



Alabama Department of Environmental Management
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APR 20 2020

Billy Joe Driver, Mayor
City of Clanton
Post Office Box 580
Clanton, AL 35046

RE: Draft Permit
NPDES Permit No. AL0054631
Walnut Creek WWTP
Chilton County, Alabama

Dear Mayor Driver:

Transmitted herein is a draft of the referenced permit.

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

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

Please be aware that Part I.C.1.c of your permit requires that you apply for participation in the Department's web-based Electronic Environmental (E2) Reporting System Program for submittal of DMRs upon issuance of this permit unless valid justification as to why you cannot participate is submitted in writing. Please also be aware that Part I.C.2.e of your permit requires that you apply for participation in the Department's web-based electronic environmental (E2) reporting system for submittal of SSOs within 30 days of coverage under this permit unless valid justification as to why you cannot participate is submitted in writing. After issuance of the permit, SSO hotline notifications and hard copy Form 415 SSO reports may be used only with the written approval from the Department. The E2 Program allows ADEM to electronically validate, acknowledge receipt, and upload data to the state's central wastewater database. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. The Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes> or you may obtain a hard copy by submitting a written request or by emailing e2admin@adem.alabama.gov.

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

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

Should you have any questions, please contact the undersigned by email at slee@adem.alabama.gov or by phone at (334) 274-4223.

Sincerely,

Sandra Lee
Municipal Section
Water Division

/mfc
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



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: CITY OF CLANTON
POST OFFICE BOX 580
CLANTON, ALABAMA 35046

FACILITY LOCATION: WALNUT CREEK WWTP (2.25) MGD
1574 CHILTON COUNTY ROAD 51
CLANTON, ALABAMA
CHILTON COUNTY

PERMIT NUMBER: AL0054631

RECEIVING WATERS: WALNUT 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

MUNICIPAL SECTION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT

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PART I**DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS****A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS****1. Outfall 0011 Discharge Limits - Municipal and Industrial wastewater**

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
Oxygen, Dissolved (DO) 00300 I 0 0	*****	*****	*****	*****	6.0 mg/l	*****	*****	E	GRAB	C	*****
pH 00400 I 0 0	*****	*****	*****	*****	6.0 S.U.	8.5 S.U.	*****	E	GRAB	C	*****
Solids, Total Suspended 00530 I 0 0	562 lbs/day	844 lbs/day	30.0 mg/l	45.0 mg/l	*****	*****	*****	E	COMP24	C	*****
Solids, Total Suspended 00530 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP24	C	*****
Nitrogen, Ammonia Total (As N) 00610 I 0 0	37.5 lbs/day	56.2 lbs/day	2.0 mg/l	3.0 mg/l	*****	*****	*****	E	COMP24	C	*****
Nitrogen, Kjeldahl Total (As N) 00625 I 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Nitrite Plus Nitrate Total I Det. (As N) 00630 I 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Phosphorus, Total (As P) 00665 I 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Nickel Total Recoverable 01074 I 0 0	*****	*****	0.063 mg/l	*****	*****	0.537 mg/l	*****	E	GRAB	G	*****
Zinc Total Recoverable 01094 I 0 0	*****	*****	0.220 mg/l	*****	*****	0.220 mg/l	*****	E	GRAB	G	*****

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

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

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

RS - Receiving Stream

US – Upstream

DS – Downstream

MW – Monitoring Well

SW – Storm Water

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

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

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May – October)

ECW = E. coli Winter (November – April)

2. Outfall 0011 Discharge Limits - Municipal and Industrial wastewater (continued)

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0011, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
Copper Total Recoverable 01119 I 0 0	*****	*****	0.014 mg/l	*****	*****	0.018 mg/l	*****	E	GRAB	G	*****
Flow, In Conduit or Thru Treatment Plant 50050 I 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	CONTIN	A	*****
Chlorine, Total Residual See note (5) (6) 50060 I 0 0	*****	*****	0.015 mg/l	*****	*****	0.025 mg/l	*****	E	GRAB	C	*****
E. Coli 51040 I 0 0	*****	*****	126 col/100mL	*****	*****	298 col/100mL	*****	E	GRAB	C	ECS
E. Coli 51040 I 0 0	*****	*****	548 col/100mL	*****	*****	2507 col/100mL	*****	E	GRAB	C	ECW
BOD, Carbonaceous 05 Day, 20C 80082 I 0 0	187 lbs/day	281 lbs/day	10.0 mg/l	15.0 mg/l	*****	*****	*****	E	COMP24	C	*****
BOD, Carbonaceous 05 Day, 20C 80082 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP24	C	*****
BOD, Carb-5 Day, 20 Deg C, Percent Remvl 80091 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****
Solids, Suspended Percent Removal 81011 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****

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

** Monitoring Requirements

(1) Sample Location

I – Influent
E – Effluent
X – End Chlorine Contact Chamber
K – Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.
RS – Receiving Stream
US – Upstream
DS – Downstream
MW – Monitoring Well
SW – Storm Water

(2) Sample Type:

CONTIN - Continuous
INSTAN - Instantaneous
COMP-8 - 8-Hour Composite
COMP24 - 24-Hour Composite
GRAB – Grab
CALCTD - Calculated

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

A - 7 days per week
B - 5 days per week
C - 3 days per week
D - 2 days per week
E - 1 day per week
F - 2 days per month
G - 1 day per month
H - 1 day per quarter
J - Annual
Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:

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

(5) See 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” or “NODI=9” (if hard copy) on the monthly DMR.

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

3. Outfall 001T Discharge Limits - Toxicity testing

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 001T, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
Toxicity, Ceriodaphnia Chronic 61426 1 0 0	*****	Pass = 0 Fail = 1	*****	*****	*****	*****	*****	E	COMP24	Q	*****
Toxicity, Pimephales Chronic 61428 1 0 0	*****	Pass = 0 Fail = 1	*****	*****	*****	*****	*****	E	COMP24	Q	*****

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

** Monitoring Requirements

(1) Sample Location

I – Influent
E – Effluent
X – End Chlorine Contact Chamber
K – Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.
RS – Receiving Stream
US – Upstream
DS – Downstream
MW – Monitoring Well
SW – Storm Water

(2) Sample Type:

CONTIN - Continuous
INSTAN - Instantaneous
COMP-8 - 8-Hour Composite
COMP24 - 24-Hour Composite
GRAB – Grab
CALCTD - Calculated

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

A - 7 days per week F - 2 days per month
B - 5 days per week G - 1 day per month
C - 3 days per week H - 1 day per quarter
D - 2 days per week J - Annual
E - 1 day per week Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:

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

4. Outfall 002S Discharge Limits - Stormwater runoff

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee shall monitor from Outfall 002S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
pH 00400 SW 0 0	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	SW	GRAB	J	*****
Solids, Total Suspended 00530 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Oil & Grease 00556 SW 0 0	*****	*****	*****	*****	*****	15 mg/l	*****	SW	GRAB	J	*****
Nitrogen, Ammonia Total (As N) 00610 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Nitrogen, Kjeldahl Total (As N) 00625 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Nitrite Plus Nitrate Total 1 Det. (As N) 00630 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Phosphorus, Total (As P) 00665 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Flow, In Conduit or Thru Treatment Plant 50050 SW 0 0	*****	*****	*****	*****	*****	REPORT MGD	*****	SW	CALCTD	J	*****
E. Coli 51040 SW 0 0	*****	*****	*****	*****	*****	REPORT col/100mL	*****	SW	GRAB	J	*****
BOD, Carbonaceous 05 Day, 20C 80082 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****

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

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

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

RS - Receiving Stream

US – Upstream

DS – Downstream

MW – Monitoring Well

SW – Storm Water

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

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

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (May – October)

ECW = E. coli Winter (November – April)

5. Outfall 003S Discharge Limits - Stormwater runoff

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee shall monitor from Outfall 003S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
pH 00400 SW 0 0	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	SW	GRAB	J	*****
Solids, Total Suspended 00530 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Oil & Grease 00556 SW 0 0	*****	*****	*****	*****	*****	15 mg/l	*****	SW	GRAB	J	*****
Nitrogen, Ammonia Total (As N) 00610 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Nitrogen, Kjeldahl Total (As N) 00625 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Nitrite Plus Nitrate Total l Det. (As N) 00630 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Phosphorus, Total (As P) 00665 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****
Flow, In Conduit or Thru Treatment Plant 50050 SW 0 0	*****	*****	*****	*****	*****	REPORT MGD	*****	SW	CALCTD	J	*****
E. Coli 51040 SW 0 0	*****	*****	*****	*****	*****	REPORT col/100mL	*****	SW	GRAB	J	*****
BOD, Carbonaceous 05 Day, 20C 80082 SW 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	SW	GRAB	J	*****

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

** Monitoring Requirements

(1) Sample Location

I – Influent
E – Effluent
X – End Chlorine Contact Chamber
K – Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.
RS – Receiving Stream
US – Upstream
DS – Downstream
MW – Monitoring Well
SW – Storm Water

(2) Sample Type:

CONTIN - Continuous
INSTAN - Instantaneous
COMP-8 - 8-Hour Composite
COMP24 - 24-Hour Composite
GRAB – Grab
CALCTD - Calculated

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

A - 7 days per week F - 2 days per month
B - 5 days per week G - 1 day per month
C - 3 days per week H - 1 day per quarter
D - 2 days per week J - Annual
E - 1 day per week Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:

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

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

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

2. Measurement Frequency

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

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

3. Test Procedures

For the purpose of reporting and compliance, Permittees shall use one of the following procedures:

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this permit the Permittee shall use the newly approved method.
- b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the Permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.
- c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures a and b above shall be reported on the Permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:

- a. The facility name and location, point source number, date, time and exact place of sampling;

- b. The name(s) of person(s) who obtained the samples or measurements;
 - c. The dates and times the analyses were performed;
 - d. The name(s) of the person(s) who performed the analyses;
 - e. The analytical techniques or methods used, including source of method and method number; and
 - f. The results of all required analyses.
5. Records Retention and Production
- a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.
 - b. All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.
6. Reduction, Suspension or Termination of Monitoring and/or Reporting
- a. The Director may, with respect to any point source identified in Provision I.A. of this permit, authorize the Permittee to reduce, suspend or terminate the monitoring and/or reporting required by this permit upon the submission of a written request for such reduction, suspension or termination by the Permittee, supported by sufficient data which demonstrates to the satisfaction of the Director that the discharge from such point source will continuously meet the discharge limitations specified in Provision I.A. of this permit.
 - b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this permit until written authorization to reduce, suspend or terminate such monitoring and/or reporting is received by the Permittee from the Director.
7. Monitoring Equipment and Instrumentation
- All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements
- a. The Permittee shall conduct the required monitoring in accordance with the following schedule:
 - (1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.
 - (2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).
 - (3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).
 - (4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter.

Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.

- b. The Permittee shall submit discharge monitoring reports (DMRs) on the forms approved by the Department and in accordance with the following schedule:
 - (1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
 - (2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the 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.
 - (3) **REPORTS OF SEMIANNUAL TESTING** shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
 - (4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, the first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
- c. Except as allowed by Provision I.C.1.c.(1) or (2), the permittee shall submit all Discharge Monitoring Reports (DMRs) required by Provision I.C.1.b. by utilizing the Department's web-based Electronic Environmental (E2) Reporting System.
 - (1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's E2 Reporting System (this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the date specified in Provision I.C.1.b., unless otherwise directed by the Department.

If the E2 Reporting System is down on the 28th day of the month in which the DMR is due or is down for an extended period of time, as determined by the Department, when a DMR is required to be submitted, the permittee may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 Reporting System resuming operation, the permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date), if applicable.
 - (2) The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.

A permittee with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The permittee shall submit the Department-approved DMR forms to the address listed in Provision I.C.1.e.
 - (3) If a permittee is allowed to submit a hard copy DMR, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit.
 - (4) If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A. of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR and the increased frequency shall be indicated on the DMR.
 - (5) In the event no discharge from a point source identified in Provision I.A. of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR.
- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and Regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible

official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

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

- e. Discharge Monitoring Reports required by this permit, the AWPCA, and the Department's Rules that are being submitted in hard copy shall be addressed to:

**Alabama Department of Environmental Management
Environmental Data Section, Permits & Services Division
Post Office Box 301463
Montgomery, Alabama 36130-1463**

Certified and Registered Mail containing Discharge Monitoring Reports shall be addressed to:

**Alabama Department of Environmental Management
Environmental Data Section, Permits & Services Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2400**

- f. All other correspondence and reports required to be submitted by this permit, the AWPCA, and the Department's Rules shall be addressed to:

**Alabama Department of Environmental Management
Municipal Section, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463**

Certified and Registered Mail shall be addressed to:

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

- g. If this permit is a reissuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b. above.

2. Noncompliance Notifications and Reports

- a. The Permittee shall notify the Department if, for any reason, the Permittee's discharge:

- (1) Does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I.A. of this permit which is denoted by an "(X)";
- (2) Potentially threatens human health or welfare;
- (3) Threatens fish or aquatic life;
- (4) Causes an in-stream water quality criterion to be exceeded;
- (5) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
- (6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
- (7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A. as a result of an unanticipated bypass or upset; or
- (8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state. (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision.)

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

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

d. Immediate notification

The Permittee shall provide notification to the Director, the public, the county health department, and any other affected entity such as public water systems, as soon as possible upon becoming aware of any notifiable sanitary sewer overflow. Notification to the Director shall be completed utilizing the Department's web-based electronic environmental SSO reporting system in accordance with Provision I.C.2.e.

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

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

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

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

2. Termination of Discharge

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

3. Updating Information

- a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the Permittee shall furnish the Director with an update of any information provided in the permit application.
- b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

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

E. SCHEDULE OF COMPLIANCE

1. Compliance with discharge limits

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

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. Schedule

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

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

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

2. Best Management Practices (BMP)

- a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.
- b. The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.
- c. The Permittee shall prepare, submit for approval and implement a BMP Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Certified Operator

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

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

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

2. Right of Entry and Inspection

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

- (1) Enter upon the Permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;
- (3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
- (4) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:
 - (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;
 - (2) It enters the same receiving stream as the permitted outfall; and
 - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.
- c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:
 - (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

- (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
 - (3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the Permittee is granted such authorization, and the Permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.
 - d. The Permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.
2. Upset
- a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:
 - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and
 - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that:
 - (i) An upset occurred;
 - (ii) The Permittee can identify the specific cause(s) of the upset;
 - (iii) The Permittee's facility was being properly operated at the time of the upset; and
 - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.
 - b. The Permittee has the burden of establishing that each of the conditions of Provision II C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

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

- 1. Duty to Comply
 - a. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
 - b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a Permittee in an enforcement action.
 - c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
 - d. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.
 - e. Nothing in this permit shall be construed to preclude or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications, or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.
- 2. Removed Substances

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

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the

primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the Permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. Compliance With Statutes and Rules

- a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059.
- b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

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

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

- a. If the Permittee intends to continue to discharge beyond the expiration date of this permit, the Permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the Permittee does not intend to continue discharge beyond the expiration of this permit, the Permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.
- b. Failure of the Permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

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

3. Transfer of Permit

This permit may not be transferred or the name of the Permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new Permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the Permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership or control of the Permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. Permit Modification and Revocation

- a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;
 - (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or
 - (3) If modification or revocation and reissuance is requested by the Permittee and cause exists, the Director may grant the request.
- b. This permit may be modified during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

- (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
- (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;
- (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;
- (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;
- (8) To agree with a granted variance under 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
- (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
- (10) When required by the reopener conditions in this permit;
- (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
- (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
- (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or
- (14) When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

5. Termination

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

- a. Violation of any term or condition of this permit;
- b. The Permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the Permittee's misrepresentation of any relevant facts at any time;
- c. Materially false or inaccurate statements or information in the permit application or the permit;
- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- e. The Permittee's discharge threatens human life or welfare or the maintenance of water quality standards;
- f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;
- g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the Permittee; or
- h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. Suspension

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

7. Stay

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

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

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

G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

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

H. PROHIBITIONS

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

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

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

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

2. False Statements

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

3. Permit Enforcement

- a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA, and as such, any terms, conditions, or limitations of the permit are enforceable under state and federal law.
- b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes:
 - (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;
 - (2) An action for damages;
 - (3) An action for injunctive relief; or
 - (4) An action for penalties.
- c. If the Permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the Permittee has made a timely and complete application for reissuance of the permit:
 - (1) Initiate enforcement action based upon the permit which has been continued;
 - (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
 - (3) Reissue the new permit with appropriate conditions; or
 - (4) Take other actions authorized by these rules and AWPCA.

4. Relief from Liability

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

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

C. PROPERTY AND OTHER RIGHTS

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

D. AVAILABILITY OF REPORTS

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

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

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

F. COMPLIANCE WITH WATER QUALITY STANDARDS

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

G. GROUNDWATER

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

H. DEFINITIONS

1. Average monthly discharge limitation – means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. Average weekly discharge limitation - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

3. Arithmetic Mean – means the summation of the individual values of any set of values divided by the number of individual values.
4. AWPCA – means the Alabama Water Pollution Control Act.
5. BOD – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. Bypass – means the intentional diversion of waste streams from any portion of a treatment facility.
7. CBOD – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. Daily discharge – means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. Daily maximum – means the highest value of any individual sample result obtained during a day.
10. Daily minimum – means the lowest value of any individual sample result obtained during a day.
11. Day – means any consecutive 24-hour period.
12. Department – means the Alabama Department of Environmental Management.
13. Director – means the Director of the Department.
14. Discharge – means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).
15. Discharge Monitoring Report (DMR) – means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. DO – means dissolved oxygen.
17. 8HC – means 8-hour composite sample, including any of the following:
 - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 1 hour over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
 - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. EPA – means the United States Environmental Protection Agency.
19. FC – means the pollutant parameter fecal coliform.
20. Flow – means the total volume of discharge in a 24-hour period.
21. FWPCA – means the Federal Water Pollution Control Act.
22. Geometric Mean – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
23. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
25. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. MGD – means million gallons per day.
27. Monthly Average – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.
28. New Discharger – means a person, owning or operating any building, structure, facility or installation:
 - a. From which there is or may be a discharge of pollutants;
 - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and

- c. Which has never received a final effective NPDES permit for dischargers at that site.
29. NH₃-N – means the pollutant parameter ammonia, measured as nitrogen.
30. Notifiable sanitary sewer overflow – means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
- Reaches a surface water of the State; or
 - May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
31. Permit application – means forms and additional information that is required by ADEM Administrative Code Rule 335-6-08 and applicable permit fees.
32. Point source – means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
33. Pollutant – includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
34. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
35. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
36. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".
37. Severe property damage – means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
38. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
40. TON – means the pollutant parameter Total Organic Nitrogen.
41. TRC – means Total Residual Chlorine.
42. TSS – means the pollutant parameter Total Suspended Solids.
43. 24HC – means 24-hour composite sample, including any of the following:
- 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;
 - A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
 - A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
44. Upset – means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
45. Waters – means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground, or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
46. Week – means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

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

I. SEVERABILITY

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

PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. SLUDGE MANAGEMENT PRACTICES

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

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR CHRONIC TOXICITY

1. Chronic Toxicity Test
 - a. The permittee shall perform short-term chronic toxicity tests on the wastewater at Outfall 0011.
 - b. The samples shall be diluted using appropriate control water to the Instream Waste Concentration (IWC) which is **75 percent** effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 7-day, 10-year low flow period.
 - c. Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and test samples at the 95% confidence level indicates chronic toxicity and shall constitute noncompliance with this permit.
2. General Test Requirements
 - a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.
 - b. Test results shall be deemed unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period for the following:
 - (1) For testing with *P. promelas*, effluent toxicity tests with control survival of less than 80% or if dry weight per surviving control organism is less than 0.25 mg;

- (2) For testing with *C. dubia*;, if the number of young per surviving control organism is less than 15 or if less than 60% of surviving control females produce three broods; or
 - (3) If the other requirements of the EPA Test Procedure are not met.
 - c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are to be reported to the Department along with an explanation of the tests performed and the test results.
 - d. Toxicity tests shall be conducted for the duration of this permit in the month of **November**. Should results from the Annual Toxicity test indicate that Outfall 001-1 exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of FEBRUARY, MAY, AUGUST, and NOVEMBER.
3. Reporting Requirements
 - a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
 - b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in Sections 2 and 6 shall be included with the DMR. Two copies of 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)
 - (a) Name of firm
 - (b) Telephone number
 - (c) Address
 - (6) Objective of test
 - b. Plant Operations
 - (1) Discharge Operating schedule (if other than continuous)
 - (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection dates (MGD, CFS, GPM)
 - (3) Design flow of treatment facility at time of sampling

c. Source of Effluent and Dilution Water

(1) Effluent samples

- (a) Sampling point
- (b) Sample collection dates and times (to include composite sample start and finish times)
- (c) Sample collection method
- (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
- (e) Lapsed time from sample collection to delivery
- (f) Lapsed time from sample collection to test initiation
- (g) Sample temperature when received at the laboratory

(2) Dilution Water

- (a) Source
- (b) Collection/preparation date(s) and time(s)
- (c) Pretreatment (if applicable)
- (d) Physical and chemical characteristics (water temperature, pH, alkalinity, hardness, specific conductance, etc.)

d. Test Conditions

- (1) Toxicity test method utilized
- (2) End point(s) of test
- (3) Deviations from referenced method, if any, and reason(s)
- (4) Date and time test started
- (5) Date and time test terminated
- (6) Type and volume of test chambers
- (7) Volume of solution per chamber
- (8) Number of organisms per test chamber
- (9) Number of replicate test chambers per treatment
- (10) Test temperature, pH, and dissolved oxygen as recommended by the method (to include ranges)
- (11) Specify if aeration was needed
- (12) Feeding frequency, amount, and type of food
- (13) Specify if (and how) pH control measures were implemented
- (14) Light intensity (mean)

e. Test Organisms

- (1) Scientific name
- (2) Life stage and age
- (3) Source
- (4) Disease(s) treatment (if applicable)

f. Quality Assurance

- (1) Reference toxicant utilized and source
- (2) Date and time of most recent chronic reference toxicant test(s), raw data, and current control chart(s). (The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.)
- (3) Dilution water utilized in reference toxicant test
- (4) Results of reference toxicant test(s) (NOEC, IC25, 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

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

D. PLANT CLASSIFICATION

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

E. POLLUTANT SCANS

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

F. STORM WATER REQUIREMENTS

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

2. Operational and Management Practices

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

- a. In the SWPP Plan, the Permittee shall:
 - (1) Assess the treatment plant site by developing and presenting site drainage maps, materials inventory, and best management operational practices. The plan shall also include a description of all spill or leak sources;
 - (2) Describe mechanisms and procedures to prevent the contact of sewage sludge, screenings, raw or partially treated wastewater, or any other waste product or pollutant with storm water discharged from the facility;
 - (3) Provide for daily inspection on workdays of any structures that function to prevent storm water pollution or that remove pollutants from storm water;
 - (4) Provide for daily inspection of the facility in general to ensure that the SWPP Plan is continually implemented and effective;
 - (5) Include a Best Management Practices (BMP) Plan that, as a minimum, addresses housekeeping, preventative maintenance, spill prevention and response, and non-storm water discharges;
 - (6) Describe mechanisms and procedures to provide sediment control sufficient to prevent or control storm water pollution storm water by particles resulting from soil or sediment migration from the site due to significant clearing, grading, or excavation activities;

- (7) Designate by position or name the person or persons responsible for the day to day implementation of the SWPP Plan; and
- (8) Bear the signature of an individual meeting signatory requirements as defined in ADEM Administrative Code, Rule 335-6-6-.09.
- b. The Director or his designee may notify the permittee at any time that the SWPP Plan is deficient and will require correction of the deficiency. The permittee shall correct any SWPP Plan deficiency identified by the Director or his designee within 30 days of receipt of notification and shall certify to the Department that the correction has been made and implemented.
- c. Administrative Procedures
 - (1) A copy of the SWPP Plan shall be maintained at the facility and shall be available for inspection by the Department.
 - (2) A log of daily inspections required by Provision IV.F.2.a.(3.) of the permit shall be maintained at the facility and shall be made available for inspection by the Department upon request. The log shall contain records of all inspections performed and each daily entry shall be signed by the person performing the inspection.
 - (3) The Permittee shall provide training for any personnel required to implement the SWPP Plan and shall retain documentation of such training at the facility. Training records for all personnel shall be available for inspection by the Department. Training shall be performed prior to the date implementation is required.
- 3. Monitoring Requirements
 - a. Storm water discharged through each storm water outfall shall be sampled once per calendar year, using first flush grab samples (FFGS) collected during the first 30 minutes of discharge.
 - b. The total volume of storm water discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for the storm event(s) sampled. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event must be a minimum of 72 hours. This information must be recorded as part of the sampling procedure and records retained in accordance with Provision I.B.5. of this permit. The volume may be measured using flow measurement devices or may be estimated using any method approved in writing by the Department.

G. SANITARY SEWER OVERFLOW RESPONSE PLAN

1. SSO Response Plan

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

- a. General Information:
 - (1) Approximate population of City/Town, if applicable
 - (2) Approximate number of customers served by the Permittee
 - (3) Identification of any subbasins designated by the Permittee, if applicable
 - (4) Identification of estimated linear feet of sanitary sewers
 - (5) Number of Pump/Lift Stations in the collection system
- b. Responsibility Information:
 - (1) The title(s) and contact information of key position(s) who will coordinate the SSO response, including information for a backup coordinator in the event that the primary SSO coordinator is unavailable. The SSO coordinator is the person responsible for assessing the SSO and initiating a series of response actions based on the type, severity, and destination of the SSO, except for routine SSOs for which the coordinator may pre-approve written procedures. Routine SSOs are those for which the corrective action procedures are generally consistent.
 - (2) The title(s), and contact information of key position(s) who will respond to SSOs, including information for backup responder(s) in the event the primary responder(s) are unavailable (i.e., position(s) who provide notification to the Department, the public, the county health department, and other affected entities such as

public water systems; position(s) responsible for organizing crews for response; position(s) responsible for addressing public inquiries)

c. SSO and Surface Water Assessment

- (1) Identification of locations within the collection system at which an SSO is likely to occur (e.g., based upon historical SSOs, lift stations where electricity may be lost, etc.)
- (2) A map of the general collection system area, including identification of surface waterbodies and the location(s) of public drinking water source(s). Mapping of all collection system piping, pump stations, etc. is not required; however, if this information is already available, it should be included.
- (3) Identification of surface waterbodies within the collection system area which are classified as Swimming according to ADEM Admin. Code chap. 335-6-11. References available to assist in this requirement include: <http://www.adem.state.al.us/alEnviroRegLaws/files/Division6Vol1.pdf> and http://gis.adem.alabama.gov/ADEM_Dash/use_class/index.html
- (4) Identification of surface waterbodies within the collection system area which are not classified as Swimming as indicated in paragraph c above, but are known locally as areas where swimming occurs or as areas that are heavily recreated

d. Public Reporting of SSOs

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

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

f. Public Notification Methods for SSOs

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

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

- (1) General SSO Response Procedures (e.g., procedures for dispatching staff to assess/correct an SSO; procedures for routine SSO corrective actions such as those for sewer blockages, overflowing manholes, line breakages, pump station power failure, etc.; procedures for disinfection of affected area, if applicable);
- (2) Procedures for collection and proper disposal of the SSO, if feasible.
- (3) General procedures for coordinating instream water quality monitoring, including, but not limited to, procedures for mobilizing staff, collecting samples, and typical test methods should the Department or the Permittee

determine monitoring is appropriate following an SSO. Identification of a contractor who will collect and analyze the sample(s) may be listed in lieu of the procedures.

- (4) References to other documents (such as Standard Operating Procedures for SSO Responses) may be acceptable for this section; however, the referenced document shall be identified and shall be reviewed at a frequency of at least that required by the Administrative Procedures Section.

- h. Date of the SSO Response Plan, dates of all modifications and/or reviews, the title and signature of the reviewer(s) for each date and the signature of the responsible official or the appropriate designee.

2. SSO Response Plan Implementation

Except as otherwise required by this Permit, the Permittee shall fully implement the SSO Response Plan as soon as practicable, but no later than 180 days after the effective date of this Permit.

3. Department Review of the SSO Response Plan

- a. When requested by the Director or his designee, the Permittee shall make the SSO Response Plan available for review by the Department.
- b. Upon review, the Director or his designee may notify the Permittee that the SSO Response Plan is deficient and require modification of the Plan.
- c. Within thirty days of receipt of notification, or an alternate timeframe as approved by the Department, the Permittee shall modify any SSO Response Plan deficiency identified by the Director or his designee and shall certify to the Department that the modification has been made.

4. SSO Response Plan Administrative Procedures

- a. The Permittee shall maintain a copy of the SSO Response Plan at the permitted facility or an alternate location approved by the Department in writing and shall make it available for inspection by the Department.
- b. The Permittee shall make a copy of the SSO Response Plan available to the public upon written request within 30 days of such request. The Permittee may redact information which may present security issues, such as location of public water supplies, identification of specific details of vulnerabilities, employee information, etc.
- c. The Permittee shall provide training for any personnel required to implement the SSO Response Plan and shall retain at the facility documentation of such training. This documentation shall be available for inspection by the Department. Training shall be provided for existing personnel prior to the date by which implementation of the SSO Response Plan is required and for new personnel as soon as possible. Should significant revisions be made to the SSO Response Plan, training regarding the revisions shall be conducted as soon as possible.
- d. The Permittee shall complete a review and evaluation of the SSO Response Plan at least once every three years. Documentation of the SSO Response Plan review and evaluation shall be signed and dated by the responsible official or the appropriate designee as part of the SSO Response Plan.



Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
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(334) 271-7700 ■ FAX (334) 271-7950

FACT SHEET

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

Date: September 3, 2019

Prepared By: Sandra Lee

NPDES Permit No. AL0054631

1. Name and Address of Applicant:

City of Clanton
Post Office Box 580
Clanton, AL 35046

2. Name and Address of Facility:

Walnut Creek WWTP
1574 Chilton County Road 51
Clanton, Alabama 35046

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

Waste Water Treatment Plant

4. Applicant's Receiving Waters

Receiving Waters
Walnut Creek

Classifications
F&W

For the Outfall latitude and longitude see the permit application.

5. Permit Conditions:

See attached Rationale and Draft Permit.

6. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

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

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

Russell A. Kelly, Chief
Permits and Services Division

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

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



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

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

Alabama Department of Environmental Management
1400 Coliseum Blvd

(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059
(334) 271-7714

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

b. Public Hearing

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

Russell A. Kelly, Chief
Permits and Services Division
Alabama Department of Environmental Management
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059
(334) 271-7714

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

c. Issuance of the Permit

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

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

d. Appeal Procedures

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

Alabama Environmental Management Commission
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059

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

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0054631** Date: September 23, 2019

Permit Applicant: City of Clanton
Post Office Box 580
Clanton, Alabama 35046

Location: Walnut Creek WWTP
1574 Chilton County Road 51
Clanton, Alabama 35046

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

Basis for Limitations: Water Quality Model: NH₃-N, DO, CBOD₅
Reissuance with no modification: pH, NH₃-N, DO, CBOD₅, TRC, TSS, TSS
Percent Removal, CBOD₅ Percent Removal,
Total Recoverable Copper, Total Recoverable
Nickel, Total Recoverable Zinc
Instream calculation at 7Q10: 75%
Toxicity based: TRC
Secondary Treatment Levels: TSS, TSS Percent Removal, CBOD₅ Percent
Removal
Other (described below): pH, E. Coli, Total Recoverable Copper, Total
Recoverable Nickel, Total Recoverable Zinc

Design Flow in Million Gallons per Day: 2.25 MGD

Major: Yes

Description of Discharge: Outfall Number 001;
Effluent discharge to Walnut Creek,
which is classified as Fish and Wildlife.

Outfall Number 002;
Stormwater runoff to Walnut Creek,
which is classified as Fish and Wildlife.

Outfall Number 003;
Stormwater runoff to Walnut Creek,
which is classified as Fish and Wildlife.

Discussion: This permit is a reissuance due to expiration.

The pH limits for Outfall 0011 were developed consistent with the Water-Use designation of the receiving stream and the Municipal Section's Permit Development Rationale. The daily maximum pH

limit is 8.5 s.u. and the daily minimum is 6.0 s.u. The monitoring frequency is three times per week. Flow will be monitored continuously, seven days per week.

The discharge limits for 5 Day Carbonaceous Biochemical Oxygen Demand (CBOD₅), Dissolved Oxygen (DO), and Total Ammonia as Nitrogen (NH₃N), for Outfall 0011 were developed by the Municipal Permitting Section based on a Waste Load Allocation (WLA) model performed by the Department's Water Quality Branch on October 9, 2013. The monthly average limits for CBOD₅ and NH₃N, are 10.0 mg/l and 2.0 mg/l, respectively. The daily minimum for DO is 6.0 mg/l. The monitoring frequency will be three times per week. A minimum percent removal of 85 percent is imposed for CBOD₅ based on 40 CFR 133.102. The percent removal will be calculated once per month.

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

The Department revised bacteriological criteria in ADEM Administrative Code R.335-6-10-.09. As a result, this permit includes E. coli limits and seasons that are consistent with the revised regulations. The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since Walnut Creek is classified as Fish & Wildlife, the limits for May – October are 126 col/100ml (monthly average) and 298 col/100ml (daily maximum), while the limits for November – April are 548 col/100ml (monthly average) and 2507 col/100ml (daily maximum). The monitoring frequency will be three times per week.

This permit imposes monthly monitoring for the following nutrient-related parameters: Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN) and Nitrate plus Nitrite-Nitrogen (NO₂+NO₃-N). 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.

The Total Residual Chlorine (TRC) limits are based on calculations to ensure that acute and chronic toxic concentrations of TRC in the receiving stream are not exceeded. Daily maximum and monthly average TRC limitations of 0.025 mg/L and 0.015 mg/L, respectively, are being imposed at Outfall 0011. The monitoring frequency will be three times per week. Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter “*9” or “NODI=9”(if hard copy) on the monthly DMR. A measurement of TRC below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as NODI=B or *B on the monthly DMRs.

Because this facility is a major municipal discharger treating municipal and industrial wastewater, chronic toxicity testing with two species (Ceriodaphnia and Pimephales) is being imposed on this permit. Toxicity testing is imposed for both survival and life-cycle impairment (i.e., growth and reproduction). Chronic toxicity at the IWC of 75 percent is required once per year during the month of November. Should the results show chronic toxicity, the permittee would have to conduct follow-up testing as described in Part IV.B of the permit.

ADEM completed a Reasonable Potential Analysis (RPA) of the data submitted in Part D of the Permittee's application (Per 40 CFR Part 122 Appendix J – Table 2), the facility's DMR data, and background data of the stream. The RPA indicates that the discharge may have a reasonable potential to contribute to copper, nickel, and zinc excursions of Alabama's in-stream water quality standards. Total Recoverable Copper monitoring will be included in the permit with a daily maximum limitation of 0.018 mg/l and a monthly average limitation of 0.014 mg/l. The monitoring frequency will be once per month.

Total Recoverable Nickel will be included in the permit with a daily maximum limitation of 0.537 mg/l and a monthly average limitation of 0.063 mg/l. The monitoring frequency will be monthly. Total Recoverable Zinc will be in the permit with a monthly average and daily maximum limitation of 0.220 mg/l. The monitoring frequency will be monthly.

The receiving stream is Walnut Creek, a Tier I waterbody. Walnut Creek is on the current 303(d) list for impaired waterbodies for pathogens. The E. coli limitations imposed for this permit are consistent with water quality criteria and are considered protective of the receiving stream. There are no approved TMDLs for this waterbody.

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

Annual stormwater monitoring for outfalls 002S and 003S will be required for Flow, pH, TSS, NH₃-N, CBOD₅, TKN, NO₃-NO₂-N, TP, Oil and Grease, and E. Coli. The previous permit required the facility to monitor TRC and DO. These are being removed from the current permit because these are not pollutants of concern in stormwater. The removal of the reporting requirement for TRC and DO is not considered backsliding because the revision is consistent with the Department's antidegradation policy and water quality standards are being attained.

Prepared by: Sandra Lee

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	Walnut Creek WWTP	
NPDES Permit Number:	AL0054631	
Receiving Stream:	Walnut Creek	
Facility Design Flow (Q _w):	2.250 MGD	
Receiving Stream 7Q ₁₀ :	1.170 cfs	
Receiving Stream 1Q ₁₀ :	0.878 cfs	(Estimated at 0.75 * 7Q ₁₀)
Winter Headwater Flow (WHF):	2.89 cfs	
Summer Temperature for CCC:	30 deg. Celsius	
Winter Temperature for CCC:	30 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 Ratio (SDR) is calculated using the 7Q₁₀ for all stream classifications.

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 74.85\%$$

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.

$$\begin{aligned} \text{Limiting Dilution} &= \frac{Q_w}{7Q_{10} + Q_w} \\ &= 74.85\% \quad \text{Effluent-Dominated, CCC Applies} \end{aligned}$$

$$\begin{aligned} \text{Criterion Maximum Concentration (CMC):} & \quad \text{CMC} = 0.411 / (1 + 10^{(7.204 - \text{pH})}) + 58.4 / (1 + 10^{(\text{pH} - 7.204)}) \\ \text{Criterion Continuous Concentration (CCC):} & \quad \text{CCC} = [0.0577 / (1 + 10^{(7.688 - \text{pH})}) + 2.487 / (1 + 10^{(\text{pH} - 7.688)})] * \text{Min}[2.85, 1.45 * 10^{(0.028 * (25 - T))}] \end{aligned}$$

	<u>CMC</u>	<u>CCC</u>
Allowable Summer Instream NH ₃ -N:	36.09 mg/l	2.18 mg/l
Allowable Winter Instream NH ₃ -N:	36.09 mg/l	2.18 mg/l

$$\begin{aligned} \text{Summer NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (7Q_{10})]}{Q_w} \\ &= 2.0 \text{ mg/l NH}_3\text{-N at 7Q}_{10} \end{aligned}$$

$$\begin{aligned} \text{Winter NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (\text{WHF} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (\text{WHF})]}{Q_w} \\ &= \text{N/A.} \end{aligned}$$

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.

	<u>DO-based NH₃-N limit</u>	<u>Toxicity-based NH₃-N limit</u>	
Summer	2.00 mg/l NH ₃ -N	2.00 mg/l NH ₃ -N	(rounded)
Winter	N/A.	N/A.	

Summer: The DO/toxicity-based limit of 2.00 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

$$\text{Instream Waste Concentration (IWC)} = \frac{Q_w}{7Q_{10} + Q_w} = 74.85\%$$

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)
<u>E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)</u>		
Monthly limit as monthly average (November through April):	548	548
Monthly limit as monthly average (May through October):	126	126
Daily Max (November through April):	2507	2507
Daily Max (May through October):	298	298
<u>Enterococci (applies to Coastal)</u>		
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:	0.015 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	0.025 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:

3/26/2020

Q _d *C _d + Q _{d2} *C _{d2} + Q _s *C _s = Q _r *C _r								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)
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			
1	Antimony		Metals	0	0	0	0	0.6	0.2	
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	0.6	0.2	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0.6	0.2	
7	Copper**		Metals	0	0	0	0	34	7.16	0.388
8	Lead**		Metals	0	0	0	0	1.2	0.4	0.206
9	Mercury**		Metals	0	0	0	0	0.001969	0.000885	0.302
10	Nickel**		Metals	0	0	0	0	91	35.38	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	116	43.6	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	50000	60200	94700	81000	
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	Chloroform*	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	2.4	0.8	
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	1,2-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	1,1,1,2,2-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	Tributyltin (TBT)	YES	VOC	0	0	0	0	0	0	
50	1,1,1-Trichloroethane	YES	VOC	0	0	0	0	0	0	
51	1,1,2,2-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	2,6-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	Benidine		Bases	0	0	0	0	0	0	
71	Benzo(A)Anthracene*	YES	Bases	0	0	0	0	0	0	
72	Benzo(A)Pyrene*	YES	Bases	0	0	0	0	0	0	
73	3,4-Benzo-Fluoranthene		Bases	0	0	0	0	0	0	
74	Benzo(GH)Perylene		Bases	0	0	0	0	0	0	
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	
77	Bis (2-Chloroethyl)-Ether*	YES	Bases	0	0	0	0	0	0	
78	Bis (2-Chloroisopropyl) Ether		Bases	0	0	0	0	0	0	
79	Bis (2-Ethylhexyl) Phthalate*	YES	Bases	0	0	0	0	0	0	
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0	
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	
84	Chrysene*	YES	Bases	0	0	0	0	0	0	
85	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 Aldehyde	YES	Bases	0	0	0	0	0	0	
102	Fluoranthene		Bases	0	0	0	0	0	0	
103	Fluorene		Bases	0	0	0	0	0	0	
104	Heptachlor	YES	Bases	0	0	0	0	0	0	
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	
106	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	0	
107	Hexachlorobutadiene*	YES	Bases	0	0	0	0	0	0	
108	Hexachlorocyclohexan (alpha)	YES	Bases	0	0	0	0	0	0	
109	Hexachlorocyclohexan (beta)	YES	Bases	0	0	0	0	0	0	
110	Hexachlorocyclohexan (gamma)	YES	Bases	0	0	0	0	0	0	
111	Hexachlorocyclopentadiene		Bases	0	0	0	0	0	0	
112	Hexachloroethane		Bases	0	0	0	0	0	0	
113	Indeno(1,2,3-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	

2.25	Enter Q _w = wastewater discharge flow from facility (MGD)
3.48126525	Q _w = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter flow from upstream discharge Q _{d2} = background stream flow in MGD above point of discharge
0	Q _{d2} = background stream flow from upstream source (cfs)
1.17	Enter TQ10, Q _s = background stream flow in cfs above point of discharge
0.8775	Enter or estimated, TQ10, Q _s = background stream flow in cfs above point of discharge (TQ10 estimated at 75% of TQ10)
40.74	Enter Mean Annual Flow, Q _s = background stream flow in cfs above point of discharge
2.89	Enter TQ2, Q _s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C _s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q _s + Q _{d2} + Q _w	Q _s = resultant in-stream flow, after discharge
Calculated on other	C _s = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
40.2	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.00 s.u.	Enter, Background pH above point of discharge
YES	Enter, Is discharge to a stream? "YES" Other option would be to a Lake. (This changes the partition coefficients for the metals)

** Using Partition Coefficients

March 2, 2020

Facility Name: Clanton Walnut Creek WWTP																								
NPDES No.: AL0054631																								
Freshwater F&W classification					Freshwater Acute (µg/l) Q ₁ = 1Q10										Human Health Consumption Fish only (µg/l)									
					Carcinogen Q ₁ = Annual Average										Non-Carcinogen Q ₁ = 7Q10									
ID	Pollutant	RP?	Carcinogen	Background from upstream source (Q ₁) Daily Max	Max Daily Discharge as reported by Applicant (C ₁)	Water Quality Criteria (C ₁)	Draft Permit Limit (C ₁)	20% of Draft Permit Limit	RP?	Background from upstream source (Q ₁) Monthly Ave	Avg Daily Discharge as reported by Applicant (C ₁)	Water Quality Criteria (C ₁)	Draft Permit Limit (C ₁)	20% of Draft Permit Limit	RP?	Water Quality Criteria (C ₁)	Draft Permit Limit (C ₁)	20% of Draft Permit Limit	RP?	Water Quality Criteria (C ₁)	Draft Permit Limit (C ₁)	20% of Draft Permit Limit	RP?	
1	Antimony			0	0.6				No	0	0.2				No	3.73E+02	4.99E+02	9.98E+01	No					
2	Arsenic		YES	0	0	592.334	741.640	148.328	No	0	0	281.324	349.151	69.830	No	3.03E-01	3.85E+00	7.70E-01	No					
3	Beryllium			0	0				No	0	0				No				No					
4	Cadmium			0	0	5.515	4.401	0.880	No	0	0	0.563	0.739	0.148	No				No					
5	Chromium/ Chromium III			0	0.8	1288.283	1610.508	322.102	No	0	0.2	167.319	223.652	44.710	No				No					
6	Chromium/ Chromium VI			0	0.8	16.000	20.033	4.007	No	0	0.2	11.000	14.697	2.939	No				No					
7	Copper	YES		0	34	14.677	18.377	3.675	Yes	0	7.16	10.566	14.195	2.831	Yes				No					
8	Lead			0	12	114.767	143.695	28.739	No	0	0.4	4.472	5.975	1.195	No				No					
9	Mercury			0	0.001969	2.400	3.005	0.601	No	0	0.000885	0.012	0.016	0.003	No	4.24E-02	5.67E-02	1.13E-02	No					
10	Nickel	YES		0	91	428.893	537.001	107.400	No	0	35.36	47.637	63.647	12.729	Yes	9.93E+02	1.33E+03	2.65E+02	No					
11	Selenium			0	0	20.000	25.041	5.008	No	0	0	5.000	6.680	1.336	No	2.43E-03	3.25E+03	6.49E+02	No					
12	Silver			0	0	0.671	0.840	0.168	No	0	0				No				No					
13	Thallium			0	0				No	0	0				No				No					
14	Zinc	YES		0	116	164.060	205.413	41.083	Yes	0	43.6	165.402	220.991	44.198	No	1.49E+04	1.99E+04	3.98E+03	No					
15	Cyanide			0	0	22.000	27.545	5.509	No	0	0	5.200	6.948	1.390	No	0.30E+03	1.25E+04	2.49E+03	No					
16	Total Phenolic Compounds			0	0				No	0	0				No				No					
17	Hardness (As CaCO3)			0	94700				No	0	81000				No				No					
18	Acrolein			0	0				No	0	0				No	5.43E+00	7.25E+00	1.45E+00	No					
19	Acrylonitrile	YES		0	0				No	0	0				No	1.41E-01	1.83E+00	3.66E-01	No					
20	Aldrin	YES		0	0	3.000	3.756	0.751	No	0	0				No	2.94E-05	3.73E-04	7.47E-06	No					
21	Benztene	YES		0	0				No	0	0				No	1.50E+01	1.97E+02	3.93E+01	No					
22	Bromoforn	YES		0	0				No	0	0				No	7.88E+01	1.00E+00	2.00E-02	No					
23	Carbon Tetrachloride	YES		0	0				No	0	0				No	9.57E-01	1.22E+01	2.43E+00	No					
24	Chlordane	YES		0	0	2.400	3.005	0.601	No	0	0	0.0043	0.006	0.001	No	4.73E-04	6.01E-03	1.20E-03	No					
25	Chlorobenzene			0	0				No	0	0				No	9.06E+02	1.21E+03	2.42E+02	No					
26	Chlorodibromo-Methane	YES		0	0				No	0	0				No	7.41E+00	9.41E+01	1.88E+01	No					
27	Chloroethane			0	0				No	0	0				No				No					
28	2-Chloro-Ethylvinyl Ether			0	0				No	0	0				No				No					
29	Chloroform	YES		0	2.4				No	0	0.8				No	1.02E+02	1.30E+03	2.59E+02	No					
30	4,4' - DDD	YES		0	0				No	0	0				No	1.31E-04	2.30E-03	4.61E-04	No					
31	4,4' - DDE	YES		0	0				No	0	0				No	1.28E-04	1.63E-03	3.25E-04	No					
32	4,4' - DDT	YES		0	0				No	0	0	0.001	0.001	0.000	No	1.28E-04	1.63E-03	3.25E-04	No					
33	Dichlorobromo-Methane	YES		0	0				No	0	0				No	1.00E+01	1.27E+02	2.55E+01	No					
34	1,1-Dichloroethane			0	0				No	0	0				No				No					
35	1,2-Dichloroethane	YES		0	0				No	0	0				No	2.14E-01	2.71E+02	5.43E+01	No					
36	Trans-1, 2-Dichloro-Ethylene			0	0				No	0	0				No	5.81E+03	7.89E+03	1.58E+03	No					
37	1,1-Dichloroethylene	YES		0	0				No	0	0				No	4.17E+03	5.29E+04	1.06E+04	No					
38	1,2-Dichloropropane			0	0				No	0	0				No	8.49E+00	1.13E+01	2.27E+00	No					
39	1,3-Dichloro-Propylene			0	0				No	0	0				No	1.33E+01	1.64E+01	3.28E+00	No					
40	Dieldrin	YES		0	0	0.240	0.300	0.060	No	0	0	0.056	0.075	0.015	No	3.12E-05	3.97E-04	7.93E-06	No					
41	Ethylbenzene			0	0				No	0	0				No	1.24E+03	1.66E+03	3.33E+02	No					
42	Methyl Bromide			0	0				No	0	0				No	8.71E+02	1.16E+03	2.33E+02	No					
43	Methyl Chloride			0	0				No	0	0				No				No					
44	Methylene Chloride	YES		0	0				No	0	0				No	3.46E+02	4.39E+03	8.78E+02	No					
45	1, 1, 2, 2-Tetrachloro-Ethane	YES		0	0				No	0	0				No	2.33E+00	2.96E+01	5.93E+00	No					
46	Tetrachloro-Ethylene	YES		0	0				No	0	0				No	1.02E+00	2.44E+01	4.87E+00	No					
47	Toluene			0	0				No	0	0				No	8.72E+03	1.17E+04	2.33E+03	No					
48	Toxaphene	YES		0	0	0.750	0.914	0.183	No	0	0	0.0002	0.000	0.000	No	1.62E-04	2.06E-03	4.11E-04	No					
49	Tributyltin (TBT)	YES		0	0	0.460	0.576	0.115	No	0	0	0.072	0.096	0.019	No				No					
50	1, 1, 1-Trichloroethane			0	0				No	0	0				No				No					
51	1, 1, 2-Trichloroethane	YES		0	0				No	0	0				No	9.10E+00	1.16E+02	2.31E+01	No					
52	Trichloroethylene	YES		0	0				No	0	0				No	1.75E+01	2.22E+02	4.44E+01	No					
53	Vinyl Chloride	YES		0	0				No	0	0				No	1.42E+00	1.81E+01	3.62E+00	No					
54	p-Chloro-m-Cresol			0	0				No	0	0				No				No					
55	2-Chlorophenol			0	0				No	0	0				No	8.71E+01	1.16E+02	2.33E+01	No					
56	2,4-Dichlorophenol			0	0				No	0	0				No	1.72E+02	2.30E+02	4.60E+01	No					
57	2,4-Dimethylphenol			0	0				No	0	0				No	4.98E+02	6.65E+02	1.33E+02	No					
58	4,6-Dinitro-o-Cresol			0	0				No	0	0				No				No					
59	2,4-Dinitrophenol			0	0				No	0	0				No	3.11E+03	4.16E+03	8.31E+02	No					
60	4,6-Dinitro-2-methylphenol	YES		0	0				No	0	0				No	1.65E+02	2.10E+03	4.20E+02	No					
61	Dioxin (2,3,7,8-TCDD)	YES		0	0				No	0	0				No	2.07E-08	3.39E-07	6.77E-08	No					
62	2-Nitrophenol			0	0				No	0	0				No				No					
63	4-Nitrophenol			0	0				No	0	0				No				No					
64	Pentachlorophenol	YES		0	0	8.723	10.922	2.184	No	0	0	6.693	8.942	1.788	No	1.77E+00	2.25E+01	4.49E+00	No					
65	Phenol			0	0				No	0	0				No	5.00E+02	6.68E+05	1.34E+05	No					
66	2,4,6-Trichlorophenol	YES		0	0				No	0	0				No	1.41E+								

Clanton Walnut Creek (AL0054631)

Total Recoverable Copper DMR Data

Monitor Pd End Date	Monthly Average (mg/l)	Daily Maximum (mg/l)
3/31/2015	0.005	0.005
4/30/2015	0.005	0.005
5/31/2015	0.005	0.005
6/30/2015	0.005	0.005
7/31/2015	0.005	0.005
8/31/2015	0.005	0.005
9/30/2015	0.005	0.005
10/31/2015	0.005	0.005
11/30/2015	0.005	0.005
12/31/2015	0.005	0.005
1/31/2016	0.005	0.005
2/29/2016	0.001	0.001
3/31/2016	0.00254	0.00254
4/30/2016	0.00227	0.00227
5/31/2016	0.00222	0.00222
6/30/2016	0.00232	0.00232
7/31/2016	0.0266	0.0266
8/31/2016	0.0207	0.0207
9/30/2016	0.0114	0.0114
10/31/2016	0.00301	0.00301
11/30/2016	0.0109	0.0109
12/31/2016	0.0216	0.0262
1/31/2017	0.0125	0.015
2/28/2017	0.011	0.02
3/31/2017	0.019	0.012
4/30/2017	0.004	0.004
5/31/2017	0.01	0.016
6/30/2017	0.012	0.015
7/31/2017	0.005	0.005
8/31/2017	0.008	0.008
9/30/2017	0.011	0.011
10/31/2017	0.034	0.034
11/30/2017	0.01	0.01
12/31/2017	0.01	0.01
1/31/2018	0.006	0.006
2/28/2018	0.01	0.01
3/31/2018	0.01	0.01

Monitor Pd End Date	Monthly Average (mg/l)		Daily Maximum (mg/l)	
4/30/2018	0.01		0.01	
5/31/2018	0.008		0.008	
6/30/2018	0.006		0.006	
7/31/2018	0.002		0.002	
8/31/2018	0.008		0.008	
9/30/2018	0.011		0.011	
10/31/2018	0.006		0.006	
11/30/2018	0.007		0.007	
12/31/2018	0.005		0.005	
1/31/2019	0.004		0.004	
2/28/2019	0.01		0.01	
3/31/2019	0.006		0.006	
4/30/2019	0.01		0.01	
5/31/2019	0.0032		0.0032	
6/30/2019	0		0	
7/31/2019	0		0	
8/31/2019	0		0	
9/30/2019	0.0073		0.0073	
10/31/2019	0		0	
11/30/2019	0		0	
12/31/2019	0.0032		0.0032	
1/31/2020	0		0	
Application	0.0032		0.0032	
Application	0.0021		0.0021	
Application	0		0	
	Monthly Average	0.00716	Maximum	0.034

Clanton Walnut Creek (AL0054631)

Total Recoverable Mercury DMR Data

Monitor Pd End Date	Monthly Average (ug/L)		Daily Maximum (ug/L)	
12/31/2015	0.000935		0.000935	
3/31/2015	0.000555		0.000895	
6/30/2015	1.38E-06		1.7E-06	
9/30/2015	0.000685		0.000685	
3/31/2016	0.00152		0.00152	
6/30/2016	0.001969		0.001969	
Application	0.00126		0.00126	
Application	0.00053			
Application	0.00051			
	Monthly Average	0.000885	Maximum	0.001969

Clanton Walnut Creek (AL0054631)

Total Recoverable Nickel DMR Data

Monitor Pd End Date	Monthly Average (mg/L)	Daily Maximum (mg/L)
3/31/2015	0.02	0.02
4/30/2015	0.026	0.026
5/31/2015	0.02	0.02
6/30/2015	0.0216	0.0216
7/31/2015	0.0329	0.0329
8/31/2015	0.0493	0.0493
9/30/2015	0.0318	0.0318
10/31/2015	0.0291	0.0291
11/30/2015	0.0239	0.0239
12/31/2015	0.02	0.02
1/31/2016	0.02	0.02
2/29/2016	0.02	0.02
3/31/2016	0.02	0.02
4/30/2016	0.02	0.02
5/31/2016	0.02	0.02
6/30/2016	0.0208	0.0208
7/31/2016	0.0224	0.0224
8/31/2016	0.025	0.025
9/30/2016	0.02	0.02
10/31/2016	0.0215	0.0215
11/30/2016	0.02	0.02
12/31/2016	0.047	0.047
1/31/2017	0.05	0.05
2/28/2017	0.05	0.05
3/31/2017	0.05	0.05
4/30/2017	0.05	0.05
5/31/2017	0.05	0.05
6/30/2017	0.05	0.05
7/31/2017	0.05	0.05
8/31/2017	0.05	0.05
9/30/2017	0.05	0.05
10/31/2017	0.057	0.057
11/30/2017	0.05	0.05
12/31/2017	0.05	0.05
1/31/2018	0.05	0.05
2/28/2018	0.05	0.05
3/31/2018	0.05	0.05

Monitor Pd End Date	Monthly Average (mg/L)		Daily Maximum (mg/L)	
4/30/2018	0.0705		0.089	
5/31/2018	0.058		0.058	
6/30/2018	0.029		0.029	
7/31/2018	0.059		0.068	
8/31/2018	0.04		0.04	
9/30/2018	0.082		0.091	
10/31/2018	0.059		0.084	
11/30/2018	0.036		0.036	
12/31/2018	0.02		0.02	
1/31/2019	0.03		0.03	
2/28/2019	0.024		0.024	
3/31/2019	0.02		0.02	
4/30/2019	0.021		0.021	
5/31/2019	0.029		0.029	
6/30/2019	0.026		0.026	
7/31/2019	0.045		0.045	
8/31/2019	0.032		0.032	
9/30/2019	0.039		0.039	
10/31/2019	0.020		0.020	
11/30/2019	0.012		0.012	
12/31/2019	0.0091		0.0091	
1/31/2020	0.0058		0.0058	
Application	0.0639		0.0639	
Application	0.0260		0.0260	
Application	0.0280		0.0280	
	Monthly Average	0.03536	Maximum	0.091

Clanton Walnut Creek (AL0054631)

Total Recoverable Zinc DMR Data

Monitor Pd End Date	Monthly Average (mg/L)	Daily Maximum (mg/L)
3/31/2015	*E	*E
4/30/2015	0.02	0.02
5/31/2015	0.02	0.02
6/30/2015	0.0137	0.0137
7/31/2015	0.02	0.02
8/31/2015	0.0293	0.0293
9/30/2015	0.02	0.02
10/31/2015	0.036	0.036
11/30/2015	0.0426	0.0426
12/31/2015	0.02	0.02
1/31/2016	0.0207	0.0207
2/29/2016	0.115	0.115
3/31/2016	0.0286	0.0286
4/30/2016	0.0439	0.0439
5/31/2016	0.029	0.029
6/30/2016	0.0386	0.0386
7/31/2016	0.0542	0.0542
8/31/2016	0.0973	0.0973
9/30/2016	0.0472	0.0472
10/31/2016	0.0502	0.0502
11/30/2016	0.0347	0.0347
12/31/2016	0.116	0.116
1/31/2017	0.05	0.05
2/28/2017	0.05	0.05
3/31/2017	0.069	0.069
4/30/2017	0.05	0.05
5/31/2017	0.0535	0.057
6/30/2017	0.05	0.05
7/31/2017	0.05	0.05
8/31/2017	0.05	0.05
9/30/2017	0.05	0.05
10/31/2017	0.05	0.05
11/30/2017	0.05	0.05
12/31/2017	0.05	0.05
1/31/2018	0.05	0.05
2/28/2018	0.05	0.05
3/31/2018	0.05	0.05

Monitor Pd End Date	Monthly Average (mg/L)		Daily Maximum (mg/L)	
4/30/2018	0.05		0.05	
5/31/2018	0.05		0.05	
6/30/2018	0.05		0.05	
7/31/2018	0.05		0.05	
8/31/2018	0.05		0.05	
9/30/2018	0.05		0.05	
10/31/2018	0.05		0.05	
11/30/2018	0.05		0.05	
12/31/2018	0.05		0.05	
1/31/2019	0.05		0.05	
2/28/2019	0.05		0.05	
3/31/2019	0.05		0.05	
4/30/2019	0.05		0.05	
5/31/2019	0.048		0.048	
6/30/2019	0.045		0.045	
7/31/2019	0.037		0.037	
8/31/2019	0.032		0.032	
9/30/2019	0		0	
10/31/2019	0.039		0.039	
11/30/2019	0.017		0.017	
12/31/2019	0.019		0.019	
1/31/2020	0.039		0.039	
Application	0.0208		0.0310	
Application	0.0132			
Application	0.0310			
	Monthly Average	0.0436	Maximum	0.116

*E – Analysis not conducted

Waste Load Allocation Summary

Page 1

REQUEST INFORMATION

Request Number:

1787

From:		In Branch/Section	
Date Submitted		Date Required	
Date Permit application received by NPDES program		FUND Code	
Receiving Waterbody		Walnut Creek	
Previous Stream Name			
Facility Name		Clanton Walnut Creek WWTP (Name of Discharger-WQ will use to file)	
		Previous Discharger Name	
River Basin	Coosa	Outfall Latitude	32.868324 (decimal degrees)
County	Chilton	Outfall Longitude	-86.597488 (decimal degrees)
Permit Number	AL0054631	Permit Type	CONVERSION
		Permit Status	Active
		Type of Discharger	MUNICIPAL
Do other discharges exist that may impact the model?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

If yes, impacting dischargers names.

Impacting dischargers permit numbers.

Existing Discharge Design Flow

2.25

MGD

Proposed Discharge Design Flow

MGD

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

Comments included

☐ Yes ☒ No

Information Verified By

REC

Year File Was Created

2001

Response ID Number

1388

Lat/Long Method

GPS

12 Digit HUC Code 031501070802

Use Classification F&W

Site Visit Completed?

☒ Yes ☐ No

Date of Site Visit

10/2/2013

Waterbody Impaired?

☐ Yes ☒ No

Date of WLA Response

10/9/2013

Antidegradation

☐ Yes ☒ No

Approved TMDL?

☐ Yes ☒ No

Waterbody Tier Level

Tier I

Approval Date of TMDL

Use Support Category

3

Waste Load Allocation Information

Modeled Reach Length

13.5

Miles

Date of Allocation

10/9/2013

Name of Model Used

SWQM

Allocation Type

Annual

Model Completed by

Ross Caton

Type of Model Used

Desk-top

Allocation Developed by

Water Quality Branch

Waste Load Allocation Summary

Page 2

Annual Effluent Limits	Conventional Parameters				Other Parameters			
	Qw	MGD	Qw	MGD	Qw	MGD	Qw	MGD
Season			Season			Season		
From			From			From		
Through			Through			Through		
CBOD5 10 mg/L			CBOD5 mg/L			TP mg/L		
NH3-N 2 mg/L			NH3-N mg/L			TN mg/L		
TKN mg/L			TKN mg/L			TSS mg/L		
D.O. 6 mg/L			D.O. mg/L					

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

Water Quality Characteristics Immediately Upstream of Discharge				
Parameter	Summer		Winter	
CBODu	2	mg/l		mg/l
NH3-N	0.11	mg/l		mg/l
Temperature	30	°C		°C
pH	7	su		su

Hydrology at Discharge Location				Method Used to Calculate	
Drainage Area Qualifier Exact	Drainage Area	29.1	sq mi	ADEM Estimate w/USGS Gage Data	
	Stream 7Q10	1.17	cfs		
	Stream 1Q10		cfs		
	Stream 7Q2	2.89	cfs	ADEM Estimate w/USGS Gage Data	
	Annual Average	40.74	cfs	ADEM Estimate w/USGS Gage Data	

Comments and/or Notations

FORM 1 GENERAL		 U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program <i>(Read the "General Instructions" before starting.)</i>		I. EPA I.D. NUMBER S _____ T/A _____ C _____ F _____ D _____ 1 2 _____ 13 14 15 _____	
LABEL ITEMS I. EPA I.D. NUMBER III. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION		PLEASE PLACE LABEL IN THIS SPACE <div style="border: 2px solid black; padding: 10px; width: fit-content; margin: auto;"> RECEIVED AUG 29 2019 IND / MUN BRANCH </div>		GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.	
II. POLLUTANT CHARACTERISTICS					
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .					
SPECIFIC QUESTIONS		Mark "X" YES NO FORM ATTACHED		SPECIFIC QUESTIONS	
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S. ? (FORM 2D)	
E. Does or will this facility treat, store, or dispose of hazardous wastes ? (FORM 3)		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	
III. NAME OF FACILITY					
1 SKIP walnut creek waste water treatment facility					
IV. FACILITY CONTACT					
A. NAME & TITLE (last, first, & title)		B. PHONE (area code & no.)			
2 billy joe driver mayor		(205) 755-4051			
V. FACILITY MAILING ADDRESS					
A. STREET OR P.O. BOX					
3 p.o. box 580					
B. CITY OR TOWN		C. STATE		D. ZIP CODE	
4 clanton		AL		35046	
VI. FACILITY LOCATION					
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER					
5 1574 county road 51					
B. COUNTY NAME					
chilton					
C. CITY OR TOWN		D. STATE		E. ZIP CODE	
6 clanton		AL		35046	

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND									
C										C									
7										7									
15	16									15	16								
C. THIRD										D. FOURTH									
C										C									
7										7									
15	16									15	16								

VIII. OPERATOR INFORMATION

A. NAME															B. Is the name listed in Item VIII-A also the owner?																			
C															<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO																			
8																																		
15	16																																	
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)																									D. PHONE (area code & no.)									
F = FEDERAL										M = PUBLIC (other than federal or state)										m (specify)					A (205) 755-4051									
S = STATE										O = OTHER (specify)																								
P = PRIVATE																																		

E. STREET OR P.O. BOX																								
po box 580																								

F. CITY OR TOWN															G. STATE					H. ZIP CODE					IX. INDIAN LAND				
B clanton															al					35046					Is the facility located on Indian lands?				
																									<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)															D. PSD (Air Emissions from Proposed Sources)														
C	T	I													C	T	I												
9	N														9	P													
15	16														15	16													
AL0054631																													
B. UIC (Underground Injection of Fluids)															E. OTHER (specify)														
C	T	I													(specify)														
9	U																												
15	16																												
C. RCRA (Hazardous Wastes)															E. OTHER (specify)														
C	T	I													(specify)														
9	R																												
15	16																												

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

Wastewater treatment consisting of pretreatment using barscreens, and aerated grit chamber, followed by biological treatment, using activated sludge, followed by secondary clarifiers, chlorination and dechlorination. Sludge is dewatered by the use of sand drying beds. sludge disposal is hauled to landfill as of april 2019.

XIII. CERTIFICATION (see instructions)

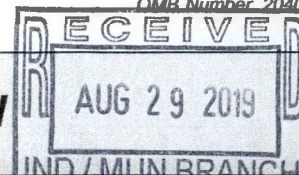
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)															B. SIGNATURE															C. DATE SIGNED									
billy joe driver mayor															Billy Joe Driver															8-29-2019									

COMMENTS FOR OFFICIAL USE ONLY																										
C																										
15	16																									

FACILITY NAME AND PERMIT NUMBER:
AL0054631 walnut creek wwtp

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



FORM
2A
NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

AL0054631 walnut creek wwtp

BASIC APPLICATION INFORMATION**PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:****All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.****A.1. Facility Information.**Facility name walnut creek waste water treatment facilityMailing Address po box 580 clanton al 35046Contact person billy joe driverTitle mayorTelephone number (205) 755-4051Facility Address 1574 county road 51 clanton al

(not P.O. Box)

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name _____

Mailing Address _____

Contact person _____

Title _____

Telephone number _____

Is the applicant the owner or operator (or both) of the treatment works?☒ owner ☐ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).NPDES AL054631

PSD _____

UIC _____

Other _____

RCRA _____

Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>clanton AL</u>	<u>6100</u>	<u>separate</u>	<u>municipal</u>
_____	_____	_____	_____
_____	_____	_____	_____

Total population served _____

A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No**A.6. Flow.** Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 2.250
- mgd

	<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>
b. Annual average daily flow rate	<u>1.739</u>	<u>1.712</u>	<u>2.030</u> mgd
c. Maximum daily flow rate	<u>2.776</u>	<u>2.491</u>	<u>2.727</u> mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100.00 %
☐ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

- i. Discharges of treated effluent yes
ii. Discharges of untreated or partially treated effluent _____
iii. Combined sewer overflow points _____
iv. Constructed emergency overflows (prior to the headworks) _____
v. Other _____

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

FACILITY NAME AND PERMIT NUMBER:

AL0054631 walnut creek wwtp

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

____ Yes

☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

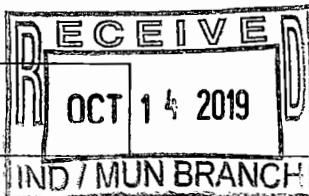
Annual daily volume disposed of by this method: _____

Is disposal through this method _____

continuous or

_____ intermittent?

FACILITY NAME AND PERMIT NUMBER:

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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 0011
- b. Location clanton 35046
32deg 52' 06" (City or town, if applicable) (Zip Code)
chilton al
(County) (State)
32deg 52' 06" 86deg 35' 51"
(Latitude) (Longitude)
- c. Distance from shore (if applicable) _____ ft.
- d. Depth below surface (if applicable) _____ ft.
- e. Average daily flow rate 2.03 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?
_____ Yes ☒ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: _____
- Average duration of each discharge: _____
- Average flow per discharge: _____ mgd
- Months in which discharge occurs: _____
- g. Is outfall equipped with a diffuser? _____ Yes ☒ No

A.10. Description of Receiving Waters.

- a. Name of receiving water walnut creek
- b. Name of watershed (if known) walnut creek
United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin (if known): coosa river
United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____
- d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of CaCO₃

FACILITY NAME AND PERMIT NUMBER:

AL0054631 walnut creek wwtp

Form Approved 1/14/99
OMB Number 2040-0086**A.11. Description of Treatment.**

- a. What levels of treatment are provided? Check all that apply.

☐ Primary☒ Secondary☐ Advanced☐ Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal _____ %

Design SS removal _____ %

Design P removal _____ %

Design N removal _____ %

Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

chlorine

If disinfection is by chlorination, is dechlorination used for this outfall?



Yes

☐ No

- d. Does the treatment plant have post aeration?



Yes

☐ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 0011

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.91	s.u.			
pH (Maximum)	7.48	s.u.			
Flow Rate	2.73	mgd	2.03	mgd	3.00
Temperature (Winter)					
Temperature (Summer)					

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5						
	CBOD-5	2.50	mg/l	2.00	mg/l	3.00	
FECAL COLIFORM							
TOTAL SUSPENDED SOLIDS (TSS)		9.50	mg/l	4.50	mg/l	3.00	

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

AL0054631 walnut creek wwtp

BASIC APPLICATION INFORMATION**PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).**All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.200,000.00 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

preparing a plan to search for i and i**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.**B.4. Operation/Maintenance Performed by Contractor(s).**Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: _____

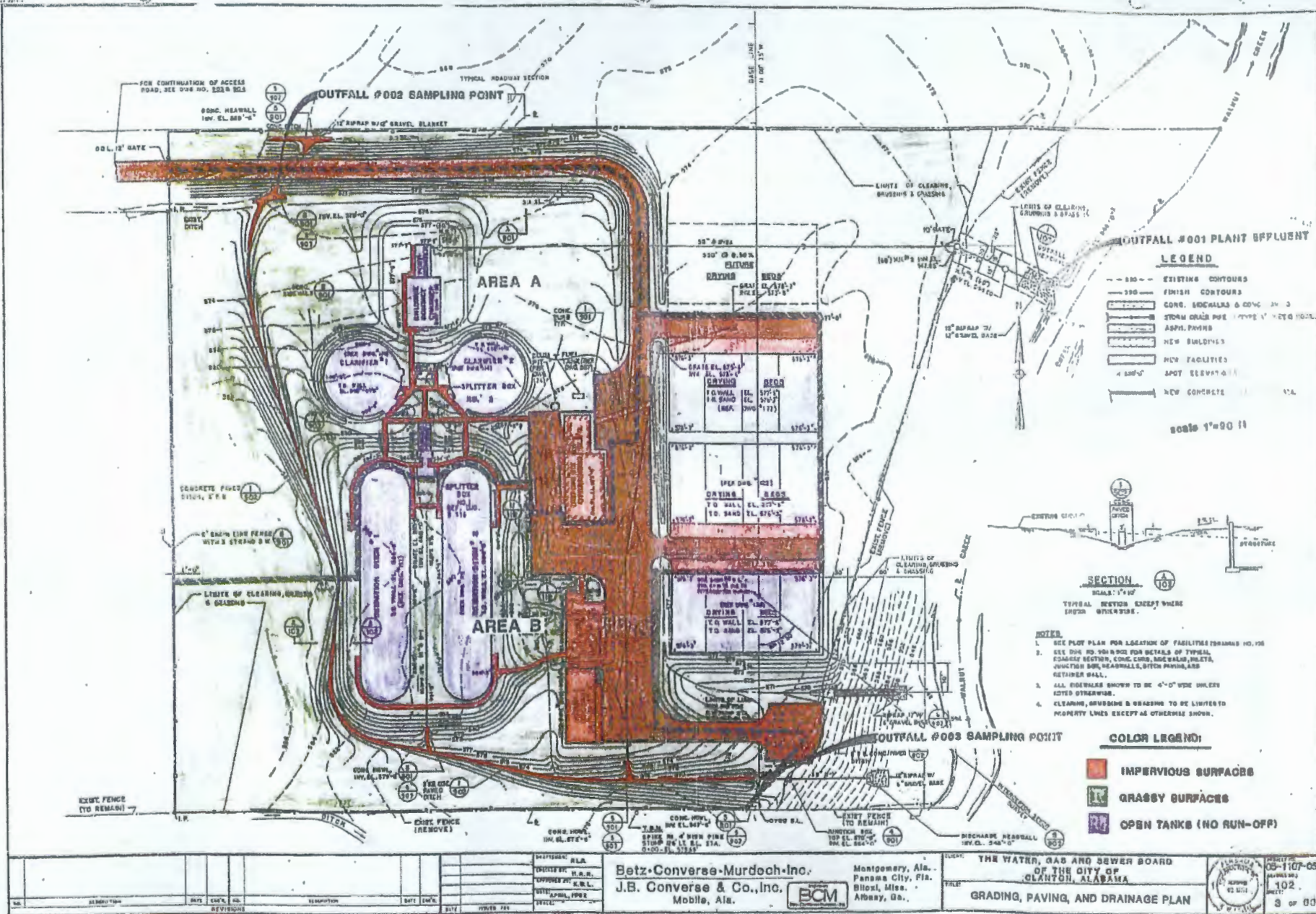
Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

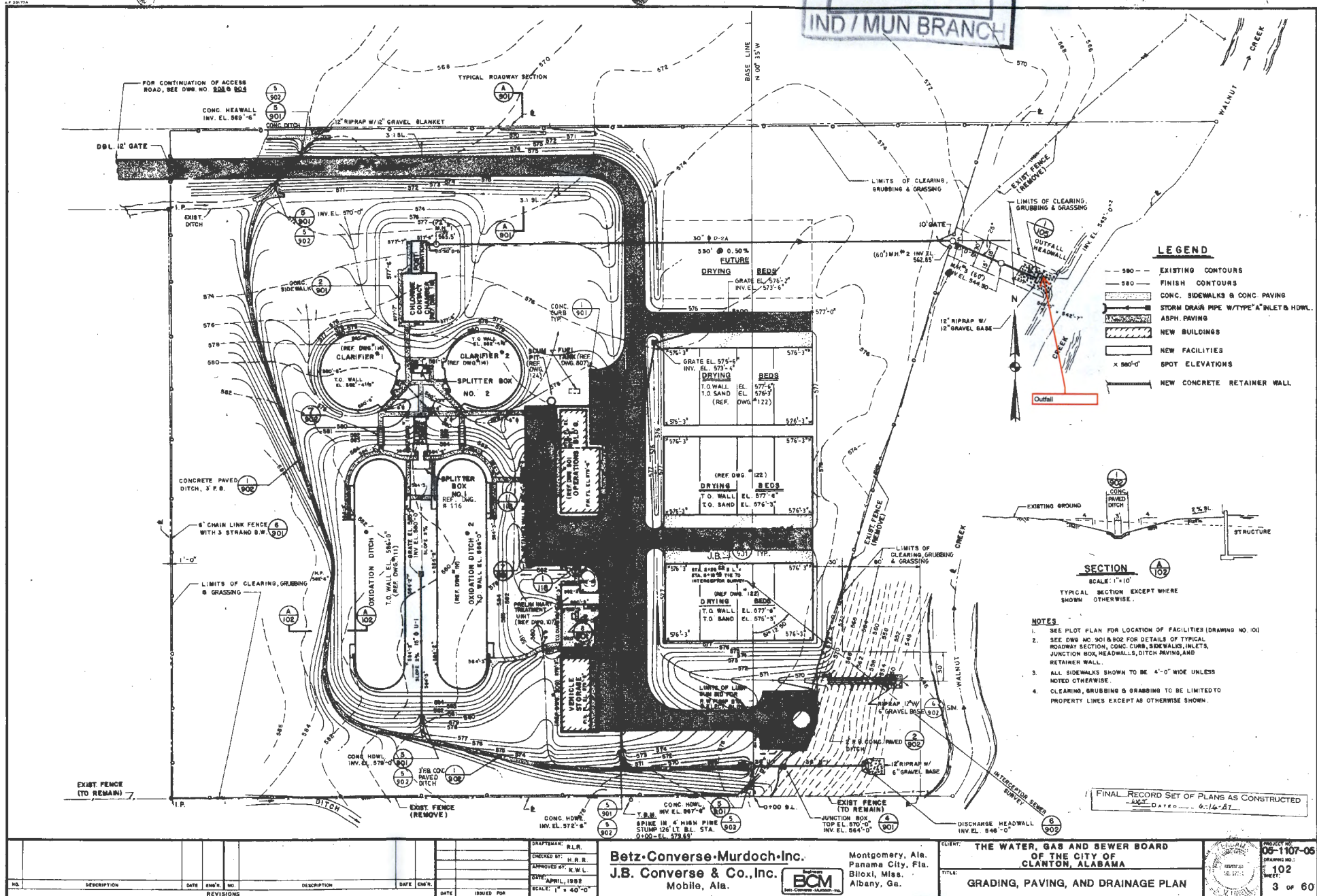
- List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

- Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

Yes ☐ No



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Betz-Converse-Murdoch-Inc.
J.B. Converse & Co., Inc.
Mobile, Ala.

Montgomery, Ala.
Panama City, Fla.
Bloomington, Miss.
Albany, Ga.

CLIENT: THE WATER, GAS AND SEWER BOARD
OF THE CITY OF
CLANTON, ALABAMA
TITLE: GRADING, PAVING, AND DRAINAGE PLAN

PROJECT NO. 05-1107-05
DRAWING NO. 102
SHEET: 3 OF 60

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM / DD / YYYY	MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 0011

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	0.47	mg/l	0.30	mg/l	3.00		
CHLORINE (TOTAL RESIDUAL, TRC)	0.01	mg/l	0.01	mg/l	3.00		
DISSOLVED OXYGEN	9.42	mg/l	8.99	mg/l	3.00		
TOTAL KJELDAHL NITROGEN (TKN)	5.20	mg/l	2.10	mg/l	3.00		
NITRATE PLUS NITRITE NITROGEN	4.66	mg/l	1.60	mg/l	3.00		
OIL and GREASE	5.60	mg/l	2.80	mg/l	3.00		
PHOSPHORUS (Total)	0.86	mg/l	0.57	mg/l	3.00		
TOTAL DISSOLVED SOLIDS (TDS)	328.00	mg/l	206.00	mg/l	3.00		
OTHER							

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

AL0054631 walnut creek wwtp

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Basic Application Information packet | Supplemental Application Information packet: |
| | <input checked="" type="checkbox"/> Part D (Expanded Effluent Testing Data) |
| | <input checked="" type="checkbox"/> Part E (Toxicity Testing: Biomonitoring Data) |
| | <input checked="" type="checkbox"/> Part F (Industrial User Discharges and RCRA/CERCLA Wastes) |
| | <input type="checkbox"/> Part G (Combined Sewer Systems) |

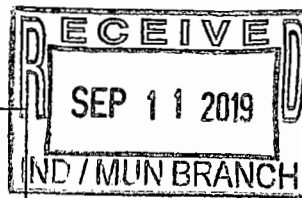
ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

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 the information, the information 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 and official title billy joe driver mayorSignature Billy Joe DriverTelephone number (205) 755-4051Date signed 8-29-2019

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:



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

FACILITY NAME AND PERMIT NUMBER:

walnutcreek wwtp AL0054631

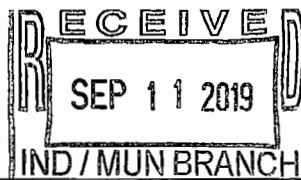
SUPPLEMENTAL APPLICATION INFORMATION**PART D. EXPANDED EFFLUENT TESTING DATA**

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 0011 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	.0006	mg/l	.0104	lbs/dy	.0002	mg/l	.0028	lbs/dy	3	200.8	.0005
ARSENIC	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	200.8	.0005
BERYLLIUM	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	200.8	.0005
CADMIUM	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	200.8	.0005
CHROMIUM	.0006	mg/l	.0104	lbs/dy	.0002	mg/l	0	lbs/dy	3	200.8	.0005
COPPER	.0032	mg/l	.0555	lbs/dy	.00176	mg/l	0	lbs/dy	3	200.8	.0005
LEAD	.0012	mg/l	.0152	lbs/dy	.0004	mg/l	.0057	lbs/dy	3	200.8	.0005
MERCURY	.00000126	mg/l	.0000159	lbs/dy	.000000767	mg/l	.0000110	lbs/dy	3	e1631	.00000050
NICKEL	.0639	mg/l	.8105	lbs/dy	.0393	mg/l	.568	lbs/dy	3	200.8	.0005
SELENIUM	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	200.8	.0005
SILVER	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	200.8	.0005
THALLIUM	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	200.8	.0005
ZINC	.0310	mg/l	.414	lbs/dy	.02166	mg/l	.3133	lbs/dy	3	200.8	.0010
CYANIDE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	m4500-cn	.010
TOTAL PHENOLIC COMPOUNDS	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	m5330	.10
HARDNESS (AS CaCO ₃)	94.7	mg/l	1201.28	lbs/dy	81	mg/l	1171.3	lbs/dy	3	200.7	1.0
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											



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

FACILITY NAME AND PERMIT NUMBER:
Walnut Creek WWTP AL0054631

Outfall number: 0011 (Complete once for each outfall discharging effluent to waters of the United States.)											
POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.002
ACRYLONITRILE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0021
BENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0014
BROMOFORM	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0016
CARBON TETRACHLORIDE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0011
CLOROBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0015
CHLORODIBROMO-METHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0015
CHLOROETHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0012
2-CHLORO-ETHYL VINYL ETHER	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0032
CHLOROFORM	.0024	mg/l	.0320	lbs/dy	.0008	mg/l	.0115	lbs/dy	3	624	.0014
DICHLOROBROMO-METHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0016
1,1-DICHLOROETHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0015
1,2-DICHLOROETHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0015
TRANS-1,2-DICHLORO-ETHYLENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0013
1,1-DICHLOROETHYLENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0014
1,2-DICHLOROPROPANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0015
1,3-DICHLORO-PROPYLENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0015
ETHYLBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0014
METHYL BROMIDE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0014
METHYL CHLORIDE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0012
METHYLENE CHLORIDE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0046
1,1,2,2-TETRACHLORO-ETHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0019
TETRACHLORO-ETHYLENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0014
TOLUENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0021

FACILITY NAME AND PERMIT NUMBER:

walnutcreek wwtp AL0054631

SEP 11 2019

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

Outfall number: 0011 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0012
1,1,2-TRICHLOROETHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0015
TRICHLOROETHYLENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0014
VINYL-CHLORIDE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.0011

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

ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
2-CHLOROPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
2,4-DICHLOROPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
2,4-DIMETHYLPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
4,6-DINITRO-O-CRESOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
2,4-DINITROPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0095
2-NITROPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
4-NITROPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
PENTACHLOROPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0048
PHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0026
2,4,6-TRICHLOROPHENOL	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024

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

BASE-NEUTRAL COMPOUNDS

ACENAPHTHENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
ACENAPHTHYLENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
ANTHRACENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
BENZIDINE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0071
BENZO(A)ANTHRACENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012
BENZO(A)PYRENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012

FACILITY NAME AND PERMIT NUMBER:

walnutcreek wwtp AL0054631

SEP 11 2019

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

IND / MUN BRANCH

Outfall number: 0011

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

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4-BENZO-FLUORANTHENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
BENZO(GH)PERYLENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
BENZO(K)FLUORANTHENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012
BIS (2-CHLOROETHOXY) METHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
BIS (2-CHLOROETHYL) ETHER	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
BIS (2-CHLOROISO-PROPYL) ETHER	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
BIS (2-ETHYLHEXYL) PHTHALATE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
4-BROMOPHENYL PHENYL ETHER	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
BUTYL BENZYL PHTHALATE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
2-CHLORONAPHTHALENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
4-CHLOROPHENYL PHENYL ETHER	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
CHRYSENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012
DI-N-BUTYL PHTHALATE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
DI-N-OCTYL PHTHALATE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
DIBENZO(A,H) ANTHRACENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012
1,2-DICHLOROBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.005
1,3-DICHLOROBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.005
1,4-DICHLOROBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	624	.005
3,3-DICHLOROBENZIDINE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012
DIETHYL PHTHALATE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
DIMETHYL PHTHALATE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
2,4-DINITROTOLUENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
2,6-DINITROTOLUENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
1,2-DIPHENYLHYDRAZINE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024

FACILITY NAME AND PERMIT NUMBER:

walnutcreek wwtp AL0054631

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Outfall number: 0011 (Complete once for each outfall discharging effluent to waters of the United States.)

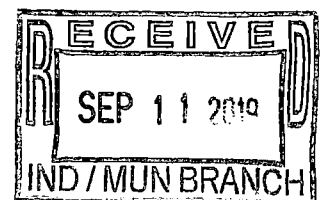
POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
FLUORENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
HEXACHLOROBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012
HEXACHLOROBUTADIENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
HEXACHLOROCYCLO-PENTADIENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0095
HEXACHLOROETHANE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
INDENO(1,2,3-CD)PYRENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0012
ISOPHORONE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
NAPHTHALENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
NITROBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625.00	.0024
N-NITROSODI-N-PROPYLAMINE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
N-NITROSODI- METHYLAMINE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
N-NITROSODI-PHENYLAMINE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
PHENANTHRENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
PYRENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024
1,2,4-TRICHLOROBENZENE	0	mg/l	0	lbs/dy	0	mg/l	0	lbs/dy	3	625	.0024

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

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

END OF PART D.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE



FACILITY NAME AND PERMIT NUMBER:
TUSKEGEE NORTH WPCP AL0048763

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

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests. Test Summaries are included in lieu of Part E.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ____ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: _____ Test number: _____ Test number: _____

a. Test information.

Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

b. Give toxicity test methods followed.

Manual title			
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection			
After dechlorination			

FACILITY NAME AND PERMIT NUMBER:
TUSKEGEE NORTH WPCP AL0048763

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Test number: _____ Test number: _____ Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

Salinity

Temperature

Ammonia

Dissolved oxygen

l. Test Results.

Acute:

Percent survival in 100%
effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

FACILITY NAME AND PERMIT NUMBER:
TUSKEGEE NORTH WPCP AL0048763

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Chronic:			
NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

____ Yes ____ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

SUPPLEMENTAL APPLICATION INFORMATION**PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES**

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

☒ Yes ☐ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 2.00

b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: adient

Mailing Address: 2541 7th street south clanton al 35046

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

metal finishing operations

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): metal frames for electrical seats for auto industry

Raw material(s): metals, acids for cleaning parts

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

13,500.00 gpd (☐ continuous or ☒ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

5,000.00 gpd (☐ continuous or ☒ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☒ Yes ☐ No

b. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

FACILITY NAME AND PERMIT NUMBER:

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OMB Number 2040-0086

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

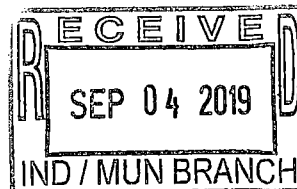
Yes ☒ No ☐ If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? Yes ☒ No (go to F.12.) ☐

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

____ Truck ____ Rail ____ Dedicated Pipe



F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number

Amount

Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____ Yes (complete F.13 through F.15.) ____ No ☒

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment:

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____ Yes ____ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

____ Continuous ____ Intermittent If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

AL0054631 walnut creek wwtp

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

☒ Yes ☐ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 2.00

b. Number of CIUs.

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: oflex

Mailing Address: 725 keystone drive clanton al 35045

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

metal finishing operations

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): anodizing of various metal parts

Raw material(s): metals, acids for cleaning parts

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

90,000.00 gpd (☐ continuous or ☒ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

5,000.00 gpd (☐ continuous or ☒ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☒ Yes ☐ No

b. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

FACILITY NAME AND PERMIT NUMBER:

AL0054631 walnut creek wwtp

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F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☒ Yes ☐ No

If yes, describe each episode.

nickel,copper,nitrafaction issues,foaming problems, and nickel in sludge

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ☐ Yes ☒ No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

☐ Truck☐ Rail☐ Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste NumberAmountUnits

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.)☒ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous☐ Intermittent

If intermittent, describe discharge schedule.

END OF PART F.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION**PART G. COMBINED SEWER SYSTEMS****If the treatment works has a combined sewer system, complete Part G.****G.1. System Map.** Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

CSO OUTFALLS:**Complete questions G.3 through G.6 once for each CSO discharge point.****G.3. Description of Outfall.**

- Outfall number n/a
- Location
(City or town, if applicable) _____ (Zip Code) _____
(County) _____ (State) _____
(Latitude) _____ (Longitude) _____
- Distance from shore (if applicable) _____ ft.
- Depth below surface (if applicable) _____ ft.
- Which of the following were monitored during the last year for this CSO?
____ Rainfall ____ CSO pollutant concentrations ____ CSO frequency
____ CSO flow volume ____ Receiving water quality
- How many storm events were monitored during the last year? _____

G.4. CSO Events.

- Give the number of CSO events in the last year.
_____ events (____ actual or ____ approx.)
- Give the average duration per CSO event.
_____ hours (____ actual or ____ approx.)

FACILITY NAME AND PERMIT NUMBER:

AL0054631 walnut creek wwtp

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- c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

- d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

- a. Name of receiving water:
- n/a

- b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

- c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

n/a**END OF PART G.**

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

Year 2015

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY**

1. GENERAL:

NPDES PERMIT NO.: AL0054631 DSN: 001 COUNTY: Chilton
 Permittee: The City of Clanton
 Facility Name: Walnut Creek WWTP
 Agent submitting Report: Mr. Anthony Kelly
 Lab Conducting Toxicity Test(s): Auburn Environmental Consulting and Testing
 Months To Test: November
 This Report for Toxicity Test(s) Required for the Month of: November
 Scheduled Test(s): Yes X No Accelerated Test(s): Yes No X
 Accelerated Test Number of For Failed Scheduled Test Date:
 Test Type Required: 48-Hr Acute Screening: -Hr Acute Definitive:
Short-term Chronic Screening: X Short-term Chronic Definitive:
 Test Organism: Pimephales promelas Test Organism: Ceriodaphnia dubia

Sam No.	Date/Time MM/DD/YY	Start	Date/Time Ended	Control Valid	Date/Time MM/DD/YY	Start	Date/Time Ended	Control Valid
1	11/03/15	1200hr	11/10/15 1100hr	yes	11/03/15	1300hr	11/09/15 1400hr	yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number											
		(1)			(2)			(3)			(4)		
P.p.	75%	Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro
C.d.	75%	Pass	N/A	Pass									

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	BOD5 mg/L	TSS mg/L	NH3 mg/L	pH mg/L	Alk mg/L	Hard mg/L	TRC mg/L	TDS mg/L	Cond. (µmho/cm)
1	N/A	3.0	0.3	7.22	56	21	<0.01	N/A	531.0
2	N/A	0.4	<0.1	7.45	76	24	<0.01	N/A	423.1
3	N/A	1.4	0.2	7.63	78	24	<0.01	N/A	446.4

Municipal Facilities Only

Sample ID	Arsenic (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Lead (µg/L)	Hexav. Chromium (µg/L)
Sample ID	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Tot. Cyanide (µg/L)	Other(s) (µg/L)

Chemical Analysis Performed By (LAB): ACT

Instantaneous Flow: (1) GPM
 Total 24-Hour Flow: (1) 1.453 MGD (2) 1.265 MGD (3) 1.255 MGD

Comments:

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

SIGNATURE OF RESPONSIBLE OFFICIAL:  DATE: 12-7-15

ADEM 465 8-02

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes _____ (explain) _____

Samples Collected as Specified in the NPDES Permit: Yes X No (explain) _____

Receiving Water: Walnut Creek Design Flow: 2.25 (MGD)

Sample ID	Sample(s) Collected				Arrival Temp (°C)	Used in Test(s)	
	MM/DD/YY	HHMM	-	MM/DD/YY HHMM		MM/DD/YY	- MM/DD/YY
CN-73-1	11/01/15	0730hr	-	11/02/15 0730hr	4.0	11/03/15	- 11/04/15
CN-73-2	11/03/15	0730hr	-	11/04/15 0730hr	4.0	11/05/15	- 11/06/15
CN-73-3	11/05/15	0730hr	-	11/06/15 0730hr	4.0	11/07/15	- 11/10/15

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
MHRW	10/26/15	11/03/15	86	70	7.89	278.0	25

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)				
Pp	<24 Hours	Aquatox	75%				
Cd	<24 Hours	Auburn Environmental	75%				

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Glass Beaker	600	250	15	4
Cd	Plastic Cup	30	15	1	10

Test Species	Temp. Range (°C)	D.O. Range (mg/L)	pH Range (mg/L)	Light Intensity Avg. (ft-c)
Pp	24.5 - 25.0	3.1 - 8.0	7.28 - 7.56	89.9
Cd	24.5 - 25.0	7.8 - 8.1	7.20 - 7.73	89.9

7. FEEDING:

Not Fed: _____ Fed Daily: X Fed Irregular: _____ (Explain in comments below)

Brine Shrimp: Fed 0.15 mL Suspension of Newly Hatched Larvae 2 Times Daily.
 YCT: Fed 0.1 mL Suspension Containing 1.9 mg/L TSS Daily.
 Algae: Fed 0.1 mL Suspension Containing 3.5 X 10⁷ Algal Cells/mL Daily.

COMMENTS: Temperature range obtained from min/max thermometer.

Facility Name: Walnut Creek WWTP NPDES #: AL0054631 DSN: 001 Date: 11/03/15

8. REFERENCE TOXICANT TESTS:

Toxicant: Sodium Chloride Source: Fisher Scientific CAS#: 7647-14-5

Solution concentration unit: mg/L g/L X % other (specify):

Test	Test Date	Control	Reference Test Solution Concentrations						
Pp	10/13/15	MHRW	1.0	1.5	2.0	2.5	3.0		
Cd	10/13/15	MHRW	0.5	0.75	1.0	1.25	1.5		

Test	Results	95% Confidence Interval	Upper and Lower CUSUM Chart Control	Number
Pp				
Cd				

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:

9.B. Test Solution Manipulations or Test Modifications:

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

Reference test data submitted to ADEM Field Toxics Unit. Summary sheet attached.

11.C. CHRONIC SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Ceriodaphnia dubia*

Were Neonates Used to Begin the Test Within 8 Hours of the Same Age?: Yes: X No:

Did 60% of the CONTROL Females Produce Their Third Brood?: Yes: X No:

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY:

CONTROL(%) 24h 100 48h 100 END 100 EFFLUENT(%) 24h 100 48h 100 END 100
Fishers Exact Test A = B = a = b =

REPRODUCTION (Average Neonates/Female)

CHRONIC TOXICITY INDICATED: YES NO X

NO REPRODUCTION STATISTICAL ANALYSIS NECESSARY: X

CONTROL: 18.4 EFFLUENT: 23.0

Normally Distributed: YES NO

Test Statistic: Critical Value: 0.868 (Parametric)

Equal variance: Unequal variance:

F Statistic: Critical F: 5.35

t - Test Statistic: t - Test Critical Value: 1.735

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

COMMENTS:

TEST ORGANISM: *Pimephales promelas*

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY: X

CONTROL(%) 24h 100 48h 95.0 END 93.3 EFFLUENT(%) 24h 100 48h 96.7 END 95.0

Normally Distributed: YES NO

Test Statistic: Critical Value: 0.749 (Parametric)

Equal variance: Unequal variance: X

F Statistic: Critical F: 29.5

t - Test Statistic: t - Test Critical Value: 1.94

Sample Rank Sum: # Reps.: 4 Critical Rank Sum: 11 (Non - Parametric)

GROWTH (Mean Dry Weight - mg)

CHRONIC TOXICITY INDICATED: YES NO X

NO GROWTH STATISTICAL ANALYSIS NECESSARY: X

CONTROL: 0.44633 EFFLUENT: 0.52863

Normally Distributed: YES X NO

Test Statistic: Critical Value: 0.749 (Parametric)

Equal variance: Unequal variance:

F Statistic: Critical F: 29.5

t - Test Statistic: t - Test Critical Value: 1.94

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

COMMENTS:



WATER CHEMISTRY DATA SHEET

STUDY NUMBER: _____

DILUTION LOT#: 659

SAMPLE ID: _____	SAMPLE ID: _____	SAMPLE ID: _____
DATE COLLECTED: <u>2/20/15</u>	DATE COLLECTED: _____	DATE COLLECTED: _____
DATE ANALYZED: <u>1/20/15</u>	DATE ANALYZED: _____	DATE ANALYZED: _____
<div>D.O. (MG/L) _____</div> <div>pH (S.U.) <u>7.89</u> <u>AB</u></div> <div>(MVOLTS/ NH₃ (MG/L) _____</div> <div>CONDUCTIVITY <u>278.0</u> <u>AB</u> (UMHOS/CM)</div>	<div>D.O. (MG/L) _____</div> <div>pH (S.U.) _____</div> <div>(MVOLTS/ NH₃ (MG/L) _____</div> <div>CONDUCTIVITY _____ (UMHOS/CM)</div>	<div>D.O. (MG/L) _____</div> <div>pH (S.U.) _____</div> <div>(MVOLTS/ NH₃ (MG/L) _____</div> <div>CONDUCTIVITY _____ (UMHOS/CM)</div>
<div>CHLORINE (MG/L)</div> <div>DATE ANALYZED: _____</div> <div>READING 1: _____</div> <div>READING 2: * _____</div> <div>DIFFERENCE: _____</div> <div>ANALYST _____</div>	<div>CHLORINE (MG/L)</div> <div>DATE ANALYZED: _____</div> <div>READING 1: _____</div> <div>READING 2: * _____</div> <div>DIFFERENCE: _____</div> <div>ANALYST _____</div>	<div>CHLORINE (MG/L)</div> <div>DATE ANALYZED: _____</div> <div>READING 1: _____</div> <div>READING 2: * _____</div> <div>DIFFERENCE: _____</div> <div>ANALYST _____</div>
<div>HARDNESS (50 mL SAMPLE)</div> <div>mL TITRANT <u>8.6</u> x10 = <u>86</u> MG/L CaCO₃</div> <div>ANALYST <u>AB</u></div>	<div>HARDNESS (50 mL SAMPLE)</div> <div>mL TITRANT _____ x10 = _____ MG/L CaCO₃</div> <div>ANALYST _____</div>	<div>HARDNESS (50 mL SAMPLE)</div> <div>mL TITRANT _____ x10 = _____ MG/L CaCO₃</div> <div>ANALYST _____</div>
<div>ALKALINITY (50 mL SAMPLE)</div> <div>mL TITRANT <u>3.5</u> x20 = <u>70</u> MG/L CaCO₃</div> <div>ANALYST <u>AB</u></div>	<div>ALKALINITY (50 mL SAMPLE)</div> <div>mL TITRANT _____ x20 = _____ MG/L CaCO₃</div> <div>ANALYST _____</div>	<div>ALKALINITY (50 mL SAMPLE)</div> <div>mL TITRANT _____ x20 = _____ MG/L CaCO₃</div> <div>ANALYST _____</div>
<div>TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: _____ mL)</div> <div>PAPER+SOLIDS _____ GRAMS</div> <div>PAPER WEIGHT _____ GRAMS</div> <div>DIFFERENCE _____ GRAMS</div> <div>MULTIPLIER _____</div> <div>T.S.S. IN MG/L _____</div> <div>ANALYST _____</div>	<div>TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: _____ mL)</div> <div>PAPER+SOLIDS _____ GRAMS</div> <div>PAPER WEIGHT _____ GRAMS</div> <div>DIFFERENCE _____ GRAMS</div> <div>MULTIPLIER _____</div> <div>T.S.S. IN MG/L _____</div> <div>ANALYST _____</div>	<div>TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: _____ mL)</div> <div>PAPER+SOLIDS _____ GRAMS</div> <div>PAPER WEIGHT _____ GRAMS</div> <div>DIFFERENCE _____ GRAMS</div> <div>MULTIPLIER _____</div> <div>T.S.S. IN MG/L _____</div> <div>ANALYST _____</div>

* = dechlorinated with 7 mg/L sodium thiosulfate per 1 mg/L chlorine (reading 1)

UNLESS OTHERWISE INDICATED, THESE DATA WERE COLLECTED IN ACCORDANCE WITH SOP #'S

276	277	292	290
275	293	291	295



WATER CHEMISTRY DATA SHEET

STUDY NUMBER: 275DILUTION LOT#: 659

SAMPLE ID: <u>128466</u>	SAMPLE ID: <u>128513</u>	SAMPLE ID: <u>128525</u>
DATE COLLECTED: <u>02Nov15</u>	DATE COLLECTED: <u>04Nov15</u>	DATE COLLECTED: <u>06Nov15</u>
DATE ANALYZED: <u>05Nov15</u>	DATE ANALYZED: <u>10Nov15</u>	DATE ANALYZED: <u>10Nov15</u>
ANALYST	ANALYST	ANALYST
D.O. (MG/L)	D.O. (MG/L)	D.O. (MG/L)
pH (S.U.) <u>7.22</u> <u>AB</u>	pH (S.U.) <u>7.45</u> <u>AB</u>	pH (S.U.) <u>7.63</u> <u>AB</u>
(MVOLTS/ NH ₃ (MG/L)) <u>170/0.3</u> <u>AB</u>	(MVOLTS/ NH ₃ (MG/L)) <u>194/0.1</u> <u>AB</u>	(MVOLTS/ NH ₃ (MG/L)) <u>176/0.2</u> <u>AB</u>
CONDUCTIVITY <u>531</u> <u>AB</u> (UMHOS/CM)	CONDUCTIVITY <u>423.1</u> <u>AB</u> (UMHOS/CM)	CONDUCTIVITY <u>446.4</u> <u>AB</u> (UMHOS/CM)
CHLORINE (MG/L)	CHLORINE (MG/L)	CHLORINE (MG/L)
DATE ANALYZED: <u>03Nov15</u>	DATE ANALYZED: <u>05Nov15</u>	DATE ANALYZED: <u>07Nov15</u>
READING 1: <u>60.01 mg/L</u>	READING 1: <u>60.01 mg/L</u>	READING 1: <u>60.01 mg/L</u>
READING 2: <u> </u>	READING 2: <u> </u>	READING 2: <u> </u>
DIFFERENCE: <u> </u>	DIFFERENCE: <u> </u>	DIFFERENCE: <u> </u>
ANALYST <u>AB</u>	ANALYST <u>AB</u>	ANALYST <u>AB</u>
HARDNESS (50 mL SAMPLE)	HARDNESS (50 mL SAMPLE)	HARDNESS (50 mL SAMPLE)
mL TITRANT <u>2.1</u> x10 = <u>21</u> MG/L CaCO ₃	mL TITRANT <u>2.4</u> x10 = <u>24</u> MG/L CaCO ₃	mL TITRANT <u>2.4</u> x10 = <u>24</u> MG/L CaCO ₃
ANALYST <u>AB</u>	ANALYST <u>AB</u>	ANALYST <u>AB</u>
ALKALINITY (50 mL SAMPLE)	ALKALINITY (50 mL SAMPLE)	ALKALINITY (50 mL SAMPLE)
mL TITRANT <u>2.8</u> x20 = <u>56</u> MG/L CaCO ₃	mL TITRANT <u>3.8</u> x20 = <u>76</u> MG/L CaCO ₃	mL TITRANT <u>3.9</u> x20 = <u>78</u> MG/L CaCO ₃
ANALYST <u>AB</u>	ANALYST <u>AB</u>	ANALYST <u>AB</u>
TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: <u>500</u> mL)	TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: <u>500</u> mL)	TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: <u>500</u> mL)
PAPER+SOLIDS <u>0.1280</u> GRAMS	PAPER+SOLIDS <u>0.1307</u> GRAMS	PAPER+SOLIDS <u>0.1309</u> GRAMS
PAPER WEIGHT <u>0.1265</u> GRAMS	PAPER WEIGHT <u>0.1305</u> GRAMS	PAPER WEIGHT <u>0.1302</u> GRAMS
DIFFERENCE <u>0.0015</u> GRAMS	DIFFERENCE <u>0.0002</u> GRAMS	DIFFERENCE <u>0.0007</u> GRAMS
MULTIPLIER <u>2</u>	MULTIPLIER <u>2</u>	MULTIPLIER <u>2</u>
T.S.S. IN MG/L <u>3.0</u>	T.S.S. IN MG/L <u>0.4</u>	T.S.S. IN MG/L <u>1.4</u>
ANALYST <u>AB</u>	ANALYST <u>AB</u>	ANALYST <u>AB</u>

* = dechlorinated with 7 mg/L sodium thiosulfate per 1 mg/L chlorine (reading 1)

UNLESS OTHERWISE INDICATED, THESE DATA WERE COLLECTED IN ACCORDANCE WITH SOP #'S

276	277	292	290
275	293	291	295



6485 Lee Road 54
Auburn, AL 36801
800 662-1584

7 DAY FATHEAD MINNOW TOXICITY TEST
(continued)

PROJECT No.: 275-074
BEGINNING DATE: 03 NOV 15
CLIENT: CLANTON WALNUT CREEK WWTP

TEST SEQUENCE
~~INITIAL TEST~~
FIRST RETEST
SECOND RETEST

75.0 IWC. %

TEST HOUR	TEST CHAMBER				pH	DO mg/l	TEMP °C	FED ORGANISMS		INITIALS TIME	NOTES AND OBSERVATIONS
	1	2	3	4				am	pm		
START	15	15	15	15	7.28	8.0	25.0		1400	12:20	All Normal
24	15	15	15	15	7.33 7.43	6.2 2.9	25.0 25.0	0200	1600	11:00	All normal
48	13	15	15	15	7.47 7.45	5.2 6.7	25.0 25.0	0200	1600	11:00	All <i>normal</i>
72	13	15	14	15	7.38 7.51	3.4 2.0	25.0 25.0	0200	1600	11:00	All <i>normal</i>
96	13	15	14	15	7.41 7.52	3.1 2.0	25.0 25.0	0200	1600	11:00	All <i>normal</i>
120	13	15	14	15	7.40 7.56	3.2 6.9	25.0 25.0	0200	1500	11:00	All <i>normal</i>
144	13	15	14	15	7.43 7.47	4.9 2.6	25.0 25.0	0200	1600 AB	11:00	All <i>normal</i>
168	13	15	14	15	7.53	7.1	25.0			11:00	

100% EFFLUENT

DAYS	1	2	3	4	5	6	7
pH	7.34	7.69	7.83	7.79	7.84	7.86	7.94



6485 Lee Road 54
Auburn, AL 36801
800 662-1584

Page 2 of 2

PROJECT No.: 275-074
BEGINNING DATE: 03 NOV 15
CLIENT: CLANTON WALNUT CREEK WWTP

3 BROOD CERIODAPHNIA TOXICITY TEST
(continued)

TEST SEQUENCE
INITIAL TEST
FIRST RETEST
SECOND RETEST

**1 = ALIVE 0 = DEAD
** 1/1 = 1 ADULT, 1 NEONATE
** M = MISSING

75.0 % I.W.C

TEST HOUR	TEST CHAMBER**										LIVE ADULTS	pH	DO mg/l	TEMP °C	FED	SOLUTIONS	INITIALS	NOTES AND OBSERVATIONS
	1	2	3	4	5	6	7	8	9	10					ORGANISMS	RENEWED	TIME	
START	1	1	1	1	1	1	1	1	1	1	10	7.30	8.0	25.0	YES		3/12/15	All Normal
24	1	1	1	1	1	1	1	1	1	1	10	7.29 7.62	8.1 7.1	25.0 25.0	✓	✓	3/14/15	All Normal
48	1	1	1	1	1	1	1	1	1	1	10	7.56 7.72	8.0 7.9	25.0 25.0	✓	✓	3/14/15	All Normal
72	1/5	1/3	1/4	1/4	1/3	1/4	1/3	1/3	1/3	1/4	10	7.60 7.70	8.1 7.9	25.0 25.0	✓	✓	3/14/15	All Normal
96	1/8	1/9	1/8	1	1/7	1/9	1/7	1/8	1/10	1/8	10	7.57 7.71	8.1 7.8	25.0 25.0	✓	✓	3/14/15	All Normal
120	1	1	1	1	1	1	1	1	1	1	10	7.58 7.73	8.1 7.7	25.0 25.0	✓	✓	3/14/15	All Normal
144	1/12	1/13	1/15	1/10	1/16	1/12	1/14	1/12	1/14	1/12	10	7.67	7.8	25.0			3/15/15	All Normal
168																		
192																		
TOTAL NEONATES	25	15	27	14	26	25	24	23	27	24								

$\bar{X} = 23.0$

100% EFFLUENT

DAYS	1	2	3	4	5	6	7
pH	7.34	7.69	7.88	7.79	7.84	7.86	7.84

NOTES AND OBSERVATIONS

ACT PROJECT NO.: 275-073
STUDY: NPDESCLIENT: CITY OF CLANTON
SITE: CLANTON WWTP
PERMIT#: AL0054631TRANSFER TO: AUBURN ENVIRONMENTAL
6485 LEE ROAD 54
AUBURN, AL 36830
(334) 745-0055MATRIX: (circle one) LIQUID SOLID

SAMPLE LAB USE ONLY	ANALYSIS, MEASUREMENT	DATE COLLECTED	TIME COLLECTED	PERSON COLLECTING
128466	TOX: PRESERVED 4°C FLOW: 1.640 453 MG 128466	11-2-15	7:30 AM	D. Puckett

WERE SAMPLES PLACED ON ICE/IN REFRIGERATOR IMMEDIATELY AFTER SAMPLING YES NO

INFORMATION ON COMPOSITE SAMPLE(S):

- DATE AND TIME OF FIRST SUBSAMPLE: 11-1-15 7:30 AM
- DATE AND TIME OF LAST SUBSAMPLE: 11-2-15 7:30 AM
- FREQUENCY OF SUBSAMPLE COLLECTIONS 60 MINUTES
- APPROXIMATE QUANTITY OF SUBSAMPLES: 250 circle one
(mls, ounces, gallons)

SAMPLE CHAIN OF CUSTODY

		COURIER	
		YES	NO
TRANSFERRED BY: X		DATE/TIME: 11/2/15 1300	<input checked="" type="checkbox"/>
RECEIVED BY: X		DATE/TIME:	
TRANSFERRED BY: X		DATE/TIME: 2 NOV 15 100	<input checked="" type="checkbox"/>
RECEIVED BY: X		DATE/TIME: 2 NOV 15 1530	<input checked="" type="checkbox"/>

PLEASE DO NOT WRITE BELOW THIS LINE

TEMPERATURE OF SAMPLES WHEN REC'D BY LAB: 0.2 °C

SAMPLES STORED IN REFRIGERATOR ID#: 267 THERMOMETER ID#: 451

SHIPPED BY: NT TRACKING #: NAAECT BOTTLES: YES NO



ACT PROJECT NO.: 275-073
STUDY: NPDES

CLIENT: CITY OF CLANTON
SITE: CLANTON WWTP
PERMIT#: AL0054631

TRANSFER TO: AUBURN ENVIRONMENTAL
6485 LEE ROAD 54
AUBURN, AL 36830
(334) 745-0055

MATRIX: (circle one) LIQUID SOLID

SAMPLE# LAB USE ONLY	ANALYSIS, MEASUREMENT	DATE COLLECTED	TIME COLLECTED	PERSON COLLECTING
128513	TOX: PRESERVED 4°C FLOW: 1,265 MGs	11-4-15	7:30AM	D. Puckett

WERE SAMPLES PLACED ON ICE/IN REFRIGERATOR IMMEDIATELY AFTER SAMPLING YES NO

INFORMATION ON COMPOSITE SAMPLE(S):

1. DATE AND TIME OF FIRST SUBSAMPLE: 11-3-15 7:30AM
2. DATE AND TIME OF LAST SUBSAMPLE: 11-4-15 7:30AM
3. FREQUENCY OF SUBSAMPLE COLLECTIONS 60 MINUTES
4. APPROXIMATE QUANTITY OF SUBSAMPLES: 250 circle one
(mls, ounces, gallons)

SAMPLE CHAIN OF CUSTODY:

			COURIER YES <u>NO</u>
TRANSFERRED BY: X <u>[Signature]</u>	DATE/TIME: <u>11-4-15-1300</u>		
RECEIVED BY: X <u>[Signature]</u>	DATE/TIME: <u></u>		
TRANSFERRED BY: X <u>[Signature]</u>	DATE/TIME: <u>4/15/15 100</u>		X
RECEIVED BY: X <u>[Signature]</u>	DATE/TIME: <u>4/15/15 1500</u>		X

PLEASE DO NOT WRITE BELOW THIS LINE

TEMPERATURE OF SAMPLES WHEN REC'D BY LAB: 0.1 °C

SAMPLES STORED IN REFRIGERATOR ID#: 267 THERMOMETER ID#: 457

SHIPPED BY: NA TRACKING #: NA

AECT BOTTLES: YES NO



ACT PROJECT NO.: 275-073
STUDY: NPDES

CLIENT: CITY OF CLANTON
SITE: CLANTON WWTP
PERMIT#: AL0054631

TRANSFER TO: AUBURN ENVIRONMENTAL
6485 LEE ROAD 54
AUBURN, AL 36830
(334) 745-0055

MATRIX: (circle one) LIQUID SOLID

SAMPLE/ LAB USE ONLY	ANALYSIS, MEASUREMENT	DATE COLLECTED	TIME COLLECTED	PERSON COLLECTING
128525	TOX: PRESERVED 4°C FLOW: 1.255 MGD	11-6-15	7:30 AM	D. Puckett

WERE SAMPLES PLACED ON ICE/IN REFRIGERATOR IMMEDIATELY AFTER SAMPLING YES NO

INFORMATION ON COMPOSITE SAMPLE(S):

1. DATE AND TIME OF FIRST SUBSAMPLE: 11-5-15 7:30 AM
2. DATE AND TIME OF LAST SUBSAMPLE: 11-6-15 7:30 AM
3. FREQUENCY OF SUBSAMPLE COLLECTIONS 60 MINUTES
4. APPROXIMATE QUANTITY OF SUBSAMPLES: 250 (circle one) (mls, ounces, gallons)

SAMPLE CHAIN OF CUSTODY:

TRANSFERRED BY: X [Signature]

DATE/TIME: 11-6-15

COURIER
YES NO

RECEIVED BY: X [Signature]

DATE/TIME: _____

TRANSFERRED BY: X [Signature]

DATE/TIME: 6 Nov 15 100

RECEIVED BY: X [Signature]

DATE/TIME: 6 Nov 15 1315

PLEASE DO NOT WRITE BELOW THIS LINE

TEMPERATURE OF SAMPLES WHEN REC'D BY LAB: 03 °C

SAMPLES STORED IN REFRIGERATOR ID#: 207 THERMOMETER ID#: 451

SHIPPED BY: NA TRACKING #: NA

AECT BOTTLES: YES NO

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY

Year 2016

1. GENERAL:

NPDES PERMIT NO.: AL0054631 DSN: 001 COUNTY: Chilton
 Permittee: The City of Clanton
 Facility Name: Walnut Creek WWTP
 Agent submitting Report: Mr. Anthony Kelly
 Lab Conducting Toxicity Test(s): Auburn Environmental Consulting and Testing
 Months To Test: November
 This Report for Toxicity Test(s) Required for the Month of: November
 Scheduled Test(s): Yes X No Accelerated Test(s): Yes No X
 Accelerated Test Number of For Failed Scheduled Test Date:
 Test Type Required: 48-Hr Acute Screening: -Hr Acute Definitive:
 Short-term Chronic Screening: X Short-term Chronic Definitive:

Test Organism: Pimephales promelas

Test Organism: Ceriodaphnia dubia

Sam No.	Date/Time MM/DD/YY	Start	Date/Time Ended	Control Valid	Date/Time MM/DD/YY	Start	Date/Time Ended	Control Valid
1	11/01/16	1518hr	11/08/16 1359hr	yes	11/01/16	1400hr	11/07/16 1400hr	yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number											
		(1)			(2)			(3)			(4)		
		Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro
P.p.	75%	Pass	N/A	Pass									
C.d.	75%	Pass	Pass	N/A									

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	BOD5 mg/L	TSS mg/L	NH3 mg/L	pH mg/L	Alk mg/L	Hard mg/L	TRC mg/L	TDS mg/L	Cond. (µmho/cm)
1	N/A	2.0	0.1	7.54	58	23	<0.01	N/A	265.6
2	N/A	1.6	0.3	7.51	60	25	<0.01	N/A	301.0
3	N/A	2.4	0.2	7.62	58	26	<0.01	N/A	313.9

Municipal Facilities Only

Sample ID	Arsenic (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Lead (µg/L)	Hexav. Chromium (µg/L)
Sample ID	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Tot. Cyanide (µg/L)	Other(s) (µg/L)

Chemical Analysis Performed By (LAB): ACT

Instantaneous Flow: (1) GPM
 Total 24-Hour Flow: (1) 0.992 MGD (2) 0.999 MGD (3) 0.813 MGD

Comments:

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

SIGNATURE OF RESPONSIBLE OFFICIAL: _____ DATE: _____

ADEM 465 8-02

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes _____ (explain) _____

Samples Collected as Specified in the NPDES Permit: Yes X No (explain) _____

Receiving Water: Walnut Creek Design Flow: 2.25 (MGD)

Sample ID	Sample(s) Collected				Arrival Temp (°C)	Used in Test(s)	
	MM/DD/YY	HHMM	-	MM/DD/YY HHMM		MM/DD/YY	- MM/DD/YY
CN-75-1	10/30/16	0800hr		10/31/16 0730hr	4.0	11/01/16	- 11/02/16
CN-75-2	11/01/16	0800hr		11/02/16 0730hr	4.0	11/03/16	- 11/04/16
CN-75-3	11/03/16	0800hr		11/04/16 0730hr	4.0	11/05/16	- 11/08/16

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
MHRW	10/27/16	11/01/16	89	56	7.73	212.8	25

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)				
Pp	<24 Hours	Aquatox	75%				
Cd	<24 Hours	Auburn Environmental	75%				

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Glass Beaker	600	250	15	4
Cd	Plastic Cup	30	15	1	10

Test Species	Temp. Range (°C)	D.O. Range (mg/L)	pH Range (mg/L)	Light Intensity Avg. (ft-c)
Pp	24.5 - 25.0	2.7 - 8.3	7.06 - 7.59	98.4
Cd	24.5 - 25.0	7.5 - 8.0	7.53 - 7.79	98.4

7. FEEDING:

Not Fed: _____ Fed Daily: X Fed Irregular: _____ (Explain in comments below)

Brine Shrimp: Fed 0.15 mL Suspension of Newly Hatched Larvae 2 Times Daily.
 YCT: Fed 0.1 mL Suspension Containing 1.9 mg/L TSS Daily.
 Algae: Fed 0.1 mL Suspension Containing 3.5 X 10⁷ Algal Cells/mL Daily.

COMMENTS: Temperature range obtained from min/max thermometer.

Facility Name: Walnut Creek WWTP NPDES #: AL0054631 DSN: 001 Date: 11/01/16

8. REFERENCE TOXICANT TESTS:

Toxicant: Sodium Chloride Source: Fisher Scientific CAS#: 7647-14-5

Solution concentration unit: mg/L g/L X % other (specify):

Test	Test Date	Control	Reference Test Solution Concentrations						
Pp	10/18/16	MHRW	1.0	1.5	2.0	2.5	3.0		
Cd	10/18/16	MHRW	0.5	0.75	1.0	1.25	1.5		

Test	Results	92% Confidence Interval	Upper and Lower CUSUM Chart Control	Number
Pp				
Cd				

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:

9.B. Test Solution Manipulations or Test Modifications:

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

Reference test data submitted to ADEM Field Toxics Unit. Summary sheet attached.

Facility Name: Walnut Creek WWTP NPDES #: AL0054631 DSN: 001 Date: 11/01/16

11.C. CHRONIC SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Ceriodaphnia dubia*

Were Neonates Used to Begin the Test Within 8 Hours of the Same Age?: Yes: X No:

Did 60% of the CONTROL Females Produce Their Third Brood?: Yes: X No:

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY: X

CONTROL(%) 24h 100 48h 100 END 100 EFFLUENT(%) 24h 100 48h 100 END 100

Fishers Exact Test: A = B = a = b =

REPRODUCTION (Average Neonates/Female)

CHRONIC TOXICITY INDICATED: YES NO X

NO REPRODUCTION STATISTICAL ANALYSIS NECESSARY: X

CONTROL: 18.2 EFFLUENT: 21.4

Normally Distributed: YES NO

Test Statistic: Critical Value: 0.868 (Parametric)

Equal variance: Unequal variance:

F Statistic: Critical F: 5.35

t - Test Statistic: t - Test Critical Value: 1.735

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

COMMENTS:

TEST ORGANISM: *Pimephales promelas*

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY: X

CONTROL(%) 24h 100 48h 98.3 END 98.3 EFFLUENT(%) 24h 100 48h 100 END 100

Normally Distributed: YES NO

Test Statistic: Critical Value: 0.749 (Parametric)

Equal variance: Unequal variance: X

F Statistic: Critical F: 29.5

t - Test Statistic: t - Test Critical Value: 1.94

Sample Rank Sum: # Reps.: 4 Critical Rank Sum: 11 (Non - Parametric)

GROWTH (Mean Dry Weight - mg)

CHRONIC TOXICITY INDICATED: YES NO X

NO GROWTH STATISTICAL ANALYSIS NECESSARY: X

CONTROL: 0.52267 EFFLUENT: 0.56900

Normally Distributed: YES NO

Test Statistic: Critical Value: 0.749 (Parametric)

Equal variance: Unequal variance:

F Statistic: Critical F: 29.5

t - Test Statistic: t - Test Critical Value: 1.94

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

COMMENTS:

ACT PROJECT NO.: 275-075
STUDY: NPDESCLIENT: CITY OF CLANTON
SITE: CLANTON WWTP
PERMIT#: AL0054631TRANSFER TO: AUBURN ENVIRONMENTAL
6485 LEE ROAD 54
AUBURN, AL 36830
(334) 745-0055

MATRIX: (circle one) LIQUID SOLID

SAMPLE# LAB USE ONLY	ANALYSIS, MEASUREMENT	DATE COLLECTED	TIME COLLECTED	PERSON COLLECTING
131733	TOX: PRESERVED 4°C FLOW: 0.922 MGD	10-31-16	7:30AM	Tim

WERE SAMPLES PLACED ON ICE/IN REFRIGERATOR IMMEDIATELY AFTER SAMPLING YES NO

INFORMATION ON COMPOSITE SAMPLE(S):

1. DATE AND TIME OF FIRST SUBSAMPLE: 10-30-16 8:00
2. DATE AND TIME OF LAST SUBSAMPLE: 10-31-16 7:30
3. FREQUENCY OF SUBSAMPLE COLLECTIONS 60 MINUTES
4. APPROXIMATE QUANTITY OF SUBSAMPLES: 400 (circle one) (mls, ounces, gallons)

SAMPLE CHAIN OF CUSTODY:

			COURIER	
			YES	NO
TRANSFERRED BY: X <u>[Signature]</u>	DATE/TIME: <u>10/31/16 131</u>			<input checked="" type="checkbox"/>
RECEIVED BY: X <u>[Signature]</u>	DATE/TIME: <u> </u>			
TRANSFERRED BY: X <u>[Signature]</u>	DATE/TIME: <u>31 OCT 16 111</u>			<input checked="" type="checkbox"/>
RECEIVED BY: X <u>[Signature]</u>	DATE/TIME: <u>31 OCT 16 330</u>			<input checked="" type="checkbox"/>

PLEASE DO NOT WRITE BELOW THIS LINE

TEMPERATURE OF SAMPLES WHEN REC'D BY LAB: 24 °CSAMPLES STORED IN REFRIGERATOR ID#: 267 THERMOMETER ID#: 451SHIPPED BY: RA TRACKING #: MTAECT BOTTLES: YES NO

ACT PROJECT NO.: 273-073
STUDY: NPDESCLIENT: CITY OF CLANTON
SITE: CLANTON WWTP
PERMIT#: AL0054631TRANSFER TO: AUBURN ENVIRONMENTAL
6485 LEE ROAD 54
AUBURN, AL 36830
(334) 745-0055MATRIX: (circle one) LIQUID SOLID

SAMPLE# LAB USE ONLY	ANALYSIS, MEASUREMENT	DATE COLLECTED	TIME COLLECTED	PERSON COLLECTING
13/774	TOX: PRESERVED 4°C FLOW: 0.99 MGD	11-2-16	7.30 am	D. Puchette

WERE SAMPLES PLACED ON ICE/IN REFRIGERATOR IMMEDIATELY AFTER SAMPLING YES NO

INFORMATION ON COMPOSITE SAMPLE(S):

1. DATE AND TIME OF FIRST SUBSAMPLE: 11-1-16 8:00 AM
2. DATE AND TIME OF LAST SUBSAMPLE: 11-2-16 2:30 AM
3. FREQUENCY OF SUBSAMPLE COLLECTIONS 60 MINUTES
circle one
4. APPROXIMATE QUANTITY OF SUBSAMPLES: 400 (mls, ounces, gallons)

SAMPLE CHAIN OF CUSTODY:

		COURIER	
		YES	NO
TRANSFERRED BY: X <u>[Signature]</u>	DATE/TIME: <u>11-2-16 1310</u>		<input checked="" type="checkbox"/>
RECEIVED BY: X _____	DATE/TIME: _____		
TRANSFERRED BY: X <u>[Signature]</u>	DATE/TIME: <u>2nd/16 110</u>		<input checked="" type="checkbox"/>
RECEIVED BY: X <u>[Signature]</u>	DATE/TIME: <u>2nd/16 330</u>		<input checked="" type="checkbox"/>

PLEASE DO NOT WRITE BELOW THIS LINE

TEMPERATURE OF SAMPLES WHEN REC'D BY LAB: 44 °CSAMPLES STORED IN REFRIGERATOR ID#: 267 THERMOMETER ID#: 451SHIPPED BY: NB TRACKING #: NBAECT BOTTLES: 0 YES NO



ACT PROJECT NO.: 275-075
STUDY: NPDES

CLIENT: CITY OF CLANTON
SITE: CLANTON WWTP
PERMIT#: AL0054631

TRANSFER TO: AUBURN ENVIRONMENTAL
6485 LEE ROAD 54
AUBURN, AL 36830
(334) 745-0055

MATRIX: (circle one) LIQUID SOLID

SAMPLE# LAB USE ONLY	ANALYSIS, MEASUREMENT	DATE COLLECTED	TIME COLLECTED	PERSON COLLECTING
1318008	TOX: PRESERVED 4°C FLOW: 0.813 MGD	11-4-16	7:30 AM	D. Puckett

WERE SAMPLES PLACED ON ICE/IN REFRIGERATOR IMMEDIATELY AFTER SAMPLING YES NO

INFORMATION ON COMPOSITE SAMPLE(S):

1. DATE AND TIME OF FIRST SUBSAMPLE: 11-3-16 8:00
2. DATE AND TIME OF LAST SUBSAMPLE: 11-4-16 7:30
3. FREQUENCY OF SUBSAMPLE COLLECTIONS 60 MINUTES
circle one
4. APPROXIMATE QUANTITY OF SUBSAMPLES: 400 (mls, ounces, gallons)

SAMPLE CHAIN OF CUSTODY:

		COURIER YES NO	
TRANSFERRED BY: <u>D. Puckett</u>	DATE/TIME: <u>11-4-16 12:40 PM</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
RECEIVED BY: X _____	DATE/TIME: _____	<input type="checkbox"/>	<input type="checkbox"/>
TRANSFERRED BY: X <u>[Signature]</u>	DATE/TIME: <u>11/10/16 1240</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
RECEIVED BY: X <u>[Signature]</u>	DATE/TIME: <u>11-4-16 3/5</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PLEASE DO NOT WRITE BELOW THIS LINE

TEMPERATURE OF SAMPLES WHEN REC'D BY LAB: 24° °C
SAMPLES STORED IN REFRIGERATOR ID#: 267 THERMOMETER ID#: 451
SHIPPED BY: MS TRACKING #: NA
AECT BOTTLES: YES NO



WATER CHEMISTRY DATA SHEET

STUDY NUMBER: _____

DILUTION LOT#: 692

SAMPLE ID: _____	SAMPLE ID: _____	SAMPLE ID: _____
DATE COLLECTED: <u>27 Oct 16</u>	DATE COLLECTED: _____	DATE COLLECTED: _____
DATE ANALYZED: <u>14 Nov 16</u>	DATE ANALYZED: _____	DATE ANALYZED: _____
ANALYST	ANALYST	ANALYST
D.O. (MG/L) _____	D.O. (MG/L) _____	D.O. (MG/L) _____
pH (S.U.) <u>7.73</u> <u>AB</u>	pH (S.U.) _____	pH (S.U.) _____
(MVOLTS/ NH ₃ (MG/L) _____	(MVOLTS/ NH ₃ (MG/L) _____	(MVOLTS/ NH ₃ (MG/L) _____
CONDUCTIVITY <u>212.8</u> <u>AB</u> (UMHOS/CM)	CONDUCTIVITY _____ (UMHOS/CM)	CONDUCTIVITY _____ (UMHOS/CM)
CHLORINE (MG/L)	CHLORINE (MG/L)	CHLORINE (MG/L)
DATE ANALYZED: _____	DATE ANALYZED: _____	DATE ANALYZED: _____
READING 1: _____	READING 1: _____	READING 1: _____
READING 2: * _____	READING 2: * _____	READING 2: * _____
DIFFERENCE: _____	DIFFERENCE: _____	DIFFERENCE: _____
ANALYST _____	ANALYST _____	ANALYST _____
HARDNESS (50 mL SAMPLE)	HARDNESS (50 mL SAMPLE)	HARDNESS (50 mL SAMPLE)
mL TITRANT <u>8.9</u> x10 = <u>89</u> MG/L CaCO ₃	mL TITRANT _____ x10 = _____ MG/L CaCO ₃	mL TITRANT _____ x10 = _____ MG/L CaCO ₃
ANALYST <u>AB</u>	ANALYST _____	ANALYST _____
ALKALINITY (50 mL SAMPLE)	ALKALINITY (50 mL SAMPLE)	ALKALINITY (50 mL SAMPLE)
mL TITRANT <u>2.8</u> x20 = <u>56</u> MG/L CaCO ₃	mL TITRANT _____ x20 = _____ MG/L CaCO ₃	mL TITRANT _____ x20 = _____ MG/L CaCO ₃
ANALYST <u>AB</u>	ANALYST _____	ANALYST _____
TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: _____ mL)	TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: _____ mL)	TOTAL SUSPENDED SOLIDS (SAMPLE VOLUME: _____ mL)
PAPER+SOLIDS _____ GRAMS	PAPER+SOLIDS _____ GRAMS	PAPER+SOLIDS _____ GRAMS
PAPER WEIGHT _____ GRAMS	PAPER WEIGHT _____ GRAMS	PAPER WEIGHT _____ GRAMS
DIFFERENCE _____ GRAMS	DIFFERENCE _____ GRAMS	DIFFERENCE _____ GRAMS
MULTIPLIER _____	MULTIPLIER _____	MULTIPLIER _____
T.S.S. IN MG/L _____	T.S.S. IN MG/L _____	T.S.S. IN MG/L _____
ANALYST _____	ANALYST _____	ANALYST _____

* = dechlorinated with 7 mg/L sodium thiosulfate per 1 mg/L chlorine (reading 1)

UNLESS OTHERWISE INDICATED, THESE DATA WERE COLLECTED IN ACCORDANCE WITH SOP #'S

276	277	292	290
275	293	291	295



WATER CHEMISTRY DATA SHEET

STUDY NUMBER: 275-075DILUTION LOT#: 692SAMPLE ID: 131733
DATE COLLECTED: 210616
DATE ANALYZED: 14 NOV 16SAMPLE ID: 131774
DATE COLLECTED: 02 NOV 16
DATE ANALYZED: 14 NOV 16SAMPLE ID: 131800
DATE COLLECTED: 04 NOV 16
DATE ANALYZED: 14 NOV 16

ANALYST

D.O. (MG/L)
pH (S.U.) 7.54 AB
(MVOLTS
NH₃ (MG/L) 190/0.1 CEA
CONDUCTIVITY 265.6 AB
(UMHOS/CM)

ANALYST

D.O. (MG/L)
pH (S.U.) 7.51 AB
(MVOLTS
NH₃ (MG/L) 161/0.3 CEA
CONDUCTIVITY 301.0 AB
(UMHOS/CM)

ANALYST

D.O. (MG/L)
pH (S.U.) 7.62 AB
(MVOLTS
NH₃ (MG/L) 174/0.2 CEA
CONDUCTIVITY 313.9 AB
(UMHOS/CM)

CHLORINE (MG/L)

DATE ANALYZED: 01 Nov 16
READING 1: 60.91 mg/L
READING 2: _____
DIFFERENCE: _____
ANALYST AB

CHLORINE (MG/L)

DATE ANALYZED: 02 Nov 16
READING 1: 60.91 mg/L
READING 2: _____
DIFFERENCE: _____
ANALYST AB

CHLORINE (MG/L)

DATE ANALYZED: 05 Nov 16
READING 1: 60.91 mg/L
READING 2: _____
DIFFERENCE: _____
ANALYST AB

HARDNESS (50 mL SAMPLE)

mL TITRANT 2.3 x10 = 23 MG/L CaCO₃
ANALYST AB

HARDNESS (50 mL SAMPLE)

mL TITRANT 2.5 x10 = 25 MG/L CaCO₃
ANALYST AB

HARDNESS (50 mL SAMPLE)

mL TITRANT 2.6 x10 = 26 MG/L CaCO₃
ANALYST AB

ALKALINITY (50 mL SAMPLE)

mL TITRANT 2.9 x20 = 58 MG/L CaCO₃
ANALYST AB

ALKALINITY (50 mL SAMPLE)

mL TITRANT 3.0 x20 = 60 MG/L CaCO₃
ANALYST AB

ALKALINITY (50 mL SAMPLE)

mL TITRANT 2.9 x20 = 58 MG/L CaCO₃
ANALYST AB

Date analyzed 03 Nov 16
TOTAL SUSPENDED SOLIDS 1533
(SAMPLE VOLUME: 500 mL)
PAPER+SOLIDS 0.0820 GRAMS
PAPER WEIGHT 0.0810 GRAMS
DIFFERENCE 1.0 GRAMS
MULTIPLIER 2
T.S.S. IN MG/L 20
ANALYST CEA

Date analyzed 03 Nov 16
TOTAL SUSPENDED SOLIDS 1538
(SAMPLE VOLUME: 500 mL)
PAPER+SOLIDS 0.0832 GRAMS
PAPER WEIGHT 0.0824 GRAMS
DIFFERENCE 0.8 GRAMS
MULTIPLIER 2
T.S.S. IN MG/L 1.6
ANALYST CEA

Date analyzed 07 Nov 16
TOTAL SUSPENDED SOLIDS 1612
(SAMPLE VOLUME: 500 mL)
PAPER+SOLIDS 0.0822 GRAMS
PAPER WEIGHT 0.0810 GRAMS
DIFFERENCE 1.2 GRAMS
MULTIPLIER 2
T.S.S. IN MG/L 2.4
ANALYST CEA

* = dechlorinated with 7 mg/L sodium thiosulfate per 1 mg/L chlorine (reading 1)

UNLESS OTHERWISE INDICATED, THESE DATA WERE COLLECTED IN ACCORDANCE WITH SOP #'S

276	277	292	290
275	293	291	295



6485 Lee Road 54
Auburn, AL 36801
800 662-1584

Page 1 of 2

7 DAY FATHEAD MINNOW TOXICITY TEST

Q.C. TEST NO.: PHC068
TEST CONTAINER: 600 ml beaker
TEST VOLUME: 250 ml

DILUTION WATER: MHRW
AGE OF TEST ORGANISMS: <24HRS
SOURCE: AQUATOX
TEST TEMP. RANGE: 24.5 - 25.5°C

BEGINNING DATE: 01 NOV 16 TIME: 1518
ENDING DATE: 08 NOV 16 TIME: 1359

CONTROL TEST SYSTEM

TEST HOUR	TEST CHAMBER				pH	DO mg/l	TEMP °C	FED ORGANISMS		INITIALS TIME	NOTES AND OBSERVATIONS
	1	2	3	4				am	pm		
START	15	15	15	15	7.36	7.9	25.0		1621 CEN	1518 LEA	All Normal
24	15	15	15	15	7.21 7.36	3.8 7.3	25.0 25.0	0830 CEN	1625 CEN	1414 CEN	All normal
48	14	15	15	15	7.24 7.52	4.0 7.1	25.0 25.0	0830 CEN	1605 CEN	1400 CEN	All normal
72	14	15	15	15	7.20 7.71	5.0 7.6	25.0 25.0	0830 CEN	1650 CEN	1414 CEN	All normal
96	14	15	15	15	7.14 7.56	4.2 6.7	25.0 25.0	0830 CEN	1600 CEN	1452 CEN	All normal
120	14	15	15	15	7.13 7.75	3.4 7.1	25.0 25.0	0830 CEN	1557 CEN	1508 CEN	All normal
144	14	15	15	15	7.20 7.72	3.3 7.3	25.0 25.0	0830 CEN	1610 CEN	1358 CEN	All normal
168	14	15	15	15	7.05	2.8	25.0			1359 CEN	All normal

THESE DATA WERE COLLECTED IN ACCORDANCE WITH SOP T210. INITIALS/DATE: JS 05 NOV 16

JS 05 NOV 16
CEN



6485 Lee Road 54
Auburn, AL 36801
800 662-1584

Page 2 of 2

7 DAY FATHEAD MINNOW TOXICITY TEST
(continued)

PROJECT No.: 275-075
BEGINNING DATE: 01 NOV 16
CLIENT: CLANTON WWTP

TEST SEQUENCE
INITIAL TEST
FIRST RETEST
SECOND RETEST

75.0 IWC %

TEST HOUR	TEST CHAMBER				pH	DO mg/l	TEMP °C	FED ORGANISMS		INITIALS TIME	NOTES AND OBSERVATIONS
	1	2	3	4				am	pm		
START	15	15	15	15	7.52	8.3	25.0		1621 CER	1518 CER	All Normal
24	15	15	15	15	7.25 7.52	4.5 7.3	25.0 25.0	0830 CER	1625 CER	1418 CER	All Normal
48	15	15	15	15	7.18 7.49	3.3 7.7	25.0 25.0	0830 CER	1605 CER	1400 CER	All Normal
72	15	15	15	15	7.13 7.43	3.8 8.1	25.0 25.0	0830 CER	1650 CER	1414 CER	All Normal
96	15	15	15	15	7.14 7.34	3.4 7.9	25.0 25.0	← 0830 CER	1600 CER	1452 CER	All Normal
120	15	15	15	15	7.06 7.52	2.7 8.1	25.0 25.0	0830 CER	1557 CER	1508 CER	All Normal
144	15	15	15	15	7.15 7.59	2.9 8.2	25.0 25.0	0830 CER	1610 CER	1358 CER	All Normal
168	15	15	15	15	7.06	2.3	25.0			1351 CER	All Normal

100% EFFLUENT

DAYS	1	2	3	4	5	6	7
pH	7.58	7.72	7.57	7.52	7.79	7.83	7.71

01 NOV 16

DRY WEIGHT DETERMINATION FOR FATHEAD MINNOW LARVAL
SURVIVAL AND GROWTH TEST

Client Charles Walnut Creek WWT

Project#: 275-075

Test Start Date: 01 JUL 16

Weighing Start Date/Time/Temp: 08 JUL 16 / 1414 / 105°C

Weighing End Date/Time/Temp: 09 JUL 16 / 1604 / 101°C

Analyst: GEN

Concentration	Replicate number	A Weight of boat (g)	B Dry weight of boat and larvae (g)	D-A Total dry weight of larvae (g)	C Number of larvae	((B-A)/C)*1000 Mean dry weight of larvae (mg)	Remarks
CONTROL	1	1.29304	1.29995	0.00691	14	0.46067	
	2	1.29627	1.30377	0.00750	15	0.5000	
	3	1.28450	1.29335	0.00885	15	0.59000	
	4	1.29253	1.30063	0.00810	15	0.54000	$\bar{x} = 0.52267$
I.W.C. 75.0%	1	1.30714	1.31477	0.00763	15	0.50867	
	2	1.30096	1.30907	0.00811	15	0.54067	
	3	1.28895	1.29849	0.00954	15	0.63600	
	4	1.29885	1.29771	0.00886	15	0.59067	$\bar{x} = 0.56900$

NOTES/OBSERVATIONS: _____



Auburn Environmental
Consulting & Testing
205/826-3551

3-BROOD CERIODAPHNIA TOXICITY TEST

PAGE 1 OF 2

Q.C. Test No.: COCT 67
Test Container: 30 MUP
Test Volume: 15 mL
Dilution Water: MBW
Age of Test Organisms: 24 hr

Source: ACT
Test Temperature Range: 24.5-25.5
Y.C.T. LOT NUMBER: 233
ALGAE LOT #: 671

Beginning Date: 01/26/06 Time: 1400
Ending Date: 02/06/06 Time: 1400
** 1 = ALIVE 0 = DEAD
** 1/1 = 1 ADULT, 1 NEONATE
** M = MISSING OR LOST

CONTROL TEST CHAMBERS

TEST DAY	CONTAINER NUMBER **										TOTAL NUMBER OF LIVE ADULTS	pH	D.O. (mg/l)	TEMP. (°C)	FED ORGANISMS	SOLUTIONS RENEWED	INITIALS/TIME	NOTES AND OBSERVATIONS
	1	2	3	4	5	6	7	8	9	10								
START	1	1	1	1	1	1	1	1	1	1	10	7.59	8.0	25.0	✓		3/14/06	ALL
24	1	1	1	1	1	1	1	1	1	1	10	7.70 7.61	7.7 7.8	25.0 25.0	✓	✓	4/14/06	ALL
48	1	1	1	1	1	1	1	1	1	1	10	7.64 7.61	7.6 8.0	25.0 25.0	✓	✓	14/14/06	ALL
72	1	1	1	1	1	1	1	1	1	1	10	7.61 7.68	7.6 7.7	25.0 25.0	✓	✓	3/14/06	ALL
96	1/4	1/3	1/3	1/3	1/4	1/3	1/3	1/3	1/3	1/3	10	7.71 7.57	8.0 7.9	25.0 25.0	✓	✓	3/14/06	ALL
120	1/7	1/6	1/6	1/5	1/8	1/7	1/6	1	1/6	1/6	10	7.70 7.67	8.0 8.0	25.0 25.0	✓	✓	14/14/06	ALL
144	1/11	1/9	1/8	1/6	1/10	1/11	1/10	1/7	1/8	1/9	10	7.80	8.0	25.0			2/14/06	ALL
168																		
192																		
TOTAL NEONATES	22	18	17	18	22	21	19	10	17	18								

$\bar{x} = 18.2$

THESE DATA WERE COLLECTED IN ACCORDANCE WITH SOP T242. INITIALS/DATE: JS 07/20/06



**Auburn Environmental
Consulting & Testing**

Alabama Office
334/745-0055 or 800/662-1564
Fax: 334/745-3035
TBrantly@AuburnEnvironmental.com
6485 LEE ROAD 54 AUBURN, AL 36830

Colorado Office
1-800-408-0083
MWallace@AuburnEnvironmental.com
PO BOX 271716 FT. COLLINS, CO 80527

November 11, 2016

Mr. Theo Pinson
Field Toxics Unit
ADEM
P.O. Box 301463
Montgomery, AL 36130-1463

Dear Mr. Pinson,

Attached you will please find the results for the chronic reference test performed on Fathead minnow (October 18 to October 25, 2016) and Ceriodaphnia dubia (October 18 to October 24, 2016).

Results are as follows:

PARAMETER	FATHEAD MINNOW	CERIODAPHNIA DUBIA
NOEC SURVIVAL	1.5 G/L	1.25 G/L
LOEC SURVIVAL	2.0 G/L	1.5 G/L
NOEC GROWTH/REPRO	1.5 G/L	0.5 G/L
LOEC GROWTH/REPRO	2.0 G/L	0.75 G/L
IC25	1.6 G/L	0.80 G/L

If you have any questions or comments on this test please call me at (334) 745-0055.

Sincerely,

Thomas B. Brantly, Jr.
Laboratory Manager



6485 Lee Road 54
Auburn, AL 36801
800 662-1584

Page 2 of 2

PROJECT No.: 275-075
BEGINNING DATE: 01 NOV 16
CLIENT: CLANTON WWTP

3 BROOD CERIODAPHNIA TOXICITY TEST
(continued)

TEST SEQUENCE
INITIAL TEST
FIRST RETEST
SECOND RETEST

**1 = ALIVE 0 = DEAD
** 1/1 = 1 ADULT, 1 NEONATE
** M = MISSING

75.0 % I.W.C

TEST HOUR	TEST CHAMBER**										LIVE ADULTS	pH	DO mg/l	TEMP °C	FED ORGANISMS	SOLUTIONS RENEWED	INITIALS TIME	NOTES AND OBSERVATIONS
	1	2	3	4	5	6	7	8	9	10								
START	1	1	1	1	1	1	1	1	1	1	10	7.65	8.0	25.0	YES		B.14.0	All Normal
24	1	1	1	1	1	1	1	1	1	1	10	7.53 7.65	7.7 8.0	25.0 25.0	✓	✓	B.14.0	All Normal
48	1	1	1	1	1	1	1	1	1	1	10	7.58 7.58	7.6 8.0	25.0 25.0	✓	✓	B.14.0	All Normal
72	1	1	1	1	1	1	1	1	1	1	10	7.61 7.57	7.6 7.7	25.0 25.0	✓	✓	B.14.0	All Normal
96	1/3	1/5	1/4	1/3	1/4	1/5	1/4	1/4	1/3	1/3	10	7.65 7.57	7.5 7.6	25.0 25.0	✓	✓	B.14.0	All Normal
120	1/6	1/9	1/6	1/9	1/7	1/8	1/7	1/6	1/6	1/6	10	7.65 7.59	7.5 7.7	25.0 25.0	✓	✓	B.14.0	All Normal
144	1/10	1/10	1/12	1/10	1/9	1/12	1/11	1/10	1/12	1/10	10	7.79	7.9	25.0			B.14.0	All Normal
168																		
192																		
TOTAL NEONATES	19	24	22	22	20	25	22	20	21	19								

$\bar{X} = 21.4$

100% EFFLUENT

DAYS	1	2	3	4	5	6	7
pH	7.58	7.72	7.51	7.54	7.79	7.83	7.76

NOTES AND OBSERVATIONS

year 2017

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT TOXICITY TEST REPORT SUMMARY

1. GENERAL:

NPDES PERMIT NO.: AL0054631 DSN: 001 COUNTY: Chilton County

Permittee: City of Clanton

Facility Name: Walnut Creek WWTP, Clanton, Alabama

Agent submitting Report: City of Clanton, 1574 County Road 51, Clanton, Alabama 35046

Lab Conducting Toxicity Test(s): TTL, Inc., 3516 Greensboro Ave., Tuscaloosa, AL 35403

Months To Test:

This Report for Toxicity Test(s) Required for the Month of: November

Scheduled Test(s): Yes ☒ No ☐ Accelerated Test(s): Yes ☐ No ☒

Accelerated Test Number of For Failed Scheduled Test Date:

Test Type Required: 48-Hr Acute Screening: -Hr Acute Definitive:

Short-term Chronic Screening: ☒ Short-term Chronic Definitive:

Test Organism: *Pimephales promelas*

Test Organism: *Ceriodaphnia dubia*

Sam No.	Date/Time MM/DD/YY	Start HH:MM	Date/Time MM/DD/YY	Ended HH:MM	Control Valid	Date/Time MM/DD/YY	Start HH:MM	Date/Time MM/DD/YY	Ended HH:MM	Control Valid
1	11/07/17, 14:05		11/14/17, 14:35		Yes	11/07/17, 14:05		11/14/17, 14:25		Yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number											
		(1)			(2)			(3)			(4)		
		Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro
C.d.	75%	Pass		Pass									
P.p.	75%	Pass	Pass										

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test Organism	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	pH s.u.	Alkalinity mg/L CaCO3	Hardness(ef) mg/L	Spec Cond umhos/cm	Hardness (Ins) mg/L				
1	8.02	119	100	589	101				
2	8.03	123	92.6	650					
3	8.03	114	107	678					

Municipal Facilities Only

Sample ID	Arsenic (g/L)	Cadium (g/L)	Chromium (g/L)	Copper (g/L)	Lead (g/L)	Hexavalent Chromium (g/L)
Sample ID	Mercury (g/L)	Nickel (g/L)	Silver (g/L)	Zinc (g/L)	Total Cyanide (g/L)	Other(s) (g/L)

Chemical Analysis Performed By (LAB): TTL, Inc.

Instantaneous Flow: (1) GPM

Total 24-Hour Flow: (1) MGD (2) MGD (3) MGD

Comments:

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

SIGNATURE OF RESPONSIBLE OFFICIAL: DATE:

Facility Name: Clanton WWTP NPDES #: AL0054631 DSN: 001 Date: 01/30/18

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes (explain)

Samples Collected as Specified in the NPDES Permit: Yes X No (explain)

Receiving Water: Walnut Creek Design Flow: Monitor (MGD)2.25

Sample ID	Sample(s) Collected MM/DD/YY HHMM - MM/DD/YY HHMM	Arrival Temp (C)	Used in Test(s) MM/DD/YY - MM/DD/YY
1	11/05/17, 08:00 - 11/06/17, 08:00	1.2	11/07/17 - 11/08/17
2	11/07/17, 8:00 - 11/08/17, 8:00	1.1	11/09/17 - 11/10/17
3	11/09/17, 8:00 - 11/10/17, 8:00	0.9	11/11/17 - 11/13/17

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
20%DMW	10/30/17	11/07/17	80	60	7.8	178	26.0
20%DMW	11/06/17	11/11/17	80	60	7.7	180	26.0

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)				
Pp	<48 hrs	Aquatic Biosystems, Inc	00	45			
Cd	<24 hrs	In-house Culture	00	45			

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Plastic Beakers	600	300	15	4
Cd	Plastic Beakers	30	15	1	10

Test Species	Temp. Range (C)	D.O. Range (mg/L)	pH Range (mg/L)	Light Intensity Avg. (ft-c)
Pp	24.2 - 26.0	7.6 - 8.3	7.5 - 9.2	98
Cd	24.0 - 26.0	7.9 - 8.3	7.5 - 8.4	98

7. FEEDING:

Not Fed: Fed Daily: X Fed Irregular: (Explain in comments below)

Brine Shrimp: Fed 0.15 mL Suspension of Newly Hatched Larvae 2 Times Daily.
YCT: Fed 0.1 mL Suspension Containing 1.8 mg/L TSS Daily.
Algae: Fed 0.1 mL Suspension Containing 3.0x10⁷ Algal Cells/mL Daily.

COMMENTS:

Facility Name: Clanton WWTP NPDES #: AL0054631 DSN: 001 Date: 01/30/18

8. REFERENCE TOXICANT TESTS:

Toxicant: Potassium Chloride, KCl Source: Omnipur Lot# UK22FZEMS CAS#: 7447-40-7

Solution concentration unit: mg/L X g/L % other (specify):

Test Org.	Test Date MM/DD - MM/DD	Control Water	Reference Test Solution Concentrations (Cont. to Highest Conc.)						
Pp	10/24/17 - 10/31/17	20%DMW	00	125	250	500	1000	2000	
Cd	10/24/17 - 10/31/17	20%DMW	00	62.5	125	250	500	1000	

Test Org.	Results	95% Confidence Interval	Upper and Lower CUSUM Chart Control Limit (This Test)	Number (N)
Pp	845	619 - 1130	806 - 447	20
Cd	117	91 - 157	173 - 131	20

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:

None.

9.B. Test Solution Manipulations or Test Modifications:

None.

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

The raw reference toxicant data is on file with ADEM.

Facility Name: Clanton WWTP NPDES #: AL0054631 DSN: 001 Date: 01/30/18

11.C. CHRONIC SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Ceriodaphnia dubia*

Were Neonates Used to Begin the Test Within 8 Hours of the Same Age?: Yes: X No:

Did 60% of the CONTROL Females Produce Their Third Brood?: Yes: X No:

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY: X

CONTROL(%) 24h 100 48h 100 END 80 EFFLUENT(%) 24h 100 48h 100 END 90

Fishers Exact Test: A = B = a = b =

REPRODUCTION (Average Neonates/Female)

CHRONIC TOXICITY INDICATED: YES NO X

NO REPRODUCTION STATISTICAL ANALYSIS NECESSARY:

CONTROL: 17.7 EFFLUENT: 14.9

Normally Distributed: YES X NO

Test Statistic: 0.980 Critical Value: 0.868 (Parametric)

Equal variance: X Unequal variance:

F Statistic: 2.58 Critical F: 6.54

t - Test Statistic: 0.626 t - Test Critical Value: 1.743

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

COMMENTS: No Ceriodaphnia survival statistical analysis was necessary since effluent survival exceeded control survival.

TEST ORGANISM: *Pimephale promelas*

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY:

CONTROL(%) 24h 100 48h 100 END 95.0 EFFLUENT(%) 24h 100 48h 96.7 END 85.0

Normally Distributed: YES X NO

Test Statistic: 0.888 Critical Value: 0.749 (Parametric)

Equal variance: X Unequal variance:

F Statistic: 1.01 Critical F: 47.47

t - Test Statistic: 1.997 t - Test Critical Value: 1.943

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

GROWTH (Mean Dry Weight - mg)

CHRONIC TOXICITY INDICATED: YES NO X

NO GROWTH STATISTICAL ANALYSIS NECESSARY:

CONTROL: 0.2537 EFFLUENT: 0.2220

Normally Distributed: YES X NO

Test Statistic: 0.953 Critical Value: 0.749 (Parametric)

Equal variance: X Unequal variance:

F Statistic: 13.26 Critical F: 47.47

t - Test Statistic: 1.110 t - Test Critical Value: 1.943

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

COMMENTS:

Summary Data for Ceriodaphnia Survival and Reproduction Test

Discharger: Clanton
 Location: WWTP Effluent
 Test Dates: 11/07/17-11/14/17
 Analyst: WDM, JML, MMC, JMWD, CRS

Treatment		Control	Effluent
No. Live	Start	10	10
Adults	24 Hours	10	10
	48 Hours	10	10
	End	8	9
Survival (%)	24 Hours	100.0	100.0
	48 Hours	100.0	100.0
	End	80.0	90.0
Mean number of young/adult		17.7	14.9
Standard Deviation		12.01	7.48
Variance		144.23	55.88
Coefficient of Variation		67.85	50.17

Physical/Chemical Data		CONTROL	EFFLUENT
Temperature °C	Avg	25.3	25.2
	Min	24.0	24.0
	Max	26.0	26.0
D.O. mg/L	Avg	8.3	8.3
	Min	8.3	7.9
	Max	8.3	8.3
pH s.u.	Avg	8.0	8.1
	Min	7.4	7.5
	Max	8.4	8.4
Alkalinity mg/L	Mean	60	60
Hardness mg/L	Mean	80	100
Conductivity umhos/cm	Mean	180	518
Light Intens. ft-c	Mean	98	98

Summary Data for Fathead Minnow Larval Survival and Growth Test

Discharger: Clanton
 Location: WWTP Effluent
 Test Dates: 11/07/17-11/14/17
 Analyst: WDM, JML, MMC, JMWD, CRS

Treatment		Control	Effluent
No. Live	Start	60	60
Larvae	24 Hours	60	60
	48 Hours	60	58
	End	57	51
Survival (%)	24 Hours	100.0	100.0
	48 Hours	100.0	96.7
	End	95.0	85.0
Mean dry wgt. of larvae (mg)		0.2537	0.2220
Standard Deviation		0.0151	0.0550
Variance		0.0002	0.0030
Coefficient of Variation		5.96	24.79

Physical/Chemical Data		CONTROL	EFFLUENT
Temperature °C	Avg	25.2	25.3
	Min	24.0	24.2
	Max	26.0	26.0
D.O. mg/L	Avg	8.1	8.2
	Min	7.5	7.6
	Max	8.3	8.3
pH s.u.	Avg	7.9	8.1
	Min	7.4	7.5
	Max	8.0	9.2
Alkalinity mg/L	Mean	60	60
Hardness mg/L	Mean	80	100
Conductivity umhos/cm	Mean	179	524
Light Intens. ft-c	Mean	98	98

FATHEAD MINNOW SURVIVAL AND GROWTH DATA

CLIENT/TOXICANT:	Clanton	ANALYST:	WDM, JML, MMC, JMWD
LOCATION/SOURCE:	WWTP	TEST CHAMBER: G / P	600
TEST START:	11/7/2017	FOOD:	0.15 ml Brine shrimp 2 x daily
TEST END:	11/14/2017	TEST TEMP.(mg C):	25 +/- 1
DILUTION WATER:	20% DMW	ORGANISM AGE:	<24hrs

Sample: Clanton WWTP 75%

Chemical/Physical Data

		Day						
		1	2	3	4	5	6	7
Temp C	Initial	26.0	26.0	26.0	26.0	26.0	26.0	26.0
	Final	24.8	24.7	24.2	24.3	24.7	24.7	24.4
D.O. mg/l	Initial	8.3	8.3	7.9	8.3	8.3	8.3	8.3
	Final	8.2	7.6	8.0	8.3	8.3	8.3	8.3
pH s.u.	Initial	8.0	7.5	7.9	7.8	8.0	8.0	8.0
	Final	7.7	8.1	8.0	8.3	8.3	8.9	9.2
Alkalinity mg/l as CaCO ₃		60		60		60		
Hardness mg/l as CaCO ₃		100		100		100		
Conductivity umhos/cm		479	479	549	529	552	557	557
Chlorine mg/l		<0.01		<0.01		<0.01		
Light Intensity R-C		98						
pH - Undiluted s.u.		8.0	7.9	8.1	7.8	7.9	7.0	7.8

Analyst/time Initial JML/MMC/JMWD 1405 JML 1415 JML/MMC 1240 JML/MMC/JMWD 1425 MMC/JMWD 1510 MMC/JMWD 1310 MMC/JMWD 1420

Analyst/time Final MMC 1450 MMC 1315 MMC 1500 MMC 1545 MMC 1345 MMC 1455 JML 1435

Survival Data

		Day						
		Start (ON)	1	2	3	4	5	6
Replicate	1	15	15	15	15	15	15	15
	2	15	15	15	15	15	14	14
Organism age <24hrs	3	15	15	14	14	13	13	13
	4	15	15	14	12	12	12	11

Feeding time am	----	0800	800	0800	1400	1230	800	NF
Renewal time	1435	1425	1250	1435	1520	1320	1430	1410
Feeding time pm	1700	1700	1700	1700	1600	1400	1700	----
Analyst	JML/MMC/JMWD	MMC	MMC	MMC	MMC	MMC	MMC	JML

Growth Data

Drying Date: 11/14/2017 Time in: 1500 Time out: 11/16/2017 1500 Total drying time: 48.0
Weighing Date: 11/16/2017 Drying temp: 100 Analyst: JML

Rep #	Boat #	Dry Wgt of Boat (mg)	Dry wgt of boat and larvae (mg)	Total Dry Wgt of Larvae (mg)	SN# of larvae	Mean dry wgt of ON# larvae (mg)	
1	Clan-1	1292.27	1296.21	3.94	14	0.2627	
2	Clan-2	1311.98	1316.12	4.14	13	0.2760	
3	Clan-3	1304.04	1306.60	2.56	13	0.1707	AVG (mg)
4	Clan-4	1311.73	1314.41	2.68	11	0.1787	0.222

Comments:

Data approved by:

TTL, Inc., 3516 Greensboro Ave., Tuscaloosa, AL 35403, Phone (205) 345-0816, Fax (205) 345-0992

CERIODAPHNIA SURVIVAL AND REPRODUCTION DATA

CLIENT/TOXICANT:	Clanton	TEST CHAMBER:	G / P	30	ml	
LOCATION/SOURCE:	WWTP	FOOD:	0.10	ml YTC	1.8	g/l TSS
TEST START:	11/7/2017	FOOD:	0.10	ml Algae	3.0x10 ⁷	cell/ml
TEST END:	11/14/2017	TEST TEMP.(rng C):	25 +/- 1			
DILUTION WATER:	20% DMW	ORGANISM AGE:	<24 hrs within 6 hrs of same age			

Sample: <u>Clanton WWTP 75%</u>		Chemical/Physical Data								
		Day								
		1	2	3	4	5	6	7	8	9
Temp C	Initial	26.0	26.0	26.0	26.0	26.0	26.0	26.0		
	Final	24.2	24.7	24.0	24.0	24.0	24.5	25.8		
D.O. mg/l	Initial	8.3	8.3	7.9	8.3	8.3	8.3	8.3		
	Final	8.3	8.3	8.2	8.3	8.3	8.3	8.3		
pH s.u.	Initial	8.0	7.5	7.9	7.8	8.0	8.0	8.0		
	Final	8.2	8.2	8.3	8.4	8.4	8.3	8.4		
Alkalinity mg/l as CaCO ₃		60		60		60				
Hardness mg/l as CaCO ₃		100		100		100				
Conductivity umhos/cm		479	479	549	529	552	557	557		
Chlorine mg/l		<0.01		<0.01		<0.01				
Light Intensity ft-c		98								
pH - Undiluted s.u.		8.0	7.9	8.1	7.8	7.9	7.0	7.8		

Analyst/time Initial JML/MMC/JMWD 1405 JML 1415 JML/MMC 1240 JML/MMC/JMWD 1425 MMC/JMWD 1510 MMC/JMWD 1310 MMC/JMWD 1420

Analyst/time Final JML 1445 JML 1300 JML/JMWD 1455 JMWD 1530 JMWD 1335 MMC/JMWD 1440 MMC 1425

Soln change time JML 1420 JML 1245 JML/JMWD 1430 JMWD 1515 JMWD 1315 MMC/JMWD 1425 MMC 1410

Survival & Reproduction Data

REPLICATES

Parent		B5	A8	B37	B48	A6	B40	A44	B23	A33	B37	Neonates cntd
		1	2	3	4	5	6	7	8	9	10	
DAY	1	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Neonates Brd 0	Time/anlst ini. JML 1420
	2	0	0	0	0	0	0	0	0	0	0	JML 1245
	3	0	0	0	0	0	1	1	0	1	0	JML/JMWD 1430
	4	1	0	1	1	1	2	2	1	2	1	JMWD 1515
	5	2	1	2	2	2	0	0	2	2	2	JMWD 1315
	6	3	4	8	4	4	0	0	6	2	4	JMWD 1315
	7	4	4	10	2	X1	5	12	8	2	2	MMC/JMWD 1425
	8	7	2	8	0		0	0	3	0	0	MMC 1410
Total Young		16	10	29	10	6	14	23	22	10	9	AVG 14.9

Numbers = # of young

X = Adult dead;

y = adult male

M = Adult killed or lost by tech

Comments:

Data approved by:

TTL, Inc., 3516 Greensboro Ave., Tuscaloosa, AL 35403, Phone (205) 345-0816, Fax (205) 345-0992

FATHEAD MINNOW SURVIVAL AND GROWTH DATA

CLIENT/TOXICANT:	Control	ANALYST:	WDM, JML, MMC, JMWD
LOCATION/SOURCE:	TTL, Inc.	TEST CHAMBER: G / P	600
TEST START:	11/7/2017	FOOD:	0.15 ml Brine shrimp 2 x daily
TEST END:	11/14/2017	TEST TEMP.(mg C):	25 +/- 1
DILUTION WATER:	20% DMW	ORGANISM AGE:	<24hrs

Sample: Control		Chemical/Physical Data							
		Day							
		1	2	3	4	5	6	7	8
Temp C	Initial	26.0	26.0	26.0	26.0	26.0	26.0	26.0	
	Final	24.7	24.8	24.3	24.2	24.0	24.6	24.5	
D.O. mg/L	Initial	8.3	8.3	8.3	8.3	8.3	8.3	8.3	
	Final	8.1	7.6	7.7	7.9	8.0	7.5	8.3	
pH S.U.	Initial	8.0	7.4	8.0	7.8	7.7	8.0	8.0	
	Final	7.9	7.9	7.9	7.9	8.0	7.9	8.0	
Alkalinity mg/L as CaCO3		60		60		60			
Hardness mg/L as CaCO3		80		80		80			
Conductivity umhos/cm		178	178	181	177	179	178	187	
Chlorine mg/L		<0.01		<0.01		<0.01			
Light Intensity ft-c		98							
pH - Undiluted S.U.		8.0	7.4	8.0	7.8	7.7	8.0	8.0	

Analyst/time Initial JML/MMC/JMWD 1405 JML 1415 JML/MMC 1240 JML/MMC/JMWD 1425 MMC/JMWD 1510 MMC/JMWD 1310 MMC/JMWD 1420

Analyst/time Final MMC 1450 MMC 1315 MMC 1500 MMC 1545 MMC 1345 MMC 1455 JML 1435

Survival Data

		Start (ON)	1	2	Day 3	4	5	6	7 (SN)
Replicate	1	15	15	15	14	14	14	14	14
	2	15	15	15	14	14	14	14	13
Organism age <24hrs	3	15	15	15	15	15	15	15	15
	4	15	15	15	15	15	15	15	15

Feeding time am	----	0800	800	0800	1400	1230	800	NF
Renewal time	1435	1440	1305	1450	1535	1335	1445	1425
Feeding time pm	1700	1700	1700	1700	1600	1400	1700	----
Analyst	JML/MMC/JMWD	MMC	MMC	MMC	MMC	MMC	MMC	JML

Growth Data

Drying Date: 11/14/2017 Time in: 1500 Time out: 11/16/2017 1500 Total drying time: 48.0
Weighing Date: 11/16/2017 Drying temp: 100 Analyst: JML

Rep #	Boat #	Dry Wgt of Boat (mg)	Dry wgt of boat and larvae (mg)	Total Dry Wgt of Larvae (mg)	SN# of larvae	Mean dry wgt of ON# la	
1	TTL-1	1295.02	1298.66	3.64	14	0.2427	
2	TTL-2	1297.51	1301.64	4.13	13	0.2753	
3	TTL-3	1291.27	1294.93	3.66	15	0.2440	AVG (mg)
4	TTL-4	1293.75	1297.54	3.79	15	0.2527	0.2537

Comments:

Data approved by:

TTL, Inc., 3516 Greensboro Ave., Tuscaloosa, AL 35403, Phone (205) 345-0816, Fax (205) 345-0992

CERIODAPHNIA SURVIVAL AND REPRODUCTION DATA

CLIENT\TOXICANT:	Control	TEST CHAMBER:	G / P	30	ml	
LOCATION/SOURCE:	TTL, Inc.	FOOD:	0.10	ml YTC	1.8	g/l TSS
TEST START:	11/7/2017	FOOD:	0.10	ml Algae	3.0x10 ⁷	cell/ml
TEST END:	11/14/2017	TEST TEMP.(mg C):	25 +/- 1			
DILUTION WATER:	20% DMW	ORGANISM AGE:	<24 hrs within 6 hrs of same age			

Sample: Control		Chemical/Physical Data						
		Day						
		1	2	3	4	5	6	7
Temp C	Initial	26.0	26.0	26.0	26.0	26.0	26.0	26.0
	Final	24.0	25.3	24.0	24.8	24.0	24.7	25.7
D.O. mg/L	Initial	8.3	8.3	8.3	8.3	8.3	8.3	8.3
	Final	8.3	8.3	8.3	8.3	8.3	8.3	8.3
pH s.u.	Initial	8.0	7.4	8.0	7.8	7.7	8.0	8.0
	Final	7.8	8.1	8.4	8.3	8.3	8.2	8.4
Alkalinity mg/L as CaCO ₃		60		60		60		
Hardness mg/L as CaCO ₃		80		80		80		
Conductivity umhos/cm		178	178	181	177	179	178	187
Chlorine mg/L		<0.01		<0.01		<0.01		
Light Intensity ft-c		98						
pH - Undiluted s.u.		8.0	7.4	8.0	7.8	7.7	8.0	8.0

Analyst/time Initial JML/MMC/JMWD 1405 JML 1415 JML/MMC 1240 JML/MMC/JMWD 1425 MMC/JMWD 1510 MMC/JMWD 1310 MMC/JMWD 1420

Analyst/time Final JML 1445 JML 1300 JML/JMWD 1455 JMWD 1530 JMWD 1335 MMC/JMWD 1440 MMC 1425

Soln change time JML 1430 JML 1255 JML/JMWD 1440 JMWD 1525 JMWD 1325 MMC/JMWD 1435 MMC 1420

Survival & Reproduction Data				REPLICATES								
Parent	B5	A8	B37	B48	A6	B40	A44	B23	A33	B37		
	1	2	3	4	5	6	7	8	9	10	Neonates cntd	
DAY	1	Neonates	Brd	Neonates	Brd	Neonates	Brd	Neonates	Brd	Neonates	Brd	Time/analst ini.
	0	0	0	0	0	0	0	0	0	0	JML 1430	
	2	0	0	0	0	0	0	0	0	0	JML 1255	
	3	0	0	0	0	1	0	0	1 ¹	1	0	JML/JMWD 1440
	4	0	2 ¹	11 ¹	1	5 ¹	4 ¹	5 ¹	X	3 ¹	4 ¹	JMWD 1525
	5	5 ¹	0	3 ²	3 ¹	7 ²	10 ²	0		2 ²	5 ²	JMWD 1325
	6	7 ²	0	7	14 ²	X8 ³	15 ³	0		5	0	MMC/JMWD 1435
	7	0	3 ²	18 ³	0		0	0		11 ³	16 ³	MMC 1420
	8											
Total Young	12	5	39	18	21	29	5	1	22	25	AVG 17.7	

Numbers = # of young

f = fourth brood; not counted

Comments:

X = Adult dead;

y = adult male

M = Adult killed or lost by tech

Data approved by:

TTL, Inc., 3516 Greensboro Ave., Tuscaloosa, AL 35403, Phone (205) 345-0816, Fax (205) 345-0992



LIMS Chain of Custody Form

Sheet ____ of ____

Client: City of Clanton - WWTP
 Contact: Mr. Anthony Robinson
 Mailing Address: 1574 County Road 51
 City, State, Zip: Clanton, AL 36011
 Phone No.: (205) 755-2380
 Sampled By: *CLent*
 Project ID: BIO-Clanton-1
 Project Name: WWTP Biotox Data 1

TTL WORK
 ORDER NUMBER
 171106019

Composite Sample Info

Sample *toxicity*
 Start *11-05-17 - 8:01 AM*
 End *11-06-17 8:01 AM*
 Sample *toxicity*
 Start *11-05-17 - 8:01 AM*
 End *11-06-17 - 8:01 AM*

Sample Security Requirements

1. Condition of Contents: _____
 2. Sealed for Shipping By: _____
 3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____
 4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____
 5. Condition of Contents: *good ice*
 6. Comments: *1.2°C at lab*
 7. Reporting Status: Routine; _____; Rush By* _____
 8. Client P.O. # _____

*SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
<i>11-06-17 - 8:45</i>		<i>Wastewater</i>	<i>Aqueous</i>	<i>GC/MS</i>	<i>1 100 mL FLUORO</i>	<i>HAZARDOUS</i>
<i>11-06-17 - 8:01 AM</i>		<i>Clanton WWTP Effluent</i>	<i>Aqueous</i>	<i>GC/MS/24</i>	<i>1 100 mL FLUORO</i>	<i>20 TDS HAZARDOUS</i>
<i>11-06-17 - 8:01 AM</i>		<i>Clanton WWTP Effluent</i>	<i>Aqueous</i>	<i>GC/MS/24</i>	<i>1 100 mL FLUORO</i>	<i>ALKAL COND PH/LAB</i>
<i>11-06-17 - 8:01 AM</i>		<i>Clanton WWTP Effluent</i>	<i>Aqueous</i>	<i>GC/MS/24</i>	<i>2 BIOTOX-100ML HP</i>	<i>BIOTOX-10</i>

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 *Jim Rhu 11-6-17 11:13*
 2 *Tom Elt Jun 11-6-17 11:45*
 3 _____
 4 _____

Received by: (signed) Date/Time

1 *Tom Elt Jun 11-6-17 11:13*
 2 _____
 3 _____
 4 _____

SHIPPING DETAILS

Air Bill #: _____
 Method of Shipment: *Hand*
 Received By Lab: *Anthony*
 Date/Time: *11/6/17 11:45*

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.



LIMS Chain of Custody Form

Sheet ____ of ____

Client: City of Clanton - WWTP
 Contact: Mr. Anthony Robinson
 Mailing Address: 1574 County Road 51
 City, State, Zip: Clanton AL 35046
 Phone No.: (205) 755-2380
 Sampled By: *CCRB*
 Project ID: BIO-Clanton 1
 Project Name: WWTP Biotox Day 1

TTL WORK
 ORDER NUMBER
 171106019

Composite Sample Info

Sample *toxicity*
 Start *11-05-17 - 8:15A*
 End *11-06-17 - 8:15A*
 Sample *toxicity*
 Start *11-05-17 - 8:15A*
 End *11-06-17 - 8:15A*

Sample Security Requirements

1. Condition of Contents: _____
 2. Sealed for Shipping By: _____
 3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____
 4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____
 5. Condition of Contents: *good ice*
 6. Comments: *1.2°C at lab*
 7. Reporting Status: Routine; _____ ; Rush By* _____
 8. Client P.O. # _____

* SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
<i>11-06-17</i>	<i>8:45</i>	Instream	Aqueous	GRAB	1 1/2 PT PL HNO3	HARD_W
<i>11-06-17</i>	<i>8:15A</i>	Clanton WWTP Effluent	Aqueous	COMP24	1 1/2 PT PL HNO3	200.7PR HARD_W
<i>11-06-17</i>	<i>8:15A</i>	Clanton WWTP Effluent	Aqueous	COMP24	1 QT PLNP	ALK_W COND PH_LAB
<i>11-06-17</i>	<i>8:15A</i>	Clanton WWTP Effluent	Aqueous	COMP24	2 BIOTOX-1GAL NP	BIOTOX_C

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 *Jim R...* *11-6-17 11:13*
 2 *Don E...* *11-6-17 1:45*
 3 _____
 4 _____

Received by (signed) Date/Time

1 *Don E...* *11-6-17 11:13*
 2 _____
 3 _____
 4 _____

SHIPPING DETAILS Air Bill #: _____

Method of Shipment: *Hand*Received By Lab: *Don E...*Date/Time *11/6/17 1:45*

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.



LIMS Chain of Custody Form

Composite Sample Info

Sheet ____ of ____

Sample Security Requirements

Client: City of Clanton - WWTP
 Contact: Mr. Anthony Robinson
 Mailing Address: 1571 County Road 51
 City, State, Zip: Clanton, AL 35046
 Phone No.: (205) 755-2380
 Sampled By: Client
 Project ID: BIO-Clanton 23
 Project Name: WWTP Biotox Day 2-3

TTL WORK
 ORDER NUMBER
 171108 059

Sample Toxicity
 Start 11-07-17 - 8:00 AM
DATE/TIME
 End 11-08-17 - 8:00 AM
DATE/TIME
 Sample Toxicity
 Start 11-07-17 - 8:00 AM
DATE/TIME
 End 11-08-17 - 8:00 AM
DATE/TIME

- Condition of Contents: _____
- Sealed for Shipping By: _____
- Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____
- Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____
- Condition of Contents: Good - Ice
- Comments: 1.1° Cent
- Reporting Status: Routine; _____ ; Rush By* _____
*SURCHARGES MAY APPLY
- Client P.O. # _____

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
<u>11-08-17 - 8:00 AM</u>		Clanton WWTP Effluent	Aqueous	COMP24	1 10 FT PL HNO3	200 ZEP, HARDEN
<u>11-08-17 - 8:00 AM</u>		Clanton WWTP Effluent	Aqueous	COMP24	1 QT PLMP	ALKAL, COND, PH, LPS
<u>11-08-17 - 8:00 AM</u>		Clanton WWTP Effluent	Aqueous	COMP24	2 BIOTOX-1GAL MP	BIOTOX_C

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 Jim [Signature] 11-8-17 10:20
 2 Tom [Signature] 11-8-17 1:15
 3 _____
 4 _____

Received by: (signed) Date/Time

1 Tom [Signature] 11-8-17 10:20
 2 _____
 3 _____
 4 _____

SHIPPING DETAILS

Air Bill #: _____
 Method of Shipment: Truck
 Received By Lab: [Signature]
 Date/Time 11-8-17 13:25

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.



LIMS Chain of Custody Form

Composite Sample Info

Sheet ____ of ____

Sample Security Requirements

Client: City of Clanton, AL WCF
 Contact: Mr. Anthony Richardson
 Mailing Address: 1570 County Road 50
 City, State, Zip: Clanton, AL 36006
 Phone No.: (205) 755-2350
 Sampled By: Client
 Project ID: BIC-Clanton, 21
 Project Name: WYACF Station 21-01

TTL WORK
 ORDER NUMBER
 171108059

Sample toxicity
 Start 11-07-17 - 8:00 AM
 End 11-08-17 - 8:00 AM
 Sample toxicity
 Start 11-07-17 - 8:00 AM
 End 11-08-17 - 8:00 AM

- Condition of Contents: _____
- Sealed for Shipping By: _____
- Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____
- Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____
- Condition of Contents: Good - Ice
- Comments: 1.1° Cent
- Reporting Status: Routine; _____; Rush By* _____
- Client P.O. # _____

* SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
11-08-17	8:00 AM	Clanton WYACF Station 21-01	ROBUST	COMPOS	1 10 PT PL BUCS	ROBUST WYACF
11-08-17	8:00 AM	Clanton WYACF Station 21-01	ROBUST	COMPOS	1 10 PT PL BUCS	ROBUST WYACF
11-08-17	8:00 AM	Clanton WYACF Station 21-01	ROBUST	COMPOS	1 10 PT PL BUCS	ROBUST WYACF

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 Jim Rm 11-8-17 10:20
 2 Ben Rm 11-8-17 11:15
 3 _____
 4 _____

Received by: (signed) Date/Time

1 Ben Rm 11-8-17 10:20
 2 _____
 3 _____
 4 _____

SHIPPING DETAILS

Air Bill #: _____
 Method of Shipment: Truck
 Received By Lab: S. R. Rm
 Date/Time 11-8-17 13:15

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.



LIMS Chain of Custody Form

Client: City of Clanton - WWTTP
 Contact: Mr. Anthony Robinson
 Mailing Address: 4574 County Road 51
 City, State, Zip: Clanton, AL 36016
 Phone No.: (205) 755-2380
 Sampled By: Client
 Project ID: BIO-Clanton 25
 Project Name: WWTTP Biotox De-2-3

TTL WORK
 ORDER NUMBER
 171110022

Composite Sample Info

Sample: fecal coliform
 Start: 11-09-17 - 8:00 AM
 End: 11-10-17 - 8:00 AM
 Sample: fecal coliform
 Start: 11-09-17 - 8:00 AM
 End: 11-10-17 - 8:00 AM

Sample Security Requirements

1. Condition of Contents: _____
 2. Sealed for Shipping By: _____
 3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____
 4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____
 5. Condition of Contents: good, ice
 6. Comments: 0.9°C at lab
 7. Reporting Status: Routine; _____; Rush By* _____
 8. Client P.O. # _____

* SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
<u>11-09-17</u>	<u>8:00 AM</u>	Clanton WWTTP Effluent	AQUEOUS	COMP24	1 10 PT PL HND3	BIOTOX_FACD_W
<u>11-10-17</u>	<u>8:00 AM</u>	Clanton WWTTP Effluent	AQUEOUS	COMP24	1 10 PT PL HND3	BIOTOX_FACD_W
<u>11-10-17</u>	<u>8:00 AM</u>	Clanton WWTTP Effluent	AQUEOUS	COMP24	2 BIOTOX-1GAL NF	BIOTOX_C

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 [Signature] 11-10-17 10:00
 2 [Signature] 11-10-17 11:08
 3 _____
 4 _____

Received by: (signed) Date/Time

1 [Signature] 11-10-17 10:00
 2 _____
 3 _____
 4 _____

SHIPPING DETAILS

Air Bill #: _____
 Method of Shipment: [Signature]
 Received By Lab: [Signature]
 Date/Time 11/10/17 11:08

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.



LIMS Chain of Custody Form

Client: City of Canton - AMST
 Contact: Mr. Anthony, Engineer
 Mailing Address: 1571 DOW RD
 City, State, Zip: Canton, AL 35046
 Phone No.: (205) 755-2327
 Sampled By: Client
 Project ID: 2017-01-01
 Project Name: WATER BODY 1 - 2-3

TTL WORK
 ORDER NUMBER
 171110 022

Composite Sample Info

Sample fecal coliform
 Start 11-09-17 - 8:00 AM
 End 11-10-17 - 8:00 AM
 Sample fecal coliform
 Start 11-09-17 - 8:00 AM
 End 11-10-17 - 8:00 AM

Sample Security Requirements

1. Condition of Contents: _____
 2. Sealed for Shipping By: _____
 3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____
 4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____
 5. Condition of Contents: good ice
 6. Comments: 0.9°C at lab
 7. Reporting Status: Routine; _____; Rush By* _____
 8. Client P.O. # _____

* SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
<u>11-09-17</u>	<u>8:00 AM</u>	<u>Canton WATER EFFLUENT</u>	<u>ROBIOUS</u>	<u>COMPOS</u>	<u>1 VERTICAL W/ 2</u>	<u>WATER - 100</u>
<u>11-10-17</u>	<u>8:00 AM</u>	<u>Canton WATER EFFLUENT</u>	<u>ROBIOUS</u>	<u>COMPOS</u>	<u>1 VERTICAL W/ 2</u>	<u>WATER - 100</u>
<u>11-10-17</u>	<u>8:00 AM</u>	<u>Canton WATER EFFLUENT</u>	<u>ROBIOUS</u>	<u>COMPOS</u>	<u>1 VERTICAL W/ 2</u>	<u>WATER - 100</u>

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 [Signature] 11-10-17 10:00
 2 [Signature] 11-10-17 1:08
 3 _____
 4 _____

Received by: (signed) Date/Time

1 [Signature] 11-10-17 10:00
 2 _____
 3 _____
 4 _____

SHIPPING DETAILS

Air Bill #: _____
 Method of Shipment: _____
 Received By Lab: [Signature]
 Date/Time 11/10/17 1:08

ATTACHMENT 3
REFERENCE TOXICANT DATA

Raw Data and CUSUM charts on file with ADEM.

STATISTICAL ANALYSIS OF BIOTOXICITY DATA

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/07/17-11/14/17

CERIODAPHNIA REPRODUCTION

	CONTROL	EFFLUENT
	12	16
	5	10
	39	29
	18	10
	21	6
	29	14
	5	23
	1	22
	22	10
	25	9
MEAN	17.7	14.9
STANDARD DEVIATION	12.01	7.48
COEFFICIENT OF VARIATION	67.85	50.17

SHAPIRO-WILKS	Calculated W		Critical W
	0.980	>	0.868

THE DATA ARE NORMALLY DISTRIBUTED
USE t - TEST

F - TEST	Calculated F		Critical F
	2.58	<	6.54

VARIANCES EQUAL, USE EQUAL VARAINCE t - TEST

t - TEST	Calculated t		Critical t
	0.626	<	1.743

DATA SETS ARE NOT SIGNIFICANTLY DIFFERENT

STATISTICAL ANALYSIS OF BIOTOXICITY DATA

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/07/17-11/14/17

FATHEAD MINNOW GROWTH

	CONTROL		EFFLUENT
	0.2427		0.2627
	0.2753		0.2760
	0.2440		0.1707
	0.2527		0.1787
MEAN	0.2537		0.2220
STANDARD DEVIATION	0.0151		0.0550
COEFFICIENT OF VARIATION	5.9564		24.7852
SHAPIRO-WILKS	Calculated W		Critical W
	0.953	>	0.749
	THE DATA ARE NORMALLY DISTRIBUTED USE t-TEST		
F - TEST	Calculated F		Critical F
	13.26	<	47.47
	VARIANCES EQUAL, USE EQUAL VARAINCE t - TEST		
t - TEST	Calculated t		Critical t
	1.110	<	1.943
	DATA SETS ARE NOT SIGNIFICANTLY DIFFERENT		

STATISTICAL ANALYSIS OF BIOTOXICITY DATA

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/07/17-11/14/17

FATHEAD MINNOW SURVIVAL

	CONTROL	EFFLUENT
	1.303	1.303
	1.202	1.202
	1.441	1.202
	1.441	1.024
MEAN	1.347	1.183
STANDARD DEVIATION	0.117	0.116
COEFFICIENT OF VARIATION	8.656	9.796

SHAPIRO-WILKS	Calculated W	Critical W
	0.888 >	0.749

THE DATA ARE NORMALLY DISTRIBUTED
USE t-TEST

F - TEST	Calculated F	Critical F
	1.01 <	47.47

VARIANCES EQUAL, USE EQUAL VARIANCE t - TEST

t - TEST	Calculated t	Critical t
	1.997 >	1.943

DATA SETS ARE SIGNIFICANTLY DIFFERENT

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
TOXICITY TEST REPORT SUMMARY**

1. GENERAL:

NPDES PERMIT NO.: AL0054631 DSN: 001 COUNTY: Chilton County

Permittee: City of Clanton

Facility Name: Walnut Creek WWTP, Clanton, Alabama

Agent submitting Report: City of Clanton, 1574 County Road 51, Clanton, Alabama 35046

Lab Conducting Toxicity Test(s): TTL, Inc., 3516 Greensboro Ave., Tuscaloosa, AL 35403

Months To Test: _____

This Report for Toxicity Test(s) Required for the Month of: November

Scheduled Test(s): Yes X No _____ Accelerated Test(s): Yes _____ No X

Accelerated Test Number _____ of _____ For Failed Scheduled Test Date: _____

Test Type Required: 48-Hr Acute Screening: _____ -Hr Acute Definitive: _____

Short-term Chronic Screening: X Short-term Chronic Definitive: _____

Test Organism: Pimephales promelas

Test Organism: Ceriodaphnia dubia

Sam No.	Date/Time MM/DD/YY	Start HH:MM	Date/Time MM/DD/YY	Ended HH:MM	Control Valid	Date/Time MM/DD/YY	Start HH:MM	Date/Time MM/DD/YY	Ended HH:MM	Control Valid
1	11/06/18, 13:15		11/13/18, 14:45		Yes	11/06/18, 13:15		11/13/18, 14:40		Yes

2A. SUMMARY OF RESULTS FOR SCREENING TEST:

Test Org.	Eff. Conc.	Test Number											
		(1)			(2)			(3)			(4)		
		Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro	Sur	Rep	Gro
C.d.	75%	Pass	Pass										
P.p.	75%	Pass		Pass									

2B. SUMMARY OF RESULTS FOR DEFINITIVE TEST:

Test Organism	Test Solution Concentration (%)						LC50	NOEC	Not Determined

3. LABORATORY ANALYSIS OF UNDILUTED SAMPLES:

Sample ID	pH s.u.	Alkalinity mg/L CaCO3	Hardness(eff) mg/L	Spec Cond umhos/cm	Hardness (Ins) mg/L				
1	7.91	107	90.5	574	64.2				
2	7.83	104	90.6	709					
3	7.93	107	87.3	540					

Municipal Facilities Only

Sample ID	Arsenic (g/L)	Cadium (g/L)	Chromium (g/L)	Copper (g/L)	Lead (g/L)	Hexavalent Chromium (g/L)
Sample ID	Mercury (g/L)	Nickel (g/L)	Silver (g/L)	Zinc (g/L)	Total Cyanide (g/L)	Other(s) (g/L)

Chemical Analysis Performed By (LAB): TTL, Inc.

Instantaneous Flow: (1) _____ GPM

Total 24-Hour Flow: (1) _____ MGD (2) _____ MGD (3) _____ MGD

Comments:

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

SIGNATURE OF RESPONSIBLE OFFICIAL: _____ DATE: _____

Facility Name: Clanton WWTP NPDES #: AL0054631 DSN: 001 Date: 12/01/18

4. SAMPLE COLLECTION:

Split Samples: N/A X Yes _____ (explain) _____

Samples Collected as Specified in the NPDES Permit: Yes X No (explain) _____

Receiving Water: Walnut Creek Design Flow: Monitor (MGD)2.25

Sample ID	Sample(s) Collected MM/DD/YY HHMM - MM/DD/YY HHMM	Arrival Temp (C)	Used in Test(s) MM/DD/YY - MM/DD/YY
1	11/04/18, 8:00 – 11/05/18, 8:00	0.8	11/06/18 – 11/07/18
2	11/06/18, 8:00 – 11/07/18, 8:00	0.5	11/08/18 – 11/09/18
3	11/08/18, 8:00 – 11/09/18, 8:00	0.1	11/10/18 – 11/12/18

5. CONTROL / DILUTION WATER:

Type	Prepared MM/DD/YY	Begin Use MM/DD/YY	Initial Water Chemistries				
			Hard.	Alk.	pH	Cond.	@ °C
20%DMW	11/01/18	11/06/18	80	60	8.1	184	25.1

6. TOXICITY TEST INFORMATION:

Test Species	Organism Age	Organism Source	Test Solution Concentrations (%)				
Pp	<48 hrs	Aquatic Biosystems, Inc	00	75			
Cd	<24 hrs	In-house Culture	00	75			

Test Species	Test Vessel Type	Vessel Vol. (mL)	Solution Vol. (mL)	Org. / Test Vessel	Replicates per Conc.
Pp	Plastic Beakers	600	300	15	4
Cd	Plastic Beakers	30	15	1	10

Test Species	Temp. Range (C)	D.O. Range (mg/L)	pH Range (mg/L)	Light Intensity Avg. (ft-c)
Pp	24.2 – 26.0	6.6 – 8.3	7.9 – 8.2	75
Cd	24.1 – 26.0	7.7 – 8.3	7.9 – 8.4	75

7. FEEDING:

Not Fed: _____ Fed Daily: X Fed Irregular: _____ (Explain in comments below)

Brine Shrimp: Fed 0.15 mL Suspension of Newly Hