible]	13.465	2.693	No	0	0	[illegible]	0.031	0.008	No	[illegible]	2.37E-02	4.74E-03	No
25	Clorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.45E+03	1.29E+03	No
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.71E+02	7.42E+01	No
27	Chloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
29	ChloroForm		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.11E+03	1.02E+03	No
30	4,4' - DDD		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.08E-03	1.82E-03	No
31	4,4' - DDE		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.41E-03	1.28E-03	No
32	4,4' - DDT		YES	0	0	1.100	8.171	1.234	No	0	0	0.001	0.007	0.001	No	[illegible]	6.41E-03	1.28E-03	No
33	Dichlorobromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.03E+02	1.01E+02	No
34	1, 1-Dichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
35	1, 2-Dichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.07E+03	2.14E+02	No
36	Trans-1, 2-Dichloro-Ethylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.21E+04	8.41E+03	No
37	1, 1-Dichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.09E+05	4.17E+04	No
38	1, 2-Dichloropropane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.05E+01	1.21E+01	No
39	1, 3-Dichloro-Propylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.74E+01	1.75E+01	No
40	Dieldrin		YES	0	0	[illegible]	1.346	0.269	No	0	0	[illegible]	0.399	0.080	No	[illegible]	1.56E-03	3.13E-04	No
41	Ethylbenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.86E+03	1.77E+03	No
42	Methyl Bromide			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.20E+03	1.24E+03	No
43	Methyl Chloride			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.73E+04	3.46E+03	No
45	1, 1, 2, 2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.17E+02	2.34E+01	No
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.60E+01	1.92E+01	No
47	Toluene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.21E+04	1.24E+04	No
48	Toxaphene		YES	0	0	[illegible]	4.096	0.819	No	0	0	[illegible]	0.001	0.000	No	[illegible]	8.11E-03	1.62E-03	No
49	Tributyltin (TBT)		YES	0	0	[illegible]	2.581	0.516	No	0	0	[illegible]	0.513	0.103	No	-	-	-	-
50	1, 1, 1-Trichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
51	1, 1, 2-Trichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.56E+02	9.11E+01	No
52	Trichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.75E+02	1.75E+02	No
53	Vinyl Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.13E+01	1.43E+01	No
54	P-Chloro-M-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
55	2-Chlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.20E+02	1.24E+02	No
56	2, 4-Dichlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.22E+03	2.45E+02	No
57	2, 4-Dimethylphenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.54E+03	7.08E+02	No
58	4, 6-Dinitro-O-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
59	2, 4-Dinitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.21E+04	4.43E+03	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.29E+03	1.66E+03	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.34E-08	2.67E-07	No
62	2-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
63	4-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
64	Pentachlorophenol		YES	0	0	[illegible]	48.941	9.788	No	0	0	[illegible]	47.641	9.528	No	[illegible]	8.85E+01	1.77E+01	No
65	Phenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.56E+06	7.12E+05	No
66	2, 4, 6-Trichlorophenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.08E+01	1.42E+01	No
67	Acenaphthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.12E+03	8.24E+02	No
68	Acenaphthylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
69	Anthracene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.89E+05	3.32E+04	No
70	Benzidine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.25E-04	1.85E-04	No
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.34E-01	1.07E-01	No
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.34E-01	1.07E-01	No
73	Benzo(b)fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.56E-02	1.52E-02	No
74	Benzo(GHI)Perylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.56E-02	1.52E-02	No
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.84E+01	3.08E+00	No
78	Bis (2-Chloroiso-Propyl) Ether			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.69E+05	5.38E+04	No
79	Bis (2-Ethylhexyl) Phthalate		YES	0	25.8	-	-	-	-	0	6.6	-	-	-	-	[illegible]	8.42E+01	1.28E+01	No
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
81	Butyl Benzyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.02E+03	1.60E+03	No
82	2-Chloronaphthalene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.58E+03	1.32E+03	No
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
84	Chrysene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.34E-01	1.07E-01	No
85	Di-N-Butyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.87E+04	3.73E+03	No
86	Di-N-Octyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
87	Dibenzo(A,H)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.34E-01	1.07E-01	No
88	1, 2-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.38E+03	1.08E+03	No
89	1, 3-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.00E+03	8.01E+02	No
90	1, 4-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.01E+02	1.60E+02	No
91	3, 3-Dichlorobenzidine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.32E-01	1.66E-01	No
92	Diethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.82E+05	3.64E+04	No
93	Dimethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.61E+06	9.23E+05	No
94	2, 4-Dinitrotoluene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.92E+01	1.98E+01	No
95	2, 6-Dinitrotoluene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
96	1,2-Diphenylhydrazine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.34E-01	1.67E-01	No
97	Endosulfan (alpha)		YES	0	0	[illegible]	1.234	0.247	No	0	0	[illegible]	0.399	0.080	No	[illegible]	2.80E+03	5.19E+02	No
98	Endosulfan (beta)		YES	0	0	[illegible]	1.234	0.247	No	0	0	[illegible]	0.399	0.080	No	[illegible]	2.80E+03	5.19E+02	No
99	Endosulfan sulfate		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.80E+03	5.19E+02	No
100	Endrin		YES	0	0	[illegible]	0.482	0.096	No	0	0	[illegible]	0.258	0.051	No	[illegible]	1.77E+00	3.53E-01	No
101	Endrin Aldeyhde		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.83E+00	1.77E+00	No
102	Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.78E+02	1.16E+02	No
103	Fluorene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.21E+04	4.43E+03	No
104	Heptachlor		YES	0	0	[illegible]	2.917	0.583	No	0	0	[illegible]	0.027	0.005	No	[illegible]	2.32E-03	4.64E-04	No
105	Heptachlor Epoxide		YES	0	0	[illegible]	2.917	0.583	No	0	0	[illegible]	0.027	0.005	No	[illegible]	1.15E-03	2.29E-04	No
106	Hexachlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.40E-03	1.68E-03	No
107	Hexachlorobutadiene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.38E+02	1.08E+02	No
108	Hexachlorocyclohexan (alpha)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.43E-01	2.85E-02	No
109	Hexachlorocyclohexan (beta)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.99E-01	9.99E-02	No
110	Hexachlorocyclohexan (gamma)		YES	0	0	[illegible]	5.330	1.066	No	0	0	[illegible]	0.035	0.007	No	[illegible]	5.38E+01	1.08E+01	No
111	HexachlorocycloPentadiene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.58E+03	9.19E+02	No
112	Hexachloroethane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.37E+01	2.73E+00	No
113	Indano(1, 2, 3-CK)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.34E-01	1.07E-01	No
114	Isophorone			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.98E+03	7.96E+02	No
115	Naphthalene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
116	Nitrobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.87E+03	5.75E+02	No
117	N-Nitrosodi-N-Propylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.48E+01	2.95E+00	No
118	N-Nitrosodimethylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.81E+01	1.76E+01	No
119	N-Nitrosodiphenylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.75E+02	3.51E+01	No
120	PCB-1016		YES	0	0	-	-	-	-	0	0	[illegible]	0.100	0.020	No	[illegible]	1.87E-03	3.75E-04	No
121	PCB-1221		YES	0	0	-	-	-	-	0	0	[illegible]	0.100	0.020	No	[illegible]	1.87E-03	3.75E-04	No
122	PCB-1232		YES	0	0	-	-	-	-	0	0	[illegible]	0.100	0.020	No	[illegible]	1.87E-03	3.75E-04	No
123	PCB-1242		YES	0	0	-	-	-	-	0	0	[illegible]	0.100	0.020	No	[illegible]	1.87E-03	3.75E-04	No
124	PCB-1248		YES	0	0	-	-	-	-	0	0	[illegible]	0.100	0.020	No	[illegible]	1.87E-03	3.75E-04	No
125	PCB-1254		YES	0	0	-	-	-	-	0	0	[illegible]	0.100	0.020	No	[illegible]	1.87E-03	3.75E-04	No
126	PCB-1260		YES	0	0	-	-	-	-	0	0	[illegible]	0.100	0.020	No	[illegible]	1.87E-03	3.75E-04	No
127	Phenanthrene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
128	Pyrene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.66E+04	3.32E+03	No
129	1, 2, 4-Trichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.91E+02	5.83E+01	No

Facility Name: **Elkmont Rural Village WWTP**

NPDES No.: **AL0056545**

8/13/2017

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

ID	Pollutant	Carcinogen "yes"	Type	Background from upstream source (C_{d1}) 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	5.63	1.88	-
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	5	1.67	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.206
9	Mercury**		Metals	0	0	0	0	0.00073	0.000663	0.302
10	Nickel**		Metals	0	0	0	0	9.18	8.5	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	16.2	15.5	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	0	0	130000	123000	-
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	**Broneoform***	YES	VOC	0	0	0	0	0	0	-
23	**Carbon Tetrachloride***	YES	VOC	0	0	0	0	0	0	-
24	**Chlordane**	YES	VOC	0	0	0	0	0	0	-
25	Chlorobenzene		VOC	0	0	0	0	0	0	-
26	**Chlorodibromo-Methane***	YES	VOC	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	-
29	**Chloroform***	YES	VOC	0	0	0	0	0	0	-
30	**4,4'-DDD**	YES	VOC	0	0	0	0	0	0	-
31	**4,4'-DDE**	YES	VOC	0	0	0	0	0	0	-
32	**4,4'-DDT**	YES	VOC	0	0	0	0	0	0	-
33	**Dichlorobromo-Methane***	YES	VOC	0	0	0	0	0	0	-
34	1, 1-Dichloroethane		VOC	0	0	0	0	0	0	-
35	**1, 2-Dichloroethane***	YES	VOC	0	0	0	0	0	0	-
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	-
37	**1, 1-Dichloroethylene***	YES	VOC	0	0	0	0	0	0	-
38	1, 2-Dichloropropane		VOC	0	0	0	0	0	0	-
39	1, 3-Dichloro-Propylene		VOC	0	0	0	0	0	0	-
40	**Dieldrin**	YES	VOC	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	0	-
44	**Methylene Chloride***	YES	VOC	0	0	0	0	0	0	-
45	**1, 1, 2, 2-Tetrachloro-Ethane***	YES	VOC	0	0	0	0	0	0	-
46	**Tetrachloro-Ethylene***	YES	VOC	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	-
48	**Toxaphene**	YES	VOC	0	0	0	0	0	0	-
49	**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-Dinitro-2-methylphenol**	YES	Acids	0	0	0	0	0	0	-
61	**Dioxin (2,3,7,8-TCDD)**	YES	Acids	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-
64	**Pentachlorophenol***	YES	Acids	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	-
66	**2, 4, 6-Trichlorophenol***	YES	Acids	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	-
70	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	25.8	8.6	-
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	Heptachlor	YES	Bases	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-
106	**Hexachlorobenzene***	YES	Bases	0	0	0	0	0	0	-
107	**Hexachlorobutadiene***	YES	Bases	0	0	0	0	0	0	-
108	**Hexachlorocyclohexan (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-CD)Pyrene***	YES	Bases	0	0	0	0	0	0	-
114	Isophorone		Bases	0	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	0	-
117	**N-Nitrosodi-N-Propylamine***	YES	Bases	0	0	0	0	0	0	-
118	**N-Nitrosodi-N-Methylamine***	YES	Bases	0	0	0	0	0	0	-
119	**N-Nitrosodi-N-Phenylamine***	YES	Bases	0	0	0	0	0	0	-
120	**PCB-1016**	YES	Bases	0	0	0	0	0	0	-
121	**PCB-1221**	YES	Bases	0	0	0	0	0	0	-
122	**PCB-1232**	YES	Bases	0	0	0	0	0	0	-
123	**PCB-1242**	YES	Bases	0	0	0	0	0	0	-
124	**PCB-1248**	YES	Bases	0	0	0	0	0	0	-
125	**PCB-1254**	YES	Bases	0	0	0	0	0	0	-
126	**PCB-1260**	YES	Bases	0	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	0	-
129	1, 2, 4-Trichlorobenzene		Bases	0	0	0	0	0	0	-

v. 07/09/21

0.3	Enter Q_d = wastewater discharge flow from facility (MGD)
0.4641687	Q_d = 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)
1.42	Enter 7Q10, Q_s = background stream flow in cfs above point of discharge
1.07	Enter or estimated, 1Q10, Q_s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
11.39	Enter Mean Annual Flow, Q_s = background stream flow in cfs above point of discharge
3.21	Enter 7Q2. Q_s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter in Left	Enter C_s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q_d +Qd2+Q_s	Q_r = resultant in-stream flow, after discharge
Calculated on other	C_r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
100	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.09 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

February 13, 2023

Facility Name: Elkmont Rural Village WWTP

NPDES No.: AL0056545

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 (CdZ) Daily Max	Max Daily Discharge as reported by Applicant (C_{dmax})	Water Quality Criteria (C_T)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background from upstream source (CdZ) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})	Water Quality Criteria (C_T)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_T)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony			0	5.63	-	-	-	-	0	1.88	-	-	-	-	[illegible]	1.52E+03	3.03E+02	No
2	Arsenic		YES	0	0	[illegible]	1957.782	391.556	No	0	0	[illegible]	1060.775	212.155	No	3.03E-01	7.74E+00	1.55E+00	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	[illegible]	28.202	5.640	No	0	0	[illegible]	4.231	0.846	No	-	-	-	-
5	Chromium/ Chromium III			0	0	[illegible]	8967.525	1793.505	No	0	0	[illegible]	1432.610	286.522	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	[illegible]	52.883	10.577	No	0	0	[illegible]	44.652	8.930	No	-	-	-	-
7	Copper			0	5	[illegible]	114.482	22.896	No	0	1.67	[illegible]	93.695	18.739	No	-	-	-	-
8	Lead			0	0	[illegible]	1036.185	207.237	No	0	0	[illegible]	49.590	9.918	No	-	-	-	-
9	Mercury			0	0.00073	[illegible]	7.932	1.586	No	0	0.000663	[illegible]	0.049	0.010	No	4.24E-02	1.72E-01	3.44E-02	No
10	Nickel			0	9.16	[illegible]	3084.577	612.915	No	0	8.5	[illegible]	418.033	83.607	No	9.93E+02	4.03E+03	8.06E+02	No
11	Selenium			0	0	[illegible]	66.104	13.221	No	0	0	[illegible]	20.298	4.059	No	[illegible]	9.87E+03	1.97E+03	No
12	Silver			0	0	[illegible]	10.932	2.128	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.11E+00	2.22E-01	No
14	Zinc			0	16.2	[illegible]	1173.650	234.730	No	0	15.5	[illegible]	1453.183	290.639	No	1.49E+04	6.05E+04	1.21E+04	No
15	Cyanide			0	0	[illegible]	72.714	14.543	No	0	0	[illegible]	21.108	4.222	No	[illegible]	3.79E+04	7.58E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	130000	-	-	-	-	0	123000	-	-	-	-	-	-	-	-
18	Acrolein			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.20E+01	4.41E+00	No
19	Acrylonitrile		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.68E+00	7.36E-01	No
20	Aldrin		YES	0	0	[illegible]	9.916	1.983	No	0	0	-	-	-	-	[illegible]	7.51E-04	1.50E-04	No
21	Benzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.95E+02	7.90E+01	No
22	Bromoform		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.01E+03	4.02E+02	No
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.44E+01	4.89E+00	No
24	Chlordane		YES	0	0	[illegible]	7.932	1.586	No	0	0	0.0043	0.017	0.003	No	[illegible]	1.21E-02	2.41E-03	No
25	Clorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.68E+02	7.36E+02	No
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.89E+02	3.78E+01	No
27	Chloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
29	ChloroForm		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.61E+03	5.21E+02	No
30	4,4' - DDD		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.63E-03	9.26E-04	No
31	4,4' - DDE		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.27E-03	6.54E-04	No
32	4,4' - DDT		YES	0	0	1.100	3.636	0.727	No	0	0	0.001	0.004	0.001	No	[illegible]	3.27E-03	6.54E-04	No
33	Dichlorobromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.56E+02	5.13E+01	No
34	1, 1-Dichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
35	1, 2-Dichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.46E+02	1.09E+02	No
36	Trans-1, 2-Dichloro-Ethylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.40E+04	4.80E+03	No
37	1, 1-Dichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.06E+05	2.13E+04	No
38	1, 2-Dichloropropane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.45E+01	6.90E+00	No
39	1, 3-Dichloro-Propylene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.99E+01	9.97E+00	No
40	Dieldrin		YES	0	0	[illegible]	0.793	0.159	No	0	0	[illegible]	0.227	0.045	No	[illegible]	7.98E-04	1.60E-04	No
41	Ethylbenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.05E+03	1.01E+03	No
42	Methyl Bromide			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.54E+03	7.07E+02	No
43	Methyl Chloride			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	8.83E+03	1.77E+03	No
45	1, 1, 2, 2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.98E+01	1.19E+01	No
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.80E+01	9.79E+00	No
47	Toluene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.54E+04	7.08E+03	No
48	Toxaphene		YES	0	0	[illegible]	2.413	0.483	No	0	0	[illegible]	0.001	0.000	No	[illegible]	4.14E-03	8.27E-04	No
49	Tributyltin (TBT)		YES	0	0.46	[illegible]	1.520	0.304	No	0	0	[illegible]	0.292	0.058	No	-	-	-	-
50	1, 1, 1-Trichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
51	1, 1, 2-Trichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.32E+02	4.65E+01	No
52	Trichlorethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.46E+02	8.92E+01	No
53	Vinyl Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.64E+01	7.28E+00	No
54	P-Chloro-M-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
55	2-Chlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.53E+02	7.07E+01	No
56	2, 4-Dichlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.98E+02	1.40E+02	No
57	2, 4-Dimethylphenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.02E+03	4.04E+02	No
58	4, 6-Dinitro-O-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
59	2, 4-Dinitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.26E+04	2.53E+03	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.23E+03	8.45E+02	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.81E-07	1.36E-07	No
62	2-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
63	4-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
64	Pentachlorophenol		YES	0	0	[illegible]	28.832	5.766	No	0	0	[illegible]	27.167	5.433	No	[illegible]	4.51E+01	9.03E+00	No
65	Phenol			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.03E+06	4.06E+05	No
66	2, 4, 6-Trichlorophenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.81E+01	7.22E+00	No
67	Acenaphthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.35E+03	4.70E+02	No
68	Acenaphthylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
69	Anthracene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.47E+04	1.89E+04	No
70	Benzidine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.71E-04	9.41E-05	No
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.72E-01	5.44E-02	No
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.72E-01	5.44E-02	No
73	Benzo(b)fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.32E-02	8.65E-03	No
74	Benzo(GHI)Perylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.32E-02	8.65E-03	No
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.85E+00	1.57E+00	No
78	Bis (2-Chloroiso-Propyl) Ether			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.53E+05	3.07E+04	No
79	Bis (2-Ethylhexyt) Phthalate	YES	YES	0	25.8	-	-	-	-	0	8.6	-	-	-	-	[illegible]	3.27E+01	6.55E+00	Yes
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
81	Butyl Benzyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.58E+03	9.15E+02	No
82	2-Chloronaphthalene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.75E+03	7.50E+02	No
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
84	Chrysene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.72E-01	5.44E-02	No
85	Di-N-Butyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.06E+04	2.13E+03	No
86	Di-N-Octyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
87	Dibenzo(A,H)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.72E-01	5.44E-02	No
88	1, 2-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.07E+03	6.13E+02	No
89	1, 3-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.28E+03	4.57E+02	No
90	1, 4-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.57E+02	9.13E+01	No
91	3, 3-Dichlorobenzidine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.24E-01	8.49E-02	No
92	Diethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.04E+05	2.08E+04	No
93	Dimethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.83E+06	5.26E+05	No
94	2, 4-Dinitrotoluene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	5.06E+01	1.01E+01	No
95	2, 6-Dinitrotoluene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
96	1,2-Diphenylhydrazine			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.75E-01	9.51E-02	No
97	Endosulfan (alpha)		YES	0	0	[illegible]	0.727	0.145	No	0	0	[illegible]	0.227	0.045	No	[illegible]	1.32E+03	2.65E+02	No
98	Endosulfan (beta)		YES	0	0	[illegible]	0.727	0.145	No	0	0	[illegible]	0.227	0.045	No	[illegible]	1.32E+03	2.65E+02	No
99	Endosulfan sulfate		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.32E+03	2.65E+02	No
100	Endrin		YES	0	0	[illegible]	0.284	0.057	No	0	0	[illegible]	0.146	0.029	No	[illegible]	9.01E-01	1.80E-01	No
101	Endrin Aldeyhde		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.50E+00	9.01E-01	No
102	Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	3.29E+02	6.58E+01	No
103	Fluorene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.26E+04	2.53E+03	No
104	Heptochlor		YES	0	0	[illegible]	1.719	0.344	No	0	0	[illegible]	0.015	0.003	No	[illegible]	1.18E-03	2.36E-04	No
105	Heptachlor Epoxide		YES	0	0	[illegible]	1.719	0.344	No	0	0	[illegible]	0.015	0.003	No	[illegible]	5.85E-04	1.17E-04	No
106	Hexachlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.29E-03	8.57E-04	No
107	Hexachlorobutadiene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.75E+02	5.50E+01	No
108	Hexachlorocyclohexan (alpha)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.28E-02	1.46E-02	No
109	Hexachlorocyclohexan (beta)		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.55E-01	5.09E-02	No
110	Hexachlorocyclohexan (gamma)		YES	0	0	[illegible]	3.140	0.628	No	0	0	-	-	-	-	[illegible]	2.75E+01	5.50E+00	No
111	HexachlorocyclePentadiene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.62E+03	5.24E+02	No
112	Hexachloroethane			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.78E+00	1.56E+00	No
113	Indeno(1, 2, 3-CK)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.72E-01	5.44E-02	No
114	Isophorone			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	2.28E+03	4.55E+02	No
115	Naphthalene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
116	Nitrobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.64E+03	3.28E+02	No
117	N-Nitrosodi-N-Propylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	7.53E+00	1.51E+00	No
118	N-Nitrosodimethylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	4.49E+01	8.99E+00	No
119	N-Nitrosodiphenylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	6.94E+01	1.79E+01	No
120	PCB-1016		YES	0	0	-	-	-	-	0	0	[illegible]	0.057	0.011	No	[illegible]	9.55E-04	1.91E-04	No
121	PCB-1221		YES	0	0	-	-	-	-	0	0	[illegible]	0.057	0.011	No	[illegible]	9.55E-04	1.91E-04	No
122	PCB-1232		YES	0	0	-	-	-	-	0	0	[illegible]	0.057	0.011	No	[illegible]	9.55E-04	1.91E-04	No
123	PCB-1242		YES	0	0	-	-	-	-	0	0	[illegible]	0.057	0.011	No	[illegible]	9.55E-04	1.91E-04	No
124	PCB-1248		YES	0	0	-	-	-	-	0	0	[illegible]	0.057	0.011	No	[illegible]	9.55E-04	1.91E-04	No
125	PCB-1254		YES	0	0	-	-	-	-	0	0	[illegible]	0.057	0.011	No	[illegible]	9.55E-04	1.91E-04	No
126	PCB-1260		YES	0	0	-	-	-	-	0	0	[illegible]	0.057	0.011	No	[illegible]	9.55E-04	1.91E-04	No
127	Phenanthrene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
128	Pyrene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	9.47E+03	1.89E+03	No
129	1, 2, 4-Trichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	[illegible]	1.66E+02	3.32E+01	No

NPDES/SID Permit Fee Sheet

Permit Number: AL0056545
Permittee: Limestone County Water and Sewer Authority
Site: Elkmont Rural Village WWTP
County: Limestone
Submission Reference Number: HPN-2XKC-MX9PZ
Submission Received Date 10/3/2022
Assigned Staff: Sandra Lee
Total Charges: $15015.00
Totals Payments: $15015.00
Amount Due: $0.00 WDA

Charges

Type	Amount
Base Charge: NPDES Individual Permit - Modification/Reissuance - Municipal (Form 188): ;	$4290.00

Payments

Type	Amount	Date	Check/Payment Confirmation Number
Payment	$4290.00	11/02/2022	079699

Charges

Type	Amount
Base Charge: Modeling fee for update of current model.	$4855.00
Adjustment: Modeling Fee for facility expansion	$4855.09
Adjustment: Balancing out typo of 0.09	$-0.09

Payments

Type	Amount	Date	Check/Payment Confirmation Number
Payment	$9710.00	11/02/2022	079699

Charges

Type	Amount
Base Charge: Toxicity Fee because the facility has Significant Industrial Users.	$1015.00

Payments

Type	Amount	Date	Check/Payment Confirmation Number
Payment	$1015.00	11/02/2022	079699

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0056545	Elkmont Rural Village WWTP	

Form 2A NPDES | EPA

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

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

Facility Information

1.1 Facility name
Elkmont Rural Village WWTP

Mailing address (street or P.O. box)
P.O. Box 110

City or town	State	ZIP code
Athens	AL	35612

Contact name (first and last)	Title	Phone number	Email address
Sam Thomas	Operator	(256) 497-9700	sthomas@lcwsa.com

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
18458 RURAL VILLAGE BACK WAY

City or town	State	ZIP code
Elkmont	AL	35620

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
Limestone County Water and Sewer Authority

Applicant address (street or P.O. box)
P.O. Box 110

City or town	State	ZIP code
Athens	AL	35612

Contact name (first and last)	Title	Phone number	Email address
Alan Lash	Engineering Manager	(256) 527-0836	alash@lcwsa.com

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) AL0056545	☐ 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)

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
Elkmont, AL	53	100 % separate sanitary sewer ____ % combined storm and sanitary sewer ☐ Unknown	☑ Own ☐ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
ERV Subdivision	480	100 % separate sanitary sewer ____ % combined storm and sanitary sewer ☐ Unknown	☑ Own ☐ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
		____ % separate sanitary sewer ____ % combined storm and sanitary sewer ☐ Unknown	☐ Own ☐ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
		____ % separate sanitary sewer ____ % combined storm and sanitary sewer ☐ Unknown	☐ Own ☐ Maintain ☐ Own ☐ Maintain ☐ Own ☐ Maintain
Total Population Served	533		

	Separate Sanitary Sewer System	Combined Storm and Sanitary Sewer
Total percentage of each type of sewer line (in miles)	100 %	0 %

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
0.150 mgd

Annual Average Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
0.0775 mgd	0.0742 mgd	0.0774 mgd

Maximum Daily Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
0.3617 mgd	0.4156 mgd	0.3635 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	0	0	0	0

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0056545	Elkmont Rural Village 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	
Elkmont, AL	53	100	% separate sanitary sewer	☑ Own	☐ Maintain
		____	% combined storm and sanitary sewer	☐ Own	☐ Maintain
		☐	Unknown	☐ Own	☐ Maintain
ERV Subdivision	480	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
Total Population Served	533				

Total percentage of each type of sewer line (in miles)	Separate Sanitary Sewer System	Combined Storm and Sanitary Sewer
	100 %	0 %

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
Proposed Expansion:	0.300 mgd

Annual Average Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
0.0775 mgd	0.0742 mgd	0.0774 mgd

Maximum Daily Flow Rates (Actual)		
Two Years Ago	Last Year	This Year
0.3617 mgd	0.4156 mgd	0.3635 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	0	0	0	0

Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

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

☐ Yes ☑ No → SKIP to Item 1.14.

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

Surface Impoundment Location and Discharge Data

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

1.14 Is wastewater applied to land?

☐ Yes ☑ No → SKIP to Item 1.16.

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

Land Application Site and Discharge Data

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

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

☐ Yes ☑ No → SKIP to Item 1.21.

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

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

☐ Yes ☑ No → SKIP to Item 1.20.

1.19 Provide information on the transporter below.

Transporter Data

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

Outfalls and Other Discharge or Disposal Methods Continued

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

Receiving Facility Data

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

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

☐ Yes ☑ No ➔ SKIP to Item 1.23.

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

Information on Other Disposal Methods

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

Variance Requests

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

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

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

☑ Not applicable

Contractor Information

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

☐ Yes ☑ No ➔ SKIP to Section 2.

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

Contractor Information

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

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

Design Flow

Outfalls to Waters of the United States

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

☑ Yes ☐ No ➔ SKIP to Section 3.

Inflow and Infiltration

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

Average Daily Volume of Inflow and Infiltration
5210 gpd

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

CCTV inspections to identify locations of I&I. Spot repairs as dificiencies are discovered.

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. Construction of additional plant on-site to add additional capacity
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.	0012	09/01/2024	03/01/2026	04/01/2026	04/01/2026
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:

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 0012	Outfall Number ____	Outfall Number ____
State	Alabama		
County	Limestone		
City or town	Elkmont		
Distance from shore	5 ft.	ft.	ft.
Depth below surface	N/A ft.	ft.	ft.
Average daily flow rate	0.0774 mgd	mgd	mgd
Latitude	34 ° 54 ′ 32.1 ″ N	° ′ ″	° ′ ″
Longitude	86 ° 59 ′ 57.3 ″ 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.

Receiving Water Description

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

	Outfall Number 0012	Outfall Number _____	Outfall Number _____
Receiving water name	Sulfur Creek		
Name of watershed, river, or stream system	Middle Tennessee Lower Elk		
U.S. Soil Conservation Service 14-digit watershed code			
Name of state management/river basin	Tennessee River		
U.S. Geological Survey 8-digit hydrologic cataloging unit code	12-06030004		
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 0012	Outfall Number _____	Outfall Number _____
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	0012		
BOD_5 or $CBOD_5$	85 %	%	%
TSS	85 %	%	%
Phosphorus	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Nitrogen	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Other (specify) _____	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %

Treatment Description Continued

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

UV Disinfection

	Outfall Number 0012	Outfall Number ____	Outfall Number ____
Disinfection type	UV Disinfection		
Seasons used	All Seasons		
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 0012		Outfall Number ____		Outfall Number ____	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Number of tests of discharge water		6				
Number of tests of receiving water		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
10/19/2018	Pass
9/17/2019	Fail
10/8/2019	Retest #1 Pass
10/22/2019	Retest #2 Pass
10/27/2020	Pass
9/14/2021	Pass

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

☑ Yes ☐ No ➔ SKIP to Item 3.26.

3.23 Describe the cause(s) of the toxicity:

2019 sample indicated chronic toxicity. Unknown cause for Toxicity. Contract Laboratory indicated issues with control samples in addition to effluent samples. Addtitional tests did not indicate toxicity.

3.24 Has the treatment works conducted a toxicity reduction evaluation?

☐ Yes ☑ No ➔ SKIP to Item 3.26.

3.25 Provide details of any toxicity reduction evaluations conducted.

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

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

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

Industrial Discharges and Hazardous Wastes

4.1 Does the POTW receive discharges from SIUs or NSCIUs?

☑ Yes ☐ No ➔ SKIP to Item 4.7.

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

Number of SIUs	Number of NSCIUs
1	

4.3 Does the POTW have an approved pretreatment program?

☐ Yes ☑ No

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

☐ Yes ☑ No ➔ SKIP to Item 4.6.

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

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

☑ Yes ☐ No

Industrial Discharges and Hazardous Wastes Continued

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

☐ Yes ☑ No ➔ SKIP to Item 4.9.

4.8 If yes, provide the following information:

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

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

☐ Yes ☑ No ➔ SKIP to Section 5.

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

☐ Yes ➔ SKIP to Section 5. ☐ No

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

☐ Yes ☐ No

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

CSO Map and Diagram

5.1 Does the treatment works have a combined sewer system?

☐ Yes ☑ No ➔SKIP to Section 6.

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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.

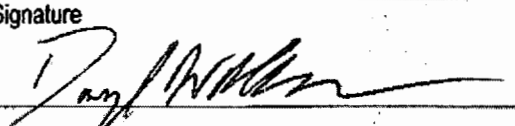
Name (print or type first and last name)	Official title
Daryl Williamson	CEO
Signature 	Date signed 10-3-22

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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)	12.0	mg/L	1.53	mg/L	114	SM 5210	2.0 mg/L ☐ ML ☑ MDL
Fecal coliform (E. coli)	730	col/100mL	28	col/100mL	114	SM 9223 B	2 col/100 ☐ ML ☑ MDL
Design flow rate	0.364	MGD	0.0754	MGD	114		
pH (minimum)	7.1	S.U.					
pH (maximum)	8.15	S.U.					
Temperature (winter)	23.2	°C	15.0	°C	60		
Temperature (summer)	28.0	°C	24.6	°C	54		
Total suspended solids (TSS)	4.40	mg/L	0.31	mg/L	114	USGS I-3765-85	2.50 mg/L ☐ ML ☑ MDL

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

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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)	5.32	mg/L	0.13	mg/L	114	FIALab 100	0.10 mg/L ☐ ML ☑ MDL
Chlorine (total residual, TRC)[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A ☐ ML ☐ MDL
Dissolved oxygen	11.38	mg/L	8.72	mg/L	114	SM 4500	0.0 mg/L ☐ ML ☐ MDL
Nitrate/nitrite	34.3	mg/L	10.36	mg/L	9	EPA 300.0	0.1 mg/L ☐ ML ☑ MDL
Kjeldahl nitrogen	5.24	mg/L	2.08	mg/L	8	FIALab 100	0.1 mg/L ☐ ML ☑ MDL
Oil and grease	N/A	N/A	N/A	N/A	N/A	N/A	N/A ☐ ML ☐ MDL
Phosphorus	3.64	mg/L	2.35	mg/L	8	SM 4500	0.1 mg/L ☐ ML ☑ MDL
Total dissolved solids	N/A	N/A	N/A	N/A	N/A	N/A	N/A ☐ ML ☐ MDL

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

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

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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 $CaCO_3$)	130	mg/L as CaCO3	123	mg/L as CaCO3	3	EPA 200.7	1.00 mg/L ☐ ML ☑ MDL
Antimony, total recoverable	5.63	ug/L	1.88	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Arsenic, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Beryllium, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Cadmium, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Chromium, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Copper, total recoverable	5.00	ug/L	1.67	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Lead, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Mercury, total recoverable	0.730	ng/L	0.663	ng/L	3	EPA 1631	0.50 ng/L ☐ ML ☑ MDL
Nickel, total recoverable	9.18	ug/L	8.50	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Selenium, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Silver, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Thallium, total recoverable	ND	ug/L	ND	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Zinc, total recoverable	16.2	ug/L	15.5	ug/L	3	EPA 200.7	1.00 ug/L ☐ ML ☑ MDL
Cyanide	ND	ug/L	ND	ug/L	3	ASTM D7511	1.00 ug/L ☐ ML ☑ MDL
Total phenolic compounds	ND	ug/L	ND	ug/L	3	EPA 420.1	1.00 ug/L ☐ ML ☑ MDL
Volatile Organic Compounds							
Acrolein	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Acrylonitrile	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Benzene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Bromoform	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ 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	ug/L	ND	ug/L	3	EPA 624	2.00 ug/L ☐ ML ☑ MDL
Chlorobenzene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Chlorodibromomethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☑ ML ☑ MDL
Chloroethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
2-chloroethylvinyl ether	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Chloroform	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Dichlorobromomethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,1-dichloroethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,2-dichloroethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
trans-1,2-dichloroethylene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,1-dichloroethylene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,2-dichloropropane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,3-dichloropropylene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Ethylbenzene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Methyl bromide	ND	ug/L	ND	ug/L	3	EPA 624	2.00 ug/L ☐ ML ☑ MDL
Methyl chloride	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Methylene chloride	ND	ug/L	ND	ug/L	3	EPA 624	2.00 ug/L ☐ ML ☑ MDL
1,1,2,2-tetrachloroethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Tetrachloroethylene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Toluene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,1,1-trichloroethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,1,2-trichloroethane	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ 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	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Vinyl chloride	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
Acid-Extractable Compounds							
p-chloro-m-cresol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2-chlorophenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2,4-dichlorophenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2,4-dimethylphenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
4,6-dinitro-o-cresol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2,4-dinitrophenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2-nitrophenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
4-nitrophenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Pentachlorophenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Phenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2,4,6-trichlorophenol	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Base-Neutral Compounds							
Acenaphthene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Acenaphthylene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Anthracene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Benzidine	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Benzo(a)anthracene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Benzo(a)pyrene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
3,4-benzofluoranthene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ 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	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Benzo(k)fluoranthene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Bis (2-chloroethoxy) methane	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Bis (2-chloroethyl) ether	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Bis (2-chloroisopropyl) ether	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Bis (2-ethylhexyl) phthalate	25.8	ug/L	8.6	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
4-bromophenyl phenyl ether	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Butyl benzyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2-chloronaphthalene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
4-chlorophenyl phenyl ether	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Chrysene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
di-n-butyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
di-n-octyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Dibenzo(a,h)anthracene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
1,2-dichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,3-dichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
1,4-dichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 624	1.00 ug/L ☐ ML ☑ MDL
3,3-dichlorobenzidine	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Diethyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Dimethyl phthalate	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2,4-dinitrotoluene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
2,6-dinitrotoluene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ 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	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Fluoranthene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Fluorene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Hexachlorobenzene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Hexachlorobutadiene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Hexachlorocyclo-pentadiene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Hexachloroethane	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Indeno(1,2,3-cd)pyrene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Isophorone	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Naphthalene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Nitrobenzene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☑ ML ☑ MDL
N-nitrosodi-n-propylamine	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☑ ML ☑ MDL
N-nitrosodimethylamine	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
N-nitrosodiphenylamine	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Phenanthrene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
Pyrene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL
1,2,4-trichlorobenzene	ND	ug/L	ND	ug/L	3	EPA 625	2.00 ug/L ☐ ML ☑ MDL

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

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TABLE D. ADDITIONAL POLLUTANTS AS REQUIRED BY NPDES PERMITTING AUTHORITY

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

[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	Pimephales promelas	Ceriodaphnia dubia
Age at initiation of test	<24 hrs	24-36 hrs	
Outfall number	0012	0012	
Date sample collected	09/13/2021	09/13/2021	09/14/2020
Date test started	09/14/2021	09/14/2021	09/15/2020
Duration	7 Days	7 Days	7 Days
Toxicity Test Methods			
Test method number	1002.0	1000.0	1002.0
Manual title	Survival and Reproduction	Survival and Growth	Survival and Reproduction
Edition number and year of publication	Ed. 4, 2002	Ed. 4, 2002	Ed. 4, 2002
Page number(s)	141	53	141
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.	After UV disinfection and before final discharge to Sulfur Creek.	After UV disinfection and before final discharge to Sulfur Creek.	After UV disinfection and before final discharge to Sulfur Creek.
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.	SDW	SDW	SDW
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.	7%	7%	7%

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	N/A %	N/A %	N/A %
LC_{50}			
95% confidence interval	%	%	%
Control percent survival	%	%	%

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0056545	Elkmont Rural Village WWTP	0012

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

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

	Test Number 1		Test Number 2		Test Number 3	
Acute Test Results Continued						
Other (describe)						
Chronic Test Results						
NOEC	7 %		7 %		7 %	
IC_{25}	0.2442 %		0.5416 %		N/A %	
Control percent survival	90 %		100 %		N/A %	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☑ No
Was reference toxicant test within acceptable bounds?	☑ Yes	☐ No	☑ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?	08/10/2021		08/10/2021			
Other (describe)						

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
	AL0056545	Elkmont Rural Village WWTP	0012

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

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

Test Information

	Test Number 4	Test Number 5	Test Number 6
Test species	Ceriodaphnia dubia	Ceriodaphnia dubia	Pimephales promelas
Age at initiation of test	24-36 hrs	<24 hrs	24-36 hrs
Outfall number	0012	0012	0012
Date sample collected	09/14/2020		
Date test started	09/15/2020		
Duration	7 Days	7 Days	
Toxicity Test Methods			
Test method number	1000.0	1002.0	1000.0
Manual title	Survival and Growth	Survival and Reproduction	Survival and Growth
Edition number and year of publication	Ed. 4, 2002	Ed. 4, 2002	Ed. 4, 2002
Page number(s)	53	141	53
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.	After UV disinfection and before final discharge to Sulfur Creek.	After UV disinfection and before final discharge to Sulfur Creek.	After UV disinfection and before final discharge to Sulfur Creek.
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
	AL0056545	Elkmont Rural Village WWTP	0012

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

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

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

	Test Number 4	Test Number 5	Test Number 6
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.	SDW	SDW	SDW
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)	☑ Fresh water ☐ Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.	7%	7%	7%

	Test Number 4		Test Number 5		Test Number 6	
Parameters Tested						
Check the parameters tested.	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☑ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen
Acute Test Results						
Percent survival in 100% effluent	N/A %		N/A %		N/A %	
LC_{50}						
95% confidence interval	%		%		%	
Control percent survival	%		%		%	

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

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

	Test Number 4		Test Number 5		Test Number 6	
Acute Test Results Continued						
Other (describe)						
Chronic Test Results						
NOEC	7 %		7 %		7 %	
IC_{25}	N/A %		N/A %		N/A %	
Control percent survival	N/A %		N/A %		N/A %	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☐ Yes	☑ No	☐ Yes	☑ No	☐ Yes	☑ No
Was reference toxicant test within acceptable bounds?	☐ Yes	☐ No	☐ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?						
Other (describe)						

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EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0056545	Elkmont Rural Village WWTP	

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

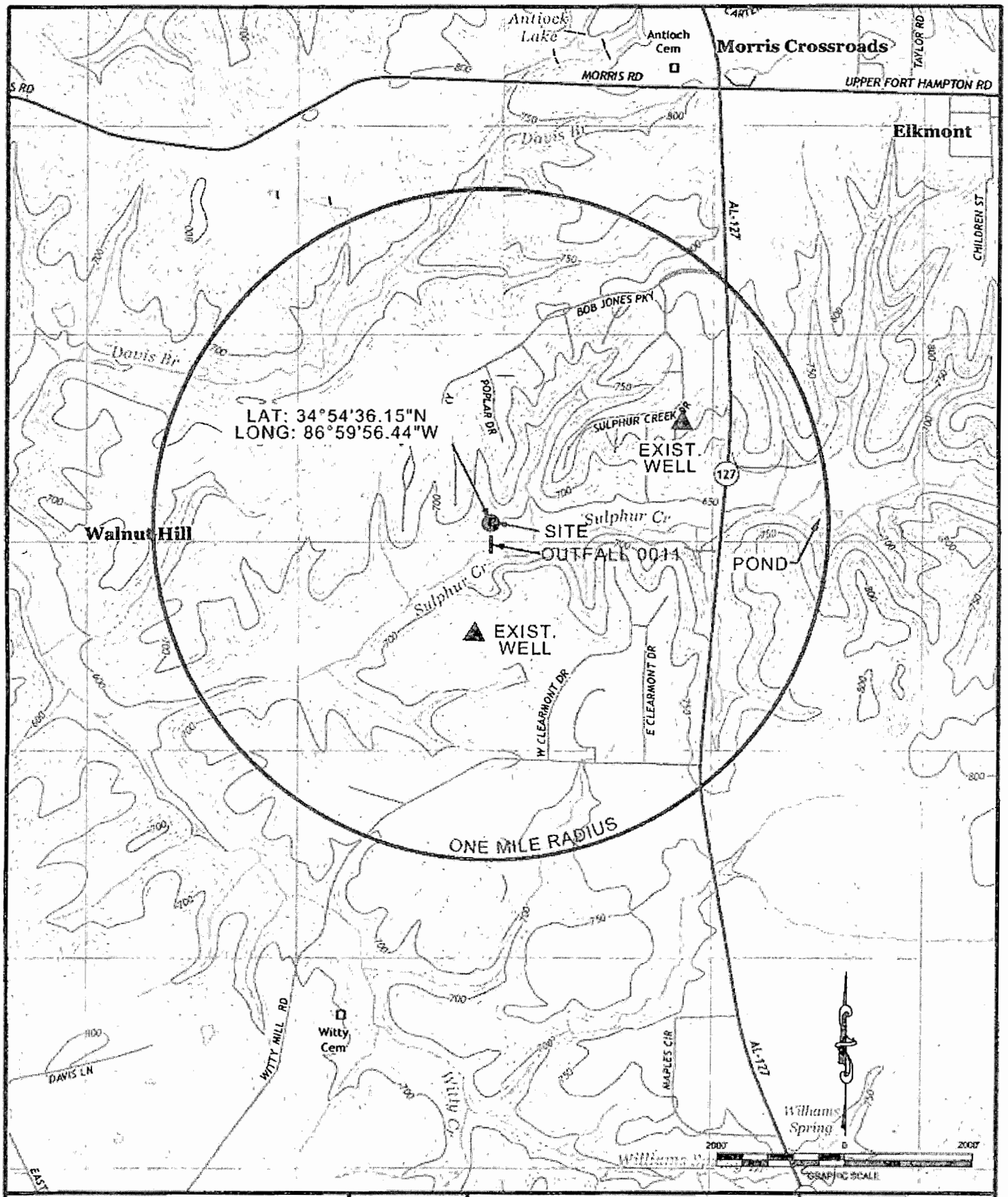
Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU 1	SIU ___	SIU ___
Name of SIU	Snap-On Logistics Company		
Mailing address (street or P.O. box)	18771 Carter's Circle		
City, state, and ZIP code	Elkmont, AL 35620		
Description of all industrial processes that affect or contribute to the discharge.	Wastewater associated with metal finishing operations.		
List the principal products and raw materials that affect or contribute to the SIU's discharge.	Black Oxide Tools		
Indicate the average daily volume of wastewater discharged by the SIU.	2780 gpd	gpd	gpd
How much of the average daily volume is attributable to process flow?	2780 gpd	gpd	gpd
How much of the average daily volume is attributable to non-process flow?	0 gpd	gpd	gpd
Is the SIU subject to local limits?	☑ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the SIU subject to categorical standards?	☑ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

	SIU 1	SIU ___	SIU ___
Under what categories and subcategories is the SIU subject?	40 CFR Part 433.17 - Metal Finishing PSNS		
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.			



HETHCOAT DAVIS
ENGINEERS PLANNERS

278 FRANKLIN ROAD, SUITE 200, BRENTWOOD, TN 37027 • 300 VESTAVIA PARKWAY, SUITE 2300, BIRMINGHAM, AL 35216

ONE MILE RADIUS

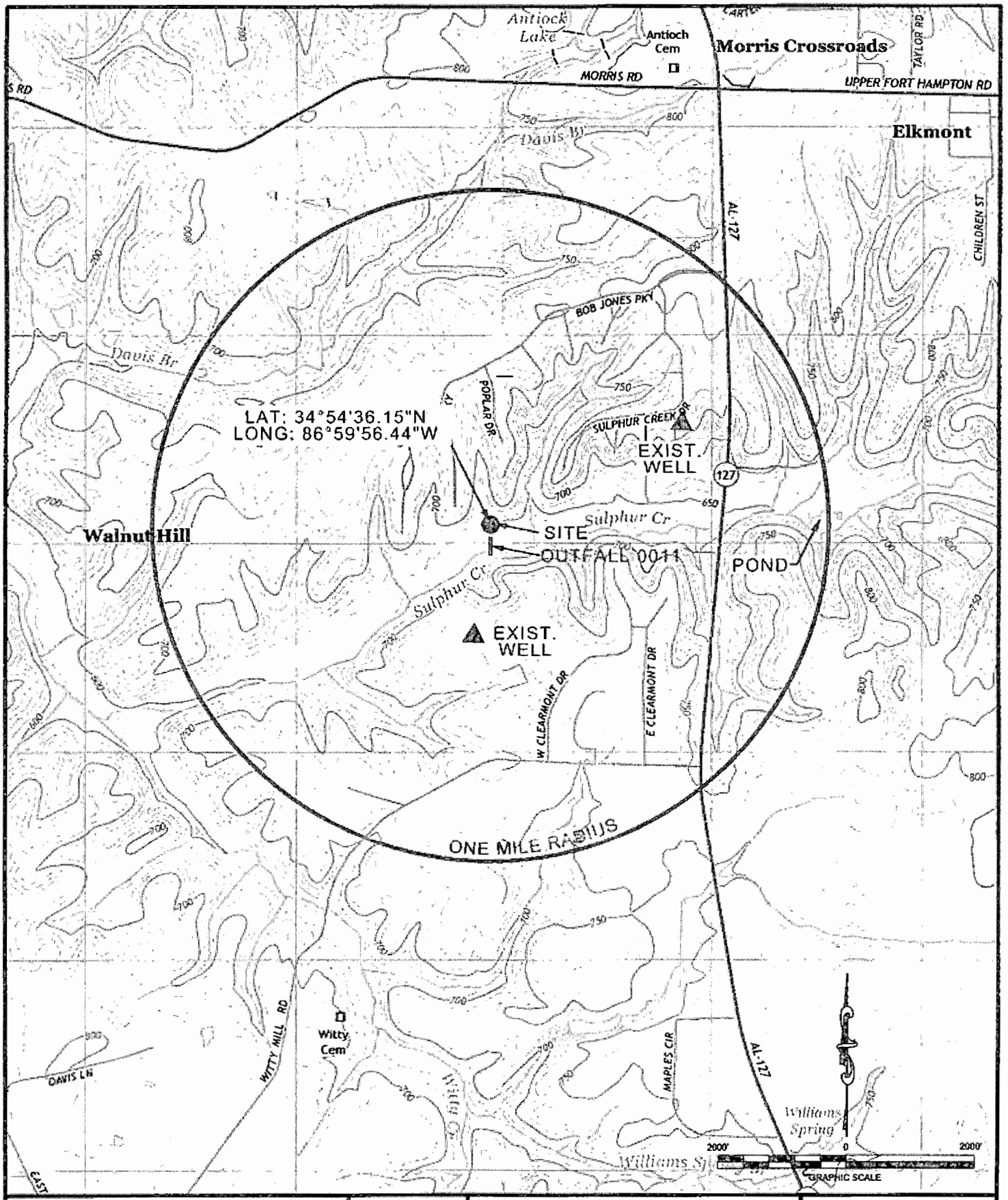
ELKMONT RURAL VILLAGE WASTEWATER TREATMENT PLANT

LIMESTONE COUNTY, ALABAMA

DATE: 4/5/2017

FILE: 1001-01

EXHIBIT 1



HETHCOAT DAVIS
ENGINEERS PLANNERS

275 FRANKLIN ROAD, SUITE 200 • BRENTWOOD, TN 37027
300 VESTAVIA PARKWAY, SUITE 2300 • BIRMINGHAM, AL 35216

ONE MILE RADIUS

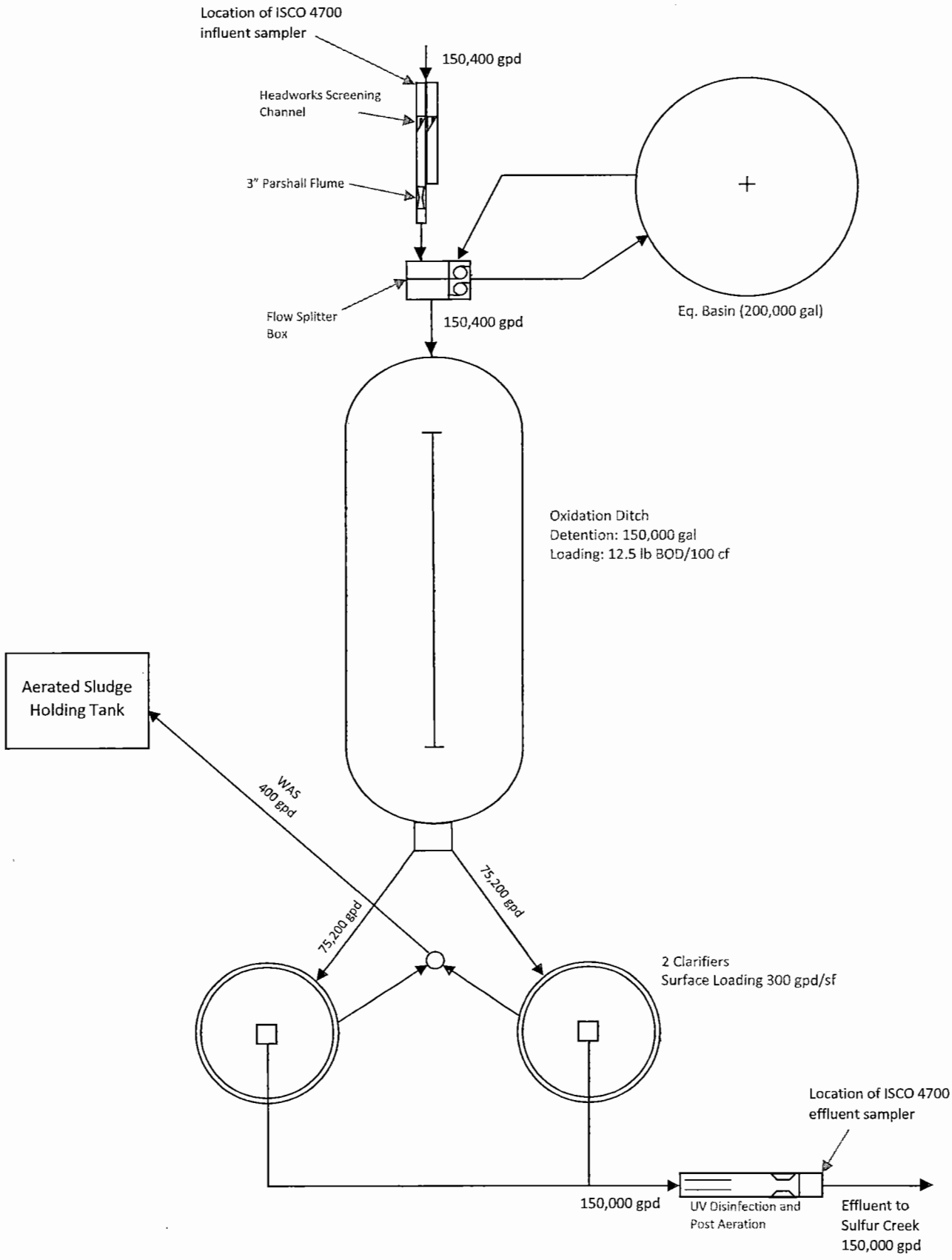
ELKMONT RURAL VILLAGE WASTEWATER TREATMENT PLANT

LIMESTONE COUNTY, ALABAMA

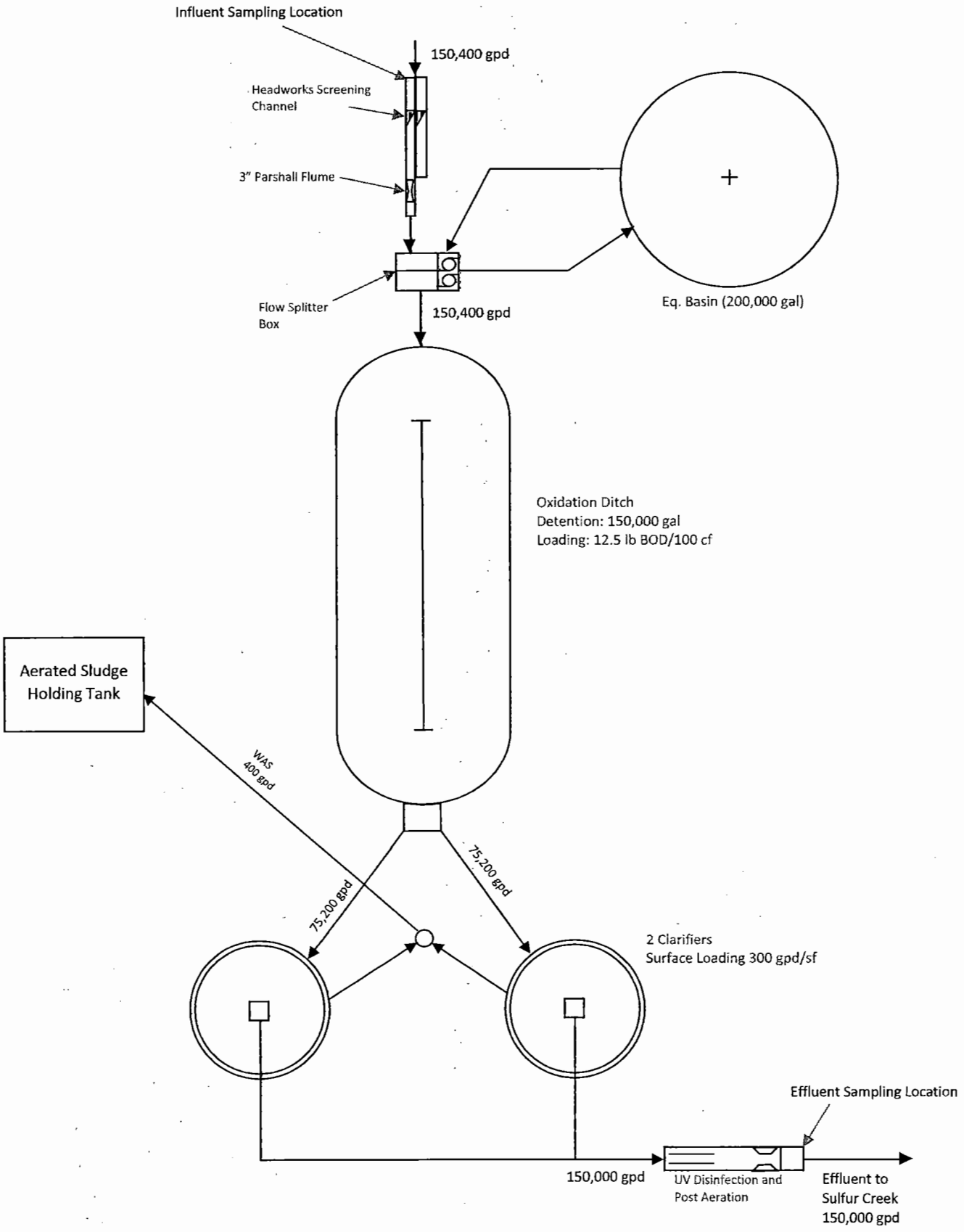
DATE: 4/5/2017

FILE: 1001-01

EXHIBIT 1



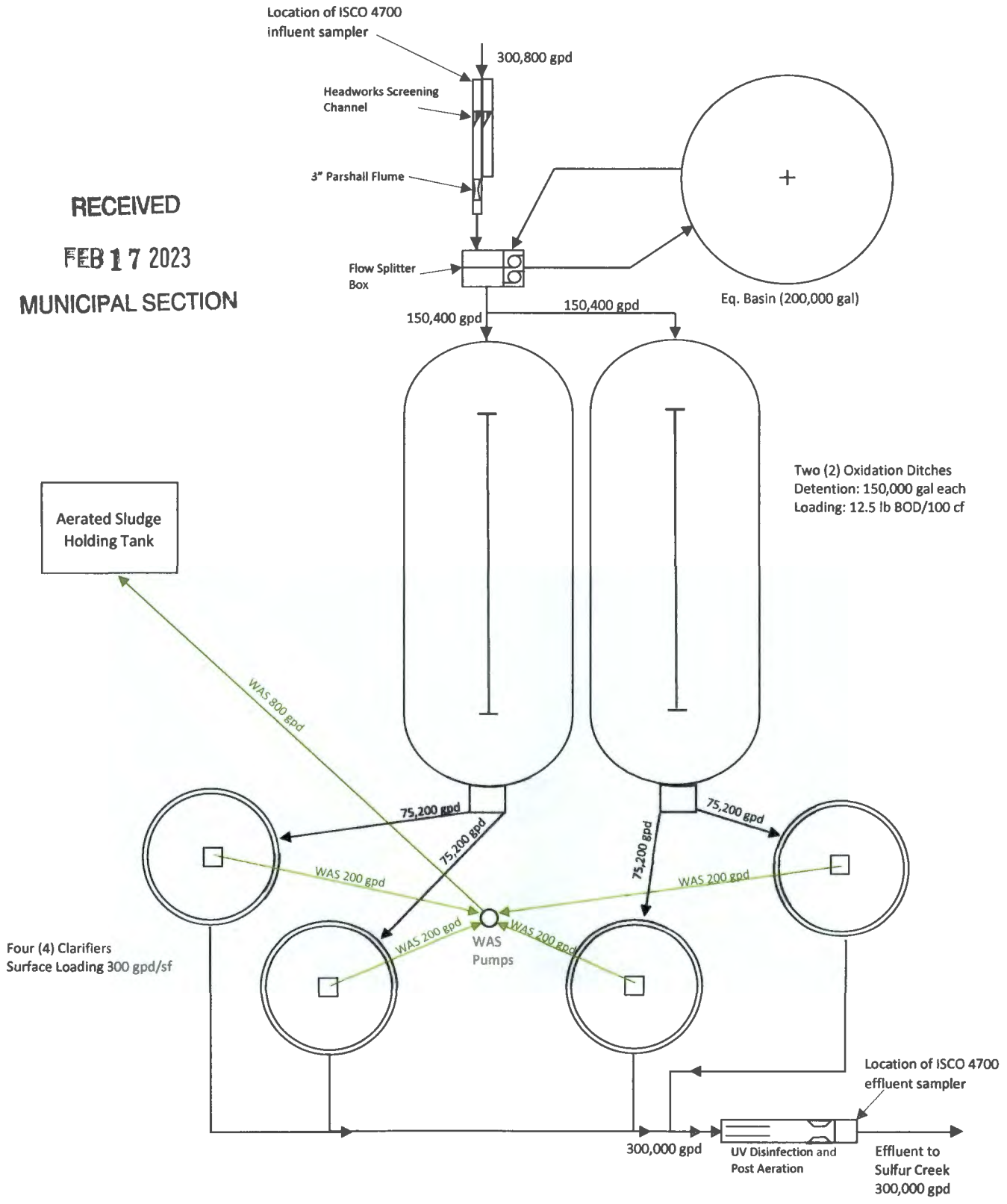
LIMESTONE COUNTY WATER AND SEWER AUTHORITY	Elkmont Rural Village WWTP Process Flow Diagram	Date: 9/27/2022



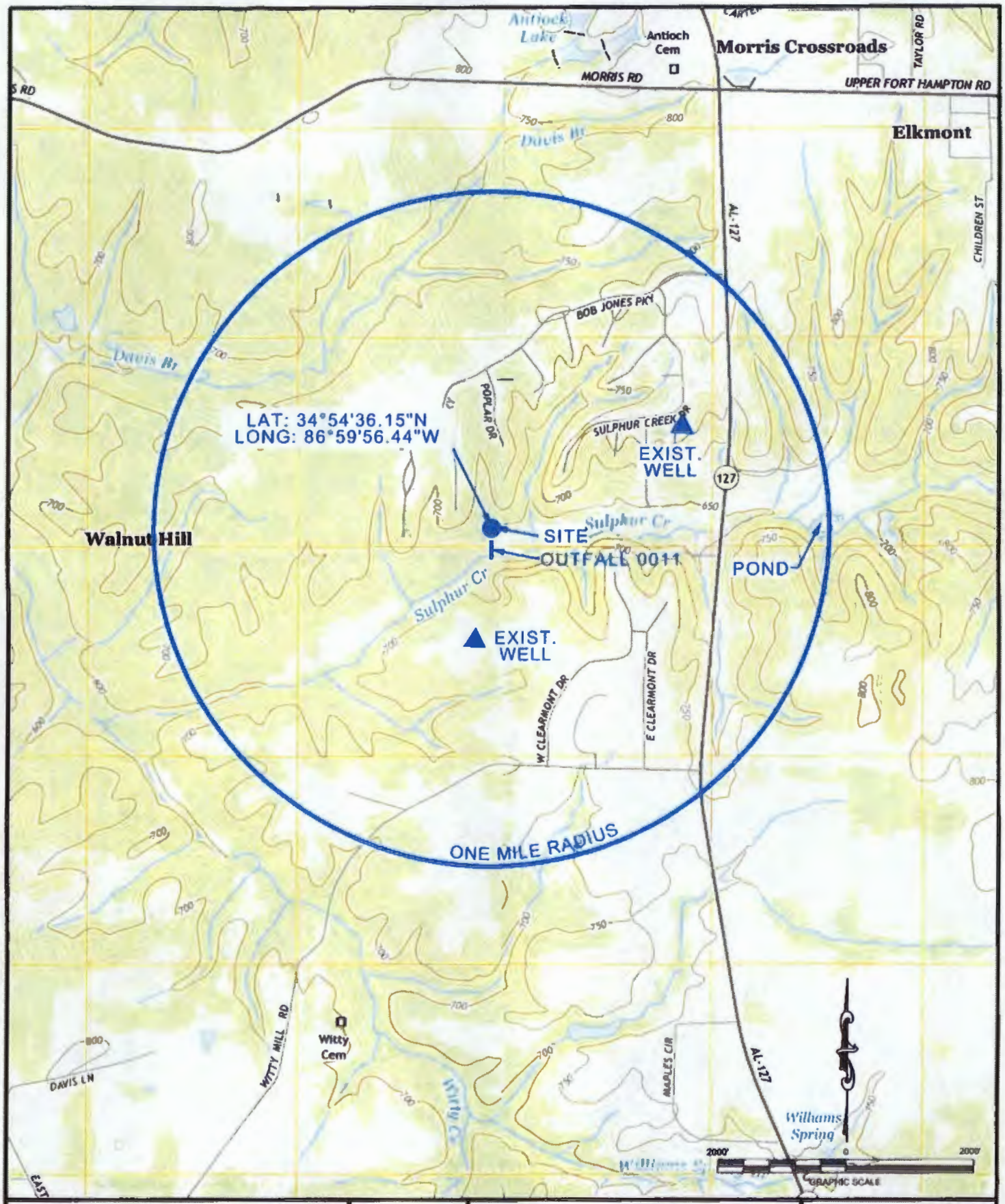
LIMESTONE COUNTY WATER AND SEWER AUTHORITY

Elkmont Rural Village WWTP
Process Flow Diagram

Date: 9/27/2022



LIMESTONE COUNTY WATER AND SEWER AUTHORITY	Elkmont Rural Village WWTP Process Flow Diagram (0.30 MGD)	Date: 9/27/2022



HETHCOAT DAVIS ENGINEERS PLANNERS 278 FRANKLIN ROAD, SUITE 200 BRENTWOOD, TN 37027 • 300 VESTAVIA PARKWAY, SUITE 2300 BIRMINGHAM, AL 35216		**ONE MILE RADIUS** **ELKMONT RURAL VILLAGE WASTEWATER TREATMENT PLANT** LIMESTONE COUNTY, ALABAMA	DATE: 4/5/2017 FILE: 1001-01 **EXHIBIT 1**

SOUTHERN ENVIRONMENTAL TESTING

October 05, 2022

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
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
DC08070-01	Elkmont Rural Effluent	09/27/2022	09/27/2022
DC08070-02	Elkmont Rural Effluent	09/27/2022	09/27/2022

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: 10/05/2022 12:18

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent **Sample ID: DC08070-01** **Collected: 09/27/2022** **Submitted: 09/27/2022**				
Metals by ICP-OES				
Total Silver	<0.00125	mg/l		
Total Arsenic	<0.00500	mg/l		
Total Beryllium	<0.00500	mg/l		
Total Calcium	42.7	mg/l		
Total Cadmium	<0.00500	mg/l		
Total Chromium	<0.00500	mg/l		
Total Copper	0.00500	mg/l		
Total Hardness	130	mg/l CaCO3		
Total Magnesium	5.75	mg/l		
Total Nickel	0.00785	mg/l		
Total Lead	<0.00500	mg/l		
Total Antimony	0.00563	mg/l		
Total Selenium	<0.00500	mg/l		
Total Thallium	<0.00500	mg/l		
Total Zinc	0.0162	mg/l		
Sample Point: Elkmont Rural Effluent **Sample ID: DC08070-02** **Collected: 09/27/2022** **Submitted: 09/27/2022**				
Inorganics				
Total Cyanide	<0.00500	mg/l		
Phenolics (4AAP)	<0.0200	mg/l		
Semivolatiles by EPA 625				
N-Nitrosodimethylamine	<2.00	ug/l		
Phenol	<2.00	ug/l		
Bis(2-chloroethyl)ether	<2.00	ug/l		
2-Chlorophenol	<2.00	ug/l		
Bis(2-chloroisopropyl)ether	<2.00	ug/l		
N-Nitrosodi-n-propylamine	<2.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/05/2022 12:18

REPORT TO
Sam Thomas **Limestone County Water & Sewer** **17218 US Hwy 72** **Athens, AL 35611**

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC08070-02**	**Collected: 09/27/2022**		**Submitted: 09/27/2022**
Semivolatiles by EPA 625 (Continued)				
Hexachloroethane	<2.00	ug/l		
Nitrobenzene	<2.00	ug/l		
Isophorone	<2.00	ug/l		
2-Nitrophenol	<2.00	ug/l		
2,4-Dimethylphenol	<2.00	ug/l		
Bis(2-chloroethoxy)methane	<2.00	ug/l		
2,4-Dichlorophenol	<2.00	ug/l		
1,2,4-Trichlorobenzene	<2.00	ug/l		
Naphthalene	<2.00	ug/l		
Hexachlorobutadiene	<2.00	ug/l		
4-Chloro-3-methylphenol	<2.00	ug/l		
Hexachlorocyclopentadiene	<2.00	ug/l		
2,4,6-Trichlorophenol	<2.00	ug/l		
2-Chloronaphthalene	<2.00	ug/l		
Dimethylphthalate	<2.00	ug/l		
Acenaphthylene	<2.00	ug/l		
2,6-Dinitrotoluene	<2.00	ug/l		
Acenaphthene	<2.00	ug/l		
2,4-Dinitrophenol	<2.00	ug/l		
4-Nitrophenol	<2.00	ug/l		
2,4-Dinitrotoluene	<2.00	ug/l		
Fluorene	<2.00	ug/l		
Diethylphthalate	<2.00	ug/l		
4-Chlorophenyl phenyl ether	<2.00	ug/l		
1,2-Diphenylhydrazine as Azobenzene	<2.00	ug/l		
4,6-Dinitro-2-methylphenol	<2.00	ug/l		
N-Nitrosodiphenylamine	<2.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/05/2022 12:18

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit

Sample Point: Elkmont Rural Effluent **Sample ID: DC08070-02** **Collected: 09/27/2022** **Submitted: 09/27/2022**

Semivolatiles by EPA 625 (Continued)

4-Bromophenyl phenyl ether	<2.00	ug/l		
Hexachlorobenzene	<2.00	ug/l		
Pentachlorophenol	<2.00	ug/l		
Phenanthrene	<2.00	ug/l		
Anthracene	<2.00	ug/l		
Di-n-butylphthalate	<2.00	ug/l		
Fluoranthene	<2.00	ug/l		
Benzidine	<2.00	ug/l		
Pyrene	<2.00	ug/l		
Butylbenzylphthalate	<2.00	ug/l		
Benzo[a]anthracene	<2.00	ug/l		
3,3'-Dichlorobenzidine	<2.00	ug/l		
Chrysene	<2.00	ug/l		
Bis(2-ethylhexyl)phthalate	<8.00	ug/l		
Di-n-octylphthalate	<2.00	ug/l		
Benzo[b]fluoranthene	<2.00	ug/l		
Benzo[k]fluoranthene	<2.00	ug/l		
Benzo[a]pyrene	<2.00	ug/l		
Indeno(1,2,3-cd)pyrene	<2.00	ug/l		
Dibenzo[a,h]anthracene	<2.00	ug/l		
Benzo[g,h,i]perylene	<2.00	ug/l		

Volatiles by EPA 624

Benzene	<1.00	ug/l		
Bromodichloromethane	<1.00	ug/l		
Bromoform	<1.00	ug/l		
Bromomethane	<2.00	ug/l		
Carbon tetrachloride	<2.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/05/2022 12:18

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit

Sample Point: Elkmont Rural Effluent **Sample ID: DC08070-02** **Collected: 09/27/2022** **Submitted: 09/27/2022**

Volatiles by EPA 624 (Continued)

Chlorobenzene	<1.00	ug/l		
Chloroethane	<1.00	ug/l		
Chloroform	<1.00	ug/l		
Chloromethane	<1.00	ug/l		
Dibromochloromethane	<1.00	ug/l		
1,2-Dichlorobenzene	<1.00	ug/l		
1,3-Dichlorobenzene	<1.00	ug/l		
1,4-Dichlorobenzene	<1.00	ug/l		
1,1-Dichloroethane	<1.00	ug/l		
1,2-Dichloroethane	<1.00	ug/l		
trans-1,2-Dichloroethylene	<1.00	ug/l		
trans-1,3-Dichloropropylene	<2.00	ug/l		
1,2-Dichloropropane	<1.00	ug/l		
cis-1,3-Dichloropropylene	<1.00	ug/l		
Ethyl benzene	<1.00	ug/l		
Methylene chloride	<2.00	ug/l		
1,1,2,2-Tetrachloroethane	<1.00	ug/l		
1,1,1-Trichloroethane	<1.00	ug/l		
1,1,2-Trichloroethane	<1.00	ug/l		
1,1-Dichloroethylene	<1.00	ug/l		
Dichlorodifluoromethane	<1.00	ug/l		
Methyl Ethyl Ketone	<5.00	ug/l		
o-Xylene	<1.00	ug/l		
m & p-Xylene	<2.00	ug/l		
Tetrachloroethylene	<1.00	ug/l		
Toluene	<1.00	ug/l		
Trichloroethylene	<1.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/05/2022 12:18

REPORT TO
Sam Thomas Limestone County Water & Sewer 17218 US Hwy 72 Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC08070-02**	**Collected: 09/27/2022**		**Submitted: 09/27/2022**
Volatiles by EPA 624 (Continued)				
Trichlorofluoromethane	<1.00	ug/l		
Vinyl chloride	<1.00	ug/l		
2-Chloroethylvinyl ether	<1.00	ug/l		
Acrylonitrile	<1.00	ug/l		
Acrolein	<1.00	ug/l		
Acetone	<5.00	ug/l		
Methyl isobutyl ketone	<5.00	ug/l		
Styrene	<1.00	ug/l		
1,2,4-Trichlorobenzene	<1.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/05/2022 12:18

REPORT TO
Sam Thomas Limestone County Water & Sewer 17218 US Hwy 72 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)
DC08070-01	Total Hardness	[CALC]	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Antimony	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Arsenic	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Beryllium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Cadmium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Chromium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Copper	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Lead	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Nickel	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Selenium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Silver	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Thallium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	
DC08070-01	Zinc	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	09/27/2022 06:00	09/29/2022 08:40	

SAMPLE RESULTS REPORT

Report Date/Time: 10/05/2022 12:18

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DC08070-02	Total Cyanide	ASTM D7511-12	SH	Decatur	09/27/2022 06:52	09/27/2022 09:51	
DC08070-02	Phenolics (4AAP)	EPA 420.1 Rev. 1978	WCC	Florence	09/27/2022 06:52	09/30/2022 08:05	
DC08070-02	Volatile Organic Analytes	EPA 624.1	AGD	Florence	09/27/2022 06:52	10/03/2022 14:00	
DC08070-02	BN/AE Semivolatiles	EPA 625.1	FLY	Florence	09/27/2022 06:52	10/03/2022 08:30	

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

Elkmont Rural
Permit Renewal

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	PROJECT NUMBER
Limestone County Water and Sewer		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**	**CITY/STATE/ZIP**
Sam Thomas	17218 US 72	Athens, AL 35611
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**
sthomas@lcwsa.com	256-233-6444	**Permit Renewal**
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
Sam Thomas	DATE DUE (REQUIRED)	

REQUESTED ANALYSES

SET LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	Hardness	CA,MG,SB,AS	BE,CD,CR,CU,PB	NI,SE,AG,TL,ZN	CN	Phenolics	624 Form 2A	625 Form 2C						
0508070 - 01	Elkmont Rural Effluent	9-27-22	0652		X	X	X	X	X										
-02	Elkmont Rural Effluent	9-27-22	0652	X						X	X	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 (2011)		SM 4500-O G		SM 2550B					
Start Date	~~0600~~ 9-26-22	pH su	7.54	TRC mg/l	0.0	DO mg/l	9.36	Temp deg C		1	60mL Amber Glass NaOH		CN
Start Time	0600	Date	9-27-22	Date	9-27-22	Date	9-27-22	Date		1	1 Liter Amber Glass H2SO4		Phenolics
Stop Date	9-27-22	Time	0652	Time	0652	Time	0652	Time		3	40mL Clear Vials None/HCL		624
Stop Time	0600	Analyst	S. Thomas	Analyst	S. Thomas	Analyst	S. Thomas	Analyst		2	1 Liter Amber Glass		625
										1	250mL HDPE HN03		Metals

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Sam Thomas	9-27-22	0830						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**IME**
RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	**DATE**	**TIME**	**SAMPLE TEMPERATURE RECEIVED @**					
Shyla Jones	9/27/22	0830	6.4 on ice					

SOUTHERN ENVIRONMENTAL TESTING

November 18, 2022

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
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
DC09205-01	Elkmont Rural Effluent	11/01/2022	11/01/2022
DC09205-02	Elkmont Rural Effluent	11/01/2022	11/01/2022

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: 11/18/2022 10:54

REPORT TO
Sam Thomas Limestone County Water & Sewer 17218 US Hwy 72 Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent **Sample ID: DC09205-01** **Collected: 11/01/2022** **Submitted: 11/01/2022**				
Metals by ICP-OES				
Total Silver	<0.00125	mg/l		
Total Arsenic	<0.00500	mg/l		
Total Beryllium	<0.00500	mg/l		
Total Calcium	38.2	mg/l		
Total Cadmium	<0.00500	mg/l		
Total Chromium	<0.00500	mg/l		
Total Copper	<0.00500	mg/l		
Total Hardness	117	mg/l CaCO3		
Total Magnesium	5.29	mg/l		
Total Nickel	0.00918	mg/l		
Total Lead	<0.00500	mg/l		
Total Antimony	<0.00500	mg/l		
Total Selenium	<0.00500	mg/l		
Total Thallium	<0.00500	mg/l		
Total Zinc	0.0151	mg/l		
Sample Point: Elkmont Rural Effluent **Sample ID: DC09205-02** **Collected: 11/01/2022** **Submitted: 11/01/2022**				
Inorganics				
Total Cyanide	<0.00500	mg/l		
Phenolics (4AAP)	<0.0200	mg/l		
Volatiles by EPA 624				
Benzene	<1.00	ug/l		
Bromodichloromethane	<1.00	ug/l		
Bromoform	<1.00	ug/l		
Bromomethane	<2.00	ug/l		
Carbon tetrachloride	<2.00	ug/l		
Chlorobenzene	<1.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 11/18/2022 10:54

REPORT TO
Sam Thomas Limestone County Water & Sewer 17218 US Hwy 72 Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC09205-02**	**Collected: 11/01/2022**		**Submitted: 11/01/2022**
Volatiles by EPA 624 (Continued)				
Chloroethane	<1.00	ug/l		
Chloroform	<1.00	ug/l		
Chloromethane	<1.00	ug/l		
Dibromochloromethane	<1.00	ug/l		
1,2-Dichlorobenzene	<1.00	ug/l		
1,3-Dichlorobenzene	<1.00	ug/l		
1,4-Dichlorobenzene	<1.00	ug/l		
1,1-Dichloroethane	<1.00	ug/l		
1,2-Dichloroethane	<1.00	ug/l		
trans-1,2-Dichloroethylene	<1.00	ug/l		
trans-1,3-Dichloropropylene	<2.00	ug/l		
1,2-Dichloropropane	<1.00	ug/l		
cis-1,3-Dichloropropylene	<1.00	ug/l		
Ethyl benzene	<1.00	ug/l		
Methylene chloride	<2.00	ug/l		
1,1,2,2-Tetrachloroethane	<1.00	ug/l		
1,1,1-Trichloroethane	<1.00	ug/l		
1,1,2-Trichloroethane	<1.00	ug/l		
1,1-Dichloroethylene	<1.00	ug/l		
Dichlorodifluoromethane	<1.00	ug/l		
Methyl Ethyl Ketone	<5.00	ug/l		
o-Xylene	<1.00	ug/l		
m & p-Xylene	<2.00	ug/l		
Tetrachloroethylene	<1.00	ug/l		
Toluene	<1.00	ug/l		
Trichloroethylene	<1.00	ug/l		
Trichlorofluoromethane	<1.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 11/18/2022 10:54

REPORT TO
Sam Thomas Limestone County Water & Sewer 17218 US Hwy 72 Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC09205-02**	**Collected: 11/01/2022**		**Submitted: 11/01/2022**
Volatiles by EPA 624 (Continued)				
Vinyl chloride	<1.00	ug/l		
2-Chloroethylvinyl ether	<1.00	ug/l		
Acrylonitrile	<1.00	ug/l		
Acrolein	<1.00	ug/l		
Acetone	<5.00	ug/l		
Methyl isobutyl ketone	<5.00	ug/l		
Styrene	<1.00	ug/l		
1,2,4-Trichlorobenzene	<1.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 11/18/2022 10:54

REPORT TO
Sam Thomas **Limestone County Water & Sewer** **17218 US Hwy 72** **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)
DC09205-01	Total Hardness	[CALC]	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Antimony	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Arsenic	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Beryllium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Cadmium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Chromium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Copper	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Lead	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Nickel	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Selenium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Silver	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Thallium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	
DC09205-01	Zinc	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	11/01/2022 06:00	11/04/2022 10:40	

SAMPLE RESULTS REPORT

Report Date/Time: 11/18/2022 10:54

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DC09205-02	Total Cyanide	ASTM D7511-12	LLW	Decatur	11/01/2022 09:45	11/02/2022 11:04	
DC09205-02	Phenolics (4AAP)	EPA 420.1 Rev. 1978	WCC	Florence	11/01/2022 09:45	11/04/2022 08:05	
DC09205-02	Volatile Organic Analytes	EPA 624.1	AGD	Florence	11/01/2022 09:45	11/03/2022 12:30	

eurofins | Environment Testing

ANALYTICAL REPORT

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-228218-1
Laboratory Sample Delivery Group: DC09205
Client Project/Site: Limestone County Water and Sewer

For:
Southern Environmental Testing
3103 Northington Court
Florence, Alabama 35630

Attn: Margaret Aiken

Cheyenne Whitmire

Authorized for release by:
11/10/2022 8:53:25 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@et.eurofinsus.com

Table of Contents

Job ID: 400-228218-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-228218-1

Receipt

The sample was received on 11/2/2022 9:59 AM. Unless otherwise noted below, the sample arrived in good condition, and whe required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1° C.

GC/MS Semi VOA

Method 625: The continuing calibration verification (CCV) associated with batch 400-599729 recovered above the upper control for Hexachlorobutadiene, Pyrene and Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 625: The laboratory control sample duplicate (LCSD) for preparation batch 400-599682 and analytical batch 400-59972 recovered outside control limits for the following analytes: Pyrene. The analyte was biased high in the LCSD and was not detec in the associated samples; therefore, the data have been reported.

Method 625: The continuing calibration verification (CCV) associated with batch 400-599864 recovered above the upper control for 2,2;-oxybis[1-chloropropane]. The samples associated with this CCV were non-detects for the affected analytes; therefore, tl data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Southern Environmental Testing
Project/Site: Limestone County Water and Sewer

Job ID: 400-228218-1
SDG: DC09205

Client Sample ID: ELKMONT RURAL EFFLUENT **Lab Sample ID: 400-228218-1**

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Southern Environmental Testing
Project/Site: Limestone County Water and Sewer

Job ID: 400-228218-1
SDG: DC09205

Method	Method Description	Protocol	Laboratory
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	EET PEN
625	Liquid-Liquid Extraction	40CFR136A	EET PEN

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Southern Environmental Testing
Project/Site: Limestone County Water and Sewer

Job ID: 400-228218-1
0EG:ÆJm9Tm5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-228218-1	ELKMONT RURAL EFFLUENT	Water	11/01/22 09:45	11/02/22 08:59

Client Sample ID: ELKMONT RURAL EFFLUENT

Date Collected: 11/01/22 09:45
Date Received: 11/02/22 08:59

Lab Sample ID: 400-228218-1

Matrix: Water

Method: 40CFR136A 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Acenaphthylene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Anthracene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Benzidine	<0.024		0.024		mg/L		11/08/22 08:39	11/08/22 17:26	1
Benzo[a]anthracene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Benzo[a]pyrene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Benzo[b]fluoranthene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Benzo[g,h,i]perylene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Benzo[k]fluoranthene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Bis(2-chloroethoxy)methane	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Bis(2-chloroethyl)ether	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2,2'-oxybis[1-chloropropane]	<0.0097		0.0097		mg/L		11/08/22 08:39	11/09/22 17:49	1
Bis(2-ethylhexyl) phthalate	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
4-Bromophenyl phenyl ether	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Butyl benzyl phthalate	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2-Chloronaphthalene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2-Chlorophenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
4-Chlorophenyl phenyl ether	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Chrysene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Dibenz(a,h)anthracene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
3,3'-Dichlorobenzidine	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2,4-Dichlorophenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Diethyl phthalate	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2,4-Dimethylphenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Dimethyl phthalate	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Di-n-butyl phthalate	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
4,6-Dinitro-2-methylphenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2,4-Dinitrophenol	<0.029		0.029		mg/L		11/08/22 08:39	11/08/22 17:26	1
2,4-Dinitrotoluene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2,6-Dinitrotoluene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Di-n-octyl phthalate	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
1,2-Diphenylhydrazine (as Azobenzene)	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Fluoranthene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Fluorene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Hexachlorobenzene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Hexachloro-1,3-butadiene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Hexachlorocyclopentadiene	<0.019		0.019		mg/L		11/08/22 08:39	11/09/22 17:49	1
Hexachloroethane	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Indeno[1,2,3-cd]pyrene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Isophorone	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Naphthalene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Nitrobenzene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2-Nitrophenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
4-Nitrophenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
N-Nitrosodimethylamine	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
N-Nitrosodi-n-propylamine	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
N-Nitrosodiphenylamine	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
para-Chloro meta-cresol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Pentachlorophenol	<0.019		0.019		mg/L		11/08/22 08:39	11/08/22 17:26	1

Client Sample ID: ELKMONT RURAL EFFLUENT
Date Collected: 11/01/22 09:45
Date Received: 11/02/22 08:59

Lab Sample ID: 400-228218-1
Matrix: Water

Method: 40CFR136A 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Phenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
Pyrene	<0.0097	*+	0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
1,2,4-Trichlorobenzene	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1
2,4,6-Trichlorophenol	<0.0097		0.0097		mg/L		11/08/22 08:39	11/08/22 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*32 - 109*	*11/08/22 08:39*	*11/08/22 17:26*	*1*
2-Fluorophenol	*59*		*10 - 104*	*11/08/22 08:39*	*11/08/22 17:26*	*1*
Nitrobenzene-d5	*75*		*31 - 111*	*11/08/22 08:39*	*11/08/22 17:26*	*1*
Phenol-d5	*43*		*10 - 110*	*11/08/22 08:39*	*11/08/22 17:26*	*1*
Terphenyl-d14	*114*		*30 - 129*	*11/08/22 08:39*	*11/08/22 17:26*	*1*
2,4,6-Tribromophenol	*86*		*15 - 135*	*11/08/22 08:39*	*11/08/22 17:26*	*1*

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample ID: ELKMONT RURAL EFFLUENT
Date Collected: 11/01/22 09:45
Date Received: 11/02/22 08:59

Lab Sample ID: 400-228218-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	625			257.6 mL	1 mL	599682	11/08/22 08:39	BKL	EET PEN
Total/NA	Analysis	625		1	0.4 mL	0.4 mL	599864	11/09/22 17:49	S1B	EET PEN
Total/NA	Prep	625			257.6 mL	1 mL	599682	11/08/22 08:39	BKL	EET PEN
Total/NA	Analysis	625		1	0.4 mL	0.4 mL	599729	11/08/22 17:26	S1B	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS Semi VOA

Prep Batch: 599682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-228218-1	ELKMONT RURAL EFFLUENT	Total/NA	Water	625	
MB 400-599682/1-A	Method Blank	Total/NA	Water	625	
LCS 400-599682/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 400-599682/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 599729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-228218-1	ELKMONT RURAL EFFLUENT	Total/NA	Water	625	599682
MB 400-599682/1-A	Method Blank	Total/NA	Water	625	599682
LCS 400-599682/2-A	Lab Control Sample	Total/NA	Water	625	599682
LCSD 400-599682/3-A	Lab Control Sample Dup	Total/NA	Water	625	599682

Analysis Batch: 599864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-228218-1	ELKMONT RURAL EFFLUENT	Total/NA	Water	625	599682
MB 400-599682/1-A	Method Blank	Total/NA	Water	625	599682

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-599682/1-A
Matrix: Water
Analysis Batch: 599729

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 599682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Acenaphthylene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Anthracene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Benzidine	<0.025		0.025		mg/L		11/08/22 08:38	11/08/22 16:20	1
Benzo[a]anthracene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Benzo[a]pyrene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Benzo[b]fluoranthene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Benzo[g,h,i]perylene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Benzo[k]fluoranthene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Bis(2-chloroethoxy)methane	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Bis(2-chloroethyl)ether	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Bis(2-ethylhexyl) phthalate	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
4-Bromophenyl phenyl ether	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Butyl benzyl phthalate	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2-Chloronaphthalene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2-Chlorophenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
4-Chlorophenyl phenyl ether	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Chrysene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Dibenz(a,h)anthracene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
3,3'-Dichlorobenzidine	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2,4-Dichlorophenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Diethyl phthalate	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2,4-Dimethylphenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Dimethyl phthalate	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Di-n-butyl phthalate	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
4,6-Dinitro-2-methylphenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2,4-Dinitrophenol	<0.030		0.030		mg/L		11/08/22 08:38	11/08/22 16:20	1
2,4-Dinitrotoluene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2,6-Dinitrotoluene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Di-n-octyl phthalate	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
1,2-Diphenylhydrazine (as Azobenzene)	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Fluoranthene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Fluorene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Hexachlorobenzene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Hexachloro-1,3-butadiene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Hexachloroethane	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Indeno[1,2,3-cd]pyrene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Isophorone	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Naphthalene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Nitrobenzene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2-Nitrophenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
4-Nitrophenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
N-Nitrosodimethylamine	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
N-Nitrosodi-n-propylamine	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
N-Nitrosodiphenylamine	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
para-Chloro meta-cresol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Pentachlorophenol	<0.020		0.020		mg/L		11/08/22 08:38	11/08/22 16:20	1
Phenanthrene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-599682/1-A
Matrix: Water
Analysis Batch: 599729

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 599682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
Pyrene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
1,2,4-Trichlorobenzene	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1
2,4,6-Trichlorophenol	<0.010		0.010		mg/L		11/08/22 08:38	11/08/22 16:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*32 - 109*	*11/08/22 08:38*	*11/08/22 16:20*	*1*
2-Fluorophenol	*59*		*10 - 104*	*11/08/22 08:38*	*11/08/22 16:20*	*1*
Nitrobenzene-d5	*75*		*31 - 111*	*11/08/22 08:38*	*11/08/22 16:20*	*1*
Phenol-d5	*42*		*10 - 110*	*11/08/22 08:38*	*11/08/22 16:20*	*1*
Terphenyl-d14	*110*		*30 - 129*	*11/08/22 08:38*	*11/08/22 16:20*	*1*
2,4,6-Tribromophenol	*74*		*15 - 135*	*11/08/22 08:38*	*11/08/22 16:20*	*1*

Lab Sample ID: MB 400-599682/1-A
Matrix: Water
Analysis Batch: 599864

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 599682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis[1-chloropropane]	<0.010		0.010		mg/L		11/08/22 08:38	11/09/22 16:46	1
Hexachlorocyclopentadiene	<0.020		0.020		mg/L		11/08/22 08:38	11/09/22 16:46	1

Lab Sample ID: LCS 400-599682/2-A
Matrix: Water
Analysis Batch: 599729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 599682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	0.120	0.0996		mg/L		83	47 - 145
Acenaphthylene	0.120	0.104		mg/L		86	33 - 145
Anthracene	0.120	0.105		mg/L		88	27 - 133
Benzidine	0.240	0.0314		mg/L		13	10 - 159
Benzo[a]anthracene	0.120	0.102		mg/L		85	33 - 143
Benzo[a]pyrene	0.120	0.103		mg/L		86	17 - 163
Benzo[b]fluoranthene	0.120	0.105		mg/L		87	24 - 159
Benzo[g,h,i]perylene	0.120	0.0933		mg/L		78	10 - 219
Benzo[k]fluoranthene	0.120	0.0962		mg/L		80	11 - 162
Bis(2-chloroethoxy)methane	0.120	0.0860		mg/L		72	33 - 184
Bis(2-chloroethyl)ether	0.120	0.0697		mg/L		58	12 - 158
2,2'-oxybis[1-chloropropane]	0.120	0.0728		mg/L		61	36 - 166
Bis(2-ethylhexyl) phthalate	0.120	0.115		mg/L		96	8 - 158
4-Bromophenyl phenyl ether	0.120	0.110		mg/L		92	53 - 127
Butyl benzyl phthalate	0.120	0.117		mg/L		97	1 - 152
2-Chloronaphthalene	0.120	0.0942		mg/L		78	60 - 118
2-Chlorophenol	0.120	0.0937		mg/L		78	23 - 134
4-Chlorophenyl phenyl ether	0.120	0.109		mg/L		91	25 - 158
Chrysene	0.120	0.101		mg/L		84	17 - 168
Dibenz(a,h)anthracene	0.120	0.0884		mg/L		74	10 - 227
3,3'-Dichlorobenzidine	0.240	0.180		mg/L		75	10 - 262
2,4-Dichlorophenol	0.120	0.107		mg/L		90	39 - 135
Diethyl phthalate	0.120	0.108		mg/L		90	10 - 114

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-599682/2-A
Matrix: Water
Analysis Batch: 599729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 599682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dimethylphenol	0.120	0.0884		mg/L		74	32 - 119
Dimethyl phthalate	0.120	0.104		mg/L		87	10 - 112
Di-n-butyl phthalate	0.120	0.105		mg/L		88	1 - 118
4,6-Dinitro-2-methylphenol	0.240	0.232		mg/L		97	10 - 181
2,4-Dinitrophenol	0.240	0.197		mg/L		82	30 - 191
2,4-Dinitrotoluene	0.120	0.109		mg/L		91	39 - 139
2,6-Dinitrotoluene	0.120	0.0996		mg/L		83	50 - 158
Di-n-octyl phthalate	0.120	0.108		mg/L		90	4 - 146
1,2-Diphenylhydrazine (as Azobenzene)	0.120	0.0849		mg/L		71	50 - 150
Fluoranthene	0.120	0.113		mg/L		94	26 - 137
Fluorene	0.120	0.107		mg/L		90	59 - 121
Hexachlorobenzene	0.120	0.120		mg/L		100	10 - 152
Hexachloro-1,3-butadiene	0.120	0.0942		mg/L		78	24 - 116
Hexachlorocyclopentadiene	0.120	0.0676		mg/L		56	1 - 122
Hexachloroethane	0.120	0.0770		mg/L		64	40 - 113
Indeno[1,2,3-cd]pyrene	0.120	0.0894		mg/L		75	10 - 171
Isophorone	0.120	0.0900		mg/L		75	21 - 196
Naphthalene	0.120	0.0905		mg/L		75	21 - 133
Nitrobenzene	0.120	0.0861		mg/L		72	35 - 180
2-Nitrophenol	0.120	0.0978		mg/L		82	29 - 182
4-Nitrophenol	0.240	0.174		mg/L		73	10 - 132
N-Nitrosodimethylamine	0.120	0.0681		mg/L		57	38 - 104
N-Nitrosodi-n-propylamine	0.120	0.0906		mg/L		76	10 - 230
N-Nitrosodiphenylamine	0.119	0.0948		mg/L		80	58 - 120
para-Chloro meta-cresol	0.120	0.113		mg/L		94	22 - 147
Pentachlorophenol	0.240	0.226		mg/L		94	14 - 176
Phenanthrene	0.120	0.103		mg/L		85	54 - 120
Phenol	0.120	0.0656		mg/L		55	5 - 112
Pyrene	0.120	0.122		mg/L		101	52 - 115
1,2,4-Trichlorobenzene	0.120	0.0921		mg/L		77	44 - 142
2,4,6-Trichlorophenol	0.120	0.0983		mg/L		82	37 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*32 - 109*
2-Fluorophenol	*62*		*10 - 104*
Nitrobenzene-d5	*76*		*31 - 111*
Phenol-d5	*52*		*10 - 110*
Terphenyl-d14	*98*		*30 - 129*
2,4,6-Tribromophenol	*99*		*15 - 135*

Lab Sample ID: LCSD 400-599682/3-A
Matrix: Water
Analysis Batch: 599729

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 599682

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	0.120	0.122		mg/L		102	47 - 145	20	30
Acenaphthylene	0.120	0.128		mg/L		107	33 - 145	21	30
Anthracene	0.120	0.131		mg/L		109	27 - 133	21	30

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-599682/3-A
Matrix: Water
Analysis Batch: 599729

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 599682

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzidine	0.240	0.0412		mg/L		17	10 - 159	27	30
Benzo[a]anthracene	0.120	0.128		mg/L		106	33 - 143	22	30
Benzo[a]pyrene	0.120	0.133		mg/L		110	17 - 163	25	30
Benzo[b]fluoranthene	0.120	0.134		mg/L		112	24 - 159	25	30
Benzo[g,h,i]perylene	0.120	0.118		mg/L		98	10 - 219	23	30
Benzo[k]fluoranthene	0.120	0.126		mg/L		105	11 - 162	27	30
Bis(2-chloroethoxy)methane	0.120	0.105		mg/L		88	33 - 184	20	30
Bis(2-chloroethyl)ether	0.120	0.0866		mg/L		72	12 - 158	22	30
2,2'-oxybis[1-chloropropane]	0.120	0.0895		mg/L		75	36 - 166	21	30
Bis(2-ethylhexyl) phthalate	0.120	0.146		mg/L		122	8 - 158	24	30
4-Bromophenyl phenyl ether	0.120	0.138		mg/L		115	53 - 127	22	30
Butyl benzyl phthalate	0.120	0.146		mg/L		122	1 - 152	23	30
2-Chloronaphthalene	0.120	0.115		mg/L		96	60 - 118	20	30
2-Chlorophenol	0.120	0.114		mg/L		95	23 - 134	20	30
4-Chlorophenyl phenyl ether	0.120	0.135		mg/L		112	25 - 158	21	30
Chrysene	0.120	0.128		mg/L		107	17 - 168	23	30
Dibenz(a,h)anthracene	0.120	0.108		mg/L		90	10 - 227	20	30
3,3'-Dichlorobenzidine	0.240	0.215		mg/L		90	10 - 262	18	30
2,4-Dichlorophenol	0.120	0.130		mg/L		108	39 - 135	19	30
Diethyl phthalate	0.120	0.133		mg/L		111	10 - 114	20	30
2,4-Dimethylphenol	0.120	0.107		mg/L		89	32 - 119	19	30
Dimethyl phthalate	0.120	0.129		mg/L		107	10 - 112	21	30
Di-n-butyl phthalate	0.120	0.130		mg/L		108	1 - 118	21	30
4,6-Dinitro-2-methylphenol	0.240	0.288		mg/L		120	10 - 181	22	30
2,4-Dinitrophenol	0.240	0.251		mg/L		105	30 - 191	24	30
2,4-Dinitrotoluene	0.120	0.136		mg/L		113	39 - 139	22	30
2,6-Dinitrotoluene	0.120	0.124		mg/L		103	50 - 158	22	30
Di-n-octyl phthalate	0.120	0.136		mg/L		113	4 - 146	23	30
1,2-Diphenylhydrazine (as Azobenzene)	0.120	0.105		mg/L		88	50 - 150	21	30
Fluoranthene	0.120	0.140		mg/L		116	26 - 137	21	30
Fluorene	0.120	0.132		mg/L		110	59 - 121	21	30
Hexachlorobenzene	0.120	0.151		mg/L		126	10 - 152	23	30
Hexachloro-1,3-butadiene	0.120	0.115		mg/L		96	24 - 116	20	30
Hexachlorocyclopentadiene	0.120	0.0848		mg/L		71	1 - 122	23	30
Hexachloroethane	0.120	0.0938		mg/L		78	40 - 113	20	30
Indeno[1,2,3-cd]pyrene	0.120	0.113		mg/L		94	10 - 171	23	30
Isophorone	0.120	0.110		mg/L		91	21 - 196	20	30
Naphthalene	0.120	0.110		mg/L		91	21 - 133	19	30
Nitrobenzene	0.120	0.106		mg/L		88	35 - 180	20	30
2-Nitrophenol	0.120	0.124		mg/L		103	29 - 182	24	30
4-Nitrophenol	0.240	0.203		mg/L		84	10 - 132	15	30
N-Nitrosodimethylamine	0.120	0.0729		mg/L		61	38 - 104	7	30
N-Nitrosodi-n-propylamine	0.120	0.110		mg/L		92	10 - 230	19	30
N-Nitrosodiphenylamine	0.119	0.119		mg/L		100	58 - 120	23	30
para-Chloro meta-cresol	0.120	0.137		mg/L		114	22 - 147	19	30
Pentachlorophenol	0.240	0.284		mg/L		118	14 - 176	23	30
Phenanthrene	0.120	0.127		mg/L		106	54 - 120	21	30
Phenol	0.120	0.0731		mg/L		61	5 - 112	11	30

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-599682/3-A
Matrix: Water
Analysis Batch: 599729

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 599682

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyrene			0.120	0.152	*+	mg/L		127	52 - 115	22	30
1,2,4-Trichlorobenzene			0.120	0.112		mg/L		93	44 - 142	19	30
2,4,6-Trichlorophenol			0.120	0.122		mg/L		102	37 - 144	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*91*		*32 - 109*
2-Fluorophenol	*69*		*10 - 104*
Nitrobenzene-d5	*91*		*31 - 111*
Phenol-d5	*56*		*10 - 110*
Terphenyl-d14	*115*		*30 - 129*
2,4,6-Tribromophenol	*113*		*15 - 135*

ɔfins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-95882-34721.1
Client Contact: Margaret Aiken	Phone: 256-280-2569	E-Mail: Cheyenne.Whitmire@Eurofinset.com		Page: Page 1 of 1
Company: Southern Environmental Testing		Analysis Requested		Job #:
Address: 2919 Fairgrounds Road SW	Due Date Requested:			Preservation Codes:
City: Decatur	TAT Requested (days): RUSH			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: AL, 35603				
Phone: 256-280-2569	PO #: Purchase Order not required			Other:
Email: maiken@setesting.com	WO #:			
Project Name:	Project #:			
Site: Limestone County Water and Sewer	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625 Form 2C	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Elkmont Rura lEffluent	11/1/22	0945	G	W			X	2	DC09205-01
Please see attached list**									

400-228218 COC

Possible Hazard Identification
[x] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [x] Disposal By Lab [ ] Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/1/22 1600				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				11-2-22 8:59	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.1° IR9

Login Sample Receipt Checklist

Client: Southern Environmental Testing

Job Number: 400-228218-1
SDG Number: DC09205

Login Number: 228218
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.1°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Environmental Testing
Project/Site: Limestone County Water and Sewer

Job ID: 400-228218-1
SDG: DC09205

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-23
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-23
California	State	2510	06-30-23
Florida	NELAP	E81010	06-30-23
Georgia	State	E81010(FL)	06-30-23
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-23
Kentucky (WW)	State	KY98030	12-31-22
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-23
South Carolina	State	96026	06-30-23
Tennessee	State	TN02907	06-30-23
Texas	NELAP	T104704286	09-30-23
US Fish & Wildlife	US Federal Programs	A22340	06-30-23
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-23

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

Elkmont Rural
Permit Renewal

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	PROJECT NUMBER
Limestone County Water and Sewer		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Sam Thomas	17218 US 72	Athens, AL 35611

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
sthomas@lcwsa.com	256-233-6444	**Permit Renewal**

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

REQUESTED ANALYSES

SET LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	Hardness	CA,MG,SB,AS	BE,CD,CR,CU,PB	NI,SE,AG,TL,ZN	CN	Phenolics	624 Form 2A	625 Form 2C						
DC09205-01	Elkmont Rural Effluent	11-1-22	0945		X	X	X	X	X										
-02	Elkmont Rural Effluent	11-1-22	0945	X						X	X	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 (2011)		SM 4500-O G		SM 2550B		1	60mL Amber Glass NaOH		CN
Start Date	10-31-22	pH su	7.00	TRC mg/l	N/A	DO mg/l	8.71	Temp deg C	18.0	1	1 Liter Amber Glass H2SO4		Phenolics
Start Time	0600	Date	11-1-22	Date		Date	11-1-22	Date	11-1-22	3	40mL Clear Vials None/HCL		624
Stop Date	11-1-22	Time	0945	Time		Time	0945	Time	0945	2	1 Liter Amber Glass		625
Stop Time	0600	Analyst	S. Thomas	Analyst		Analyst	S. Thomas	Analyst	S. Thomas	1	250mL HDPE HN03		Metals

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Sam Thomas	11-1-22	1420						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**IME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE TEMPERATURE RECEIVED @
Taylor Oneal	11/1/22	1420	2.9 iced

SOUTHERN ENVIRONMENTAL TESTING

October 26, 2022

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
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
DC08828-01	Elkmont Rural Effluent	10/19/2022	10/19/2022
DC08828-02	Elkmont Rural Effluent	10/19/2022	10/19/2022

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: 10/26/2022 15:55

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent **Sample ID: DC08828-01** **Collected: 10/19/2022** **Submitted: 10/19/2022**				
Metals by ICP-OES				
Total Silver	<0.00125	mg/l		
Total Arsenic	<0.00500	mg/l		
Total Beryllium	<0.00500	mg/l		
Total Calcium	39.1	mg/l		
Total Cadmium	<0.00500	mg/l		
Total Chromium	<0.00500	mg/l		
Total Copper	<0.00500	mg/l		
Total Hardness	121	mg/l CaCO3		
Total Magnesium	5.56	mg/l		
Total Nickel	0.00848	mg/l		
Total Lead	<0.00500	mg/l		
Total Antimony	<0.00500	mg/l		
Total Selenium	<0.00500	mg/l		
Total Thallium	<0.00500	mg/l		
Total Zinc	0.0152	mg/l		
Sample Point: Elkmont Rural Effluent **Sample ID: DC08828-02** **Collected: 10/19/2022** **Submitted: 10/19/2022**				
Inorganics				
Total Cyanide	<0.00500	mg/l		
Phenolics (4AAP)	<0.0200	mg/l		
Semivolatiles by EPA 625				
N-Nitrosodimethylamine	<2.00	ug/l		
Phenol	<2.00	ug/l		
Bis(2-chloroethyl)ether	<2.00	ug/l		
2-Chlorophenol	<2.00	ug/l		
Bis(2-chloroisopropyl)ether	<2.00	ug/l		
N-Nitrosodi-n-propylamine	<2.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/26/2022 15:55

REPORT TO
Sam Thomas **Limestone County Water & Sewer** **17218 US Hwy 72** **Athens, AL 35611**

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC08828-02**	**Collected: 10/19/2022**	**Submitted: 10/19/2022**	
Semivolatiles by EPA 625 (Continued)				
Hexachloroethane	<2.00	ug/l		
Nitrobenzene	<2.00	ug/l		
Isophorone	<2.00	ug/l		
2-Nitrophenol	<2.00	ug/l		
2,4-Dimethylphenol	<2.00	ug/l		
Bis(2-chloroethoxy)methane	<2.00	ug/l		
2,4-Dichlorophenol	<2.00	ug/l		
1,2,4-Trichlorobenzene	<2.00	ug/l		
Naphthalene	<2.00	ug/l		
Hexachlorobutadiene	<2.00	ug/l		
4-Chloro-3-methylphenol	<2.00	ug/l		
Hexachlorocyclopentadiene	<2.00	ug/l		
2,4,6-Trichlorophenol	<2.00	ug/l		
2-Chloronaphthalene	<2.00	ug/l		
Dimethylphthalate	<2.00	ug/l		
Acenaphthylene	<2.00	ug/l		
2,6-Dinitrotoluene	<2.00	ug/l		
Acenaphthene	<2.00	ug/l		
2,4-Dinitrophenol	<2.00	ug/l		
4-Nitrophenol	<2.00	ug/l		
2,4-Dinitrotoluene	<2.00	ug/l		
Fluorene	<2.00	ug/l		
Diethylphthalate	<2.00	ug/l		
4-Chlorophenyl phenyl ether	<2.00	ug/l		
1,2-Diphenylhydrazine as Azobenzene	<2.00	ug/l		
4,6-Dinitro-2-methylphenol	<2.00	ug/l		
N-Nitrosodiphenylamine	<2.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/26/2022 15:55

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC08828-02**	**Collected: 10/19/2022**	**Submitted: 10/19/2022**	
Semivolatiles by EPA 625 (Continued)				
4-Bromophenyl phenyl ether	<2.00	ug/l		
Hexachlorobenzene	<2.00	ug/l		
Pentachlorophenol	<2.00	ug/l		
Phenanthrene	<2.00	ug/l		
Anthracene	<2.00	ug/l		
Di-n-butylphthalate	<2.00	ug/l		
Fluoranthene	<2.00	ug/l		
Benzidine	<2.00	ug/l		
Pyrene	<2.00	ug/l		
Butylbenzylphthalate	<2.00	ug/l		
Benzo[a]anthracene	<2.00	ug/l		
3,3'-Dichlorobenzidine	<2.00	ug/l		
Chrysene	<2.00	ug/l		
Bis(2-ethylhexyl)phthalate	25.8	ug/l		
Di-n-octylphthalate	<2.00	ug/l		
Benzo[b]fluoranthene	<2.00	ug/l		
Benzo[k]fluoranthene	<2.00	ug/l		
Benzo[a]pyrene	<2.00	ug/l		
Indeno(1,2,3-cd)pyrene	<2.00	ug/l		
Dibenzo[a,h]anthracene	<2.00	ug/l		
Benzo[g,h,i]perylene	<2.00	ug/l		
Volatiles by EPA 624				
Benzene	<1.00	ug/l		
Bromodichloromethane	<1.00	ug/l		
Bromoform	<1.00	ug/l		
Bromomethane	<2.00	ug/l		
Carbon tetrachloride	<2.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/26/2022 15:55

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC08828-02**	**Collected: 10/19/2022**		**Submitted: 10/19/2022**
Volatiles by EPA 624 (Continued)				
Chlorobenzene	<1.00	ug/l		
Chloroethane	<1.00	ug/l		
Chloroform	<1.00	ug/l		
Chloromethane	<1.00	ug/l		
Dibromochloromethane	<1.00	ug/l		
1,2-Dichlorobenzene	<1.00	ug/l		
1,3-Dichlorobenzene	<1.00	ug/l		
1,4-Dichlorobenzene	<1.00	ug/l		
1,1-Dichloroethane	<1.00	ug/l		
1,2-Dichloroethane	<1.00	ug/l		
trans-1,2-Dichloroethylene	<1.00	ug/l		
trans-1,3-Dichloropropylene	<2.00	ug/l		
1,2-Dichloropropane	<1.00	ug/l		
cis-1,3-Dichloropropylene	<1.00	ug/l		
Ethyl benzene	<1.00	ug/l		
Methylene chloride	<2.00	ug/l		
1,1,2,2-Tetrachloroethane	<1.00	ug/l		
1,1,1-Trichloroethane	<1.00	ug/l		
1,1,2-Trichloroethane	<1.00	ug/l		
1,1-Dichloroethylene	<1.00	ug/l		
Dichlorodifluoromethane	<1.00	ug/l		
Methyl Ethyl Ketone	<5.00	ug/l		
o-Xylene	<1.00	ug/l		
m & p-Xylene	<2.00	ug/l		
Tetrachloroethylene	<1.00	ug/l		
Toluene	<1.00	ug/l		
Trichloroethylene	<1.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10/26/2022 15:55

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analyte Name	Result	Units	Qualifer	Regulatory Limit
Sample Point: Elkmont Rural Effluent	**Sample ID: DC08828-02**	**Collected: 10/19/2022**		**Submitted: 10/19/2022**
Volatiles by EPA 624 (Continued)				
Trichlorofluoromethane	<1.00	ug/l		
Vinyl chloride	<1.00	ug/l		
2-Chloroethylvinyl ether	<1.00	ug/l		
Acrylonitrile	<1.00	ug/l		
Acrolein	<1.00	ug/l		
Acetone	5.38	ug/l		
Methyl isobutyl ketone	<5.00	ug/l		
Styrene	<1.00	ug/l		
1,2,4-Trichlorobenzene	<1.00	ug/l		

SAMPLE RESULTS REPORT

Report Date/Time: 10 26 2022 15:55

REPORT TO
Sam Thomas **Limestone County Water & Sewer** **17218 US Hwy 72** **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)
DC08828-01	Total Hardness	[CALC]	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Antimony	EPA 200.7 Rev. 4.4 6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Arsenic	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Beryllium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Cadmium	EPA 200.7 Rev. 4.4 6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Calcium	EPA 200.7 Rev. 4.4 6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Chromium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Copper	EPA 200.7 Rev. 4.4 6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Lead	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Nickel	EPA 200.7 Rev. 4.4 6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Selenium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Silver	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Thallium	EPA 200.7 Rev. 4.4 6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	
DC08828-01	Zinc	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	10/19/2022 11:15	10/21/2022 07:57	

SAMPLE RESULTS REPORT

Report Date/Time: 10/26/2022 15:55

REPORT TO

Sam Thomas
Limestone County Water & Sewer
17218 US Hwy 72
Athens, AL 35611

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date Time	Analysis End Date Time (BOD, CBOD, Coliforms)
DC08828-02	Total Cyanide	ASTM D7511-12	LLW	Decatur	10/19/2022 11:30	10/20/2022 10:44	
DC08828-02	Phenolics (4AAP)	EPA 420.1 Rev. 1978	WCC	Florence	10/19/2022 11:30	10/21/2022 08:05	
DC08828-02	Volatile Organic Analytes	EPA 624.1	AGD	Florence	10/19/2022 11:30	10/24/2022 11:00	
DC08828-02	BN/AE Semivolatiles	EPA 625.1	FLY	Florence	10/19/2022 11:30	10/20/2022 08:45	

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

Elkmont Rural
Permit Renewal

COMPANY/CLIENT NAME	CLIENT P.O. NUMBER	PROJECT NUMBER
Limestone County Water and Sewer		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Sam Thomas	17218 US 72	Athens, AL 35611

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
sthomas@lcwsa.com	256-233-6444	**Permit Renewal**

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

REQUESTED ANALYSES

SET LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	Hardness	CA,MG,SB,AS	BE,CD,CR,CU,PB	NI,SE,AG,TL,ZN	CN	Phenolics	624 Form 2A	625 Form 2C
DC0[illegible]-01	Elkmont Rural Effluent	10-19-22	1130		X	X	X	X	X				
-02	Elkmont Rural Effluent	10-19-22	1130	X						X	X	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 (2011)		SM 4500-O G		SM 2550B					
Start Date	10-18-22	pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A	1	60mL Amber Glass NaOH		CN
Start Time	1115	Date	/	Date	/	Date	/	Date	/	1	1 Liter Amber Glass H2SO4		Phenolics
Stop Date	10-19-22	Time	/	Time	/	Time	/	Time	/	3	40mL Clear Vials None/HCL		624
Stop Time	1115	Analyst		Analyst		Analyst	/	Analyst	/	2	1 Liter Amber Glass		625
										1	250mL HDPE HN03		Metals

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Sam Thomas	10/19/22	1505						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**IME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	
[signature]	10/19/22	1505	SAMPLE TEMPERATURE RECEIVED @ 5.0

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

version 1.9

(Submission #: HPN-2XKC-MX9PZ, version 1)

Details

Submission ID HPN-2XKC-MX9PZ

Form Input

General Instructions

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

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

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

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

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

Applicable Fees:

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

Processing Information

Purpose of Application
Reissuance of Permit Due to Approaching Expiration

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

Action Type
Reissuance

Briefly describe any planned changes at the facility that are included in this reissuance application:
Possible plant expansion to add capacity.

Do you have additional contacts associated with this site?
No

Permit Information

Permit Number
AL0056545

Current Permittee Name
Limestone County Water and Sewer Authority

Permittee

Permittee Name
Limestone County Water and Sewer Authority

Mailing Address

Post Office Box 110

Athens, AL 35612

Is the Operator the same as the Permittee?
Yes

Has the Operator's scope of responsibility changed?
No

Responsible Official

Prefix
Mr.

First Name	Last Name
Daryl	*Williamson*

Title
CEO

Organization Name
Limestone County Water & Sewer Authority

Phone Type	Number	Extension
Business	256-233-6445	100

Email
dwilliamson@lcwsa.com

Mailing Address

17218 Highway 72 West

Athens, AL 35612

Existing Permit Contacts

Affiliation Type	Contact Information	Remove?
Responsible Official,Notification Recipient	Daryl Williamson, Limestone County Water and Sewer Authority	Keep
Permittee	Limestone County Water and Sewer Authority	Keep
Emergency Contact	Ricky Grubbs, Limestone County Water and Sewer Authority	Remove

Affiliation Type	Contact Information	Remove?
DMR Contact	Rob Cook	Remove

Facility/Site Information

Facility/Site Name
Elkmont Rural Village WWTP

Organization/Ownership Type
Water/Sewer/Utility District or Board

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

Facility/Site Physical Location Address

18458 RURAL VILLAGE BACK WAY
Elkmont, AL 35620

Facility/Site County
Limestone

Facility/Site Contact

Prefix
Mr.

First Name	Last Name
Alan	*Lash*

Title
Engineering Executive

Organization Name
Limestone County Water & Sewer Authority

Phone Type	Number	Extension
Mobile	256-527-1836	

Email
alash@lcwsa.com

Note

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

Detailed Directions to the Facility/Site
NONE PROVIDED

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

Facility/Site Front Gate Latitude and Longitude
34.90999999999999,-86.99916700000000

Primary SIC Code
4952-Sewerage Systems

Primary NAICS Code
221320-Sewage Treatment Facilities

Emergency Contact

Prefix
Mr.

First Name	Last Name
Alan	*Lash*

Title
Engineering Executive

Phone Type	Number	Extension
Mobile	256-527-1836	

Email
alash@lcwsa.com

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

Enforcement History

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

Wastewater Treatment & Discharge Information

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

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

What discharge options are used at this facility:
Surface Water

What is the Total Design Flow (in millions of gallons per day, MGD) for this facility?
0.15

What is the facility's total 2-Year Actual Average Flow (in millions of gallons per day, MGD)?
0.073

Process Flow Schematic
ERV PFD 9-27-2022.pdf - 09/30/2022 01:36 PM
Comment
NONE PROVIDED

Do you share an outfall with another facility?
No

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

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

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

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

Planned	Yes/No
Automatic Sampling Equipment	N/A

Schematic Diagram

ERV PFD 9-27-2022 sampler.pdf - 09/30/2022 01:36 PM

Comment

Both influent and effluent samplers are ISCO model 4700's.

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

Please briefly describe these changes and any potential or anticipated effects on the wastewater quality and quantity:

Expansion of the current WWTP to add capacity that will allow permitting the plant at 0.30 MGD versus the current 0.15 MGD.

Treatment Methods (TWTDS)

Treatment Level

Preliminary Treatment (e.g., grit removal, flow equalization, screening)
Primary Treatment (e.g., primary clarification, chemically-enhanced primary treatment)
Secondary Treatment [e.g., suspended growth biological treatment; attached growth and combined biological treatment].

Wastewater Disinfection Technology Information

Ultraviolet Light Disinfection

Please select all POTW Treatment Categories that apply.

Activated Sludge Process & Modifications
Aeration
Clarification
Disinfection
Sedimentation
Equalization

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

Activated Sludge, Extended Aeration
Reactor (Oxidation Ditch)

Please select all unit operations that apply for Aeration:

Aeration (post-treatment)
Aeration (general)

Please select all unit operations that apply for Clarification:

Clarification, Secondary

Please select all unit operations that apply for Disinfection:

Disinfection, Ultraviolet
Disinfection, UV Radiation

Please select all unit operations that apply for Equalization:

Equalization, Flow
Equalization, At POTW

Please select all unit operations that apply for Preliminary Treatment:

Screen, Bar
Screen (Bar Rack and Coarse)

Please select all unit operations that apply for Sedimentation:

Sedimentation

Waste Storage & Disposal Information

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

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

Description of Waste	Description of Storage Location	Disposal Location
Wet Sewage Sludge	Sludge holding tanks / digesters	Off-site

Collection System Information

Collection Systems

Collection System ID	Collection System Name	Owner Type of Collection System	Population of Collection System
NONE PROVIDED	NONE PROVIDED	Publicly owned (Owned by State, municipality, or Tribal government. This includes a district association or other public body created by or pursuant to State law and having jurisdiction over the disposal of sewage).	533

Industrial Indirect Discharge Contributors

Does this wastewater treatment system receive or plan to receive industrial source wastewater contributions?
Yes

How will you be submitting the list of existing and proposed industrial source wastewater contributions to the municipal wastewater treatment system?
I want to add my data directly on this form.

List the existing and proposed industrial source wastewater contributions to the municipal wastewater treatment system:

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit?
Snap-On Logistics Company	Waste from Metal Finishing	Existing	0.0028	Yes
Aviagen	Wash water from manufacturing & cleaning operations	Existing	0.0187	No

Are industrial wastewater contributions regulated via a locally approved sewer use ordinance?
No

Coastal Zone Information

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

Anti-Degradation Evaluation

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

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

EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a POTW or other TWTDS depending on the number and types of discharges or outfalls.

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

EPA Form 2A
EPA FORM 2A signed.pdf - 10/03/2022 09:54 AM
Comment
NONE PROVIDED

EPA form 2S
EPA FORM 2S signed.pdf - 10/03/2022 09:54 AM
Comment
NONE PROVIDED

Other attachments (as needed)
NONE PROVIDED
Comment
NONE PROVIDED

Topographic Map

Attach topographic map here.
Rural Village WWTP Topo.pdf - 09/30/2022 04:08 PM
Comment
NONE PROVIDED

Engineering Report/BMP Plan Requirements

Engineering Report/BMP Plan Requirements
NONE PROVIDED
Comment
NONE PROVIDED

Outfalls (1 of 1)

Outfall: 001

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

Outfall Identifier
001

Is this Outfall equipped with a diffuser?
No

What is this Outfall's 2-Year Average Flow (in millions of gallons per day, MGD)?
0.073

Receiving Water
Sulphur Creek

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

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

Location of Outfall or Discharge Point/Receiving Water
34.90916700000000, -86.99888900000001

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

303(d) Segment?
No

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

TMDL Segment?
No

Fee

Fee
4290

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

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

Application Preparer

Application Preparer

Prefix
Mr.

First Name	Last Name
Alan	*Lash*

Title
Engineering Executive

Organization Name
Limestone County Water & Sewer Authority

Phone Type	Number	Extension
Mobile	256-527-1836	

Email
alash@lcwsa.com

Address

17218 Highway 72 West

Athens, AL 35612

Agreements and Signature(s)

SUBMISSION AGREEMENTS

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

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

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

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

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

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

Signed By Alan Lash on 10/03/2022 at 9:58 AM

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
	AL0056545	Elkmont Rural Village 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: Elkmont Rural Village WWTP			
	Mailing address (street or P.O. box): P.O. Box 110			
	City or town: Athens	State: AL	ZIP code: 35612	Phone number: (256) 497-9700
	Contact name (first and last): Sam Thomas	Title: Operator	Email address: sthomas@lcwsa.com	
	Location address (street, route number, or other specific identifier): 18458 Rural Village Back Way ☐ Same as mailing address			
	City or town: Elkmont	State: AL	ZIP code: 35620	

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

1.3 **Facility Design Flow Rate**: 0.150 million gallons per day (mgd)

1.4 **Total Population Served**: 533

1.5 **Ownership Status**
☐ Public—federal ☐ Public—state ☑ Other public (specify) Sewer Authority
☐ 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: Limestone County Water and Sewer Authority			
	Applicant mailing address (street or P.O. box): P.O. Box 110			
	City or town: Athens		State: AL	ZIP code: 35612
	Contact name (first and last): Alan Lash	Title: Engineering Executive	Phone number: (256) 527-0836	Email address: alash@lcwsa.com

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

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

1.10	Facility's NPDES permit number ☐ Check here if you do not have an NPDES permit but are otherwise required to submit Part 2 of Form 2S.	AL0056545

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	N/A		
	Cadmium			
	Chromium			
	Copper			
	Lead			
	Mercury			
	Molybdenum			
	Nickel			
	Selenium			
	Zinc			

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
Daryl Williamson	CEO
Signature	Date signed
	6-3-22
Telephone number	[redacted]
(256) 233-6445	

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
	AL0056545	Elkmont Rural Village 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: 3.0

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) Aerobic Digestion

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)
- ☐ 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

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.

Wet Sludge is discharched into Piney Chapel lift station. Piney Chapel lift station flows to Athens WWTP for final treatment.

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.	1

2.19 Name of receiving facility: Athens WWTP

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

City or town	State	ZIP code
Athens	AL	35612

Contact name (first and last)	Title	Phone number	Email address
Virgil White	WWTP Superintendent	(256) 233-8774	

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

City or town	State	ZIP code
Athens	AL	35611

2.20	Total dry metric tons per 365-day period of sewage sludge provided to receiving facility:	3.0
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) aerobic digestion

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

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.

Elkmont Rural Village WWTP Sludge Storage Practices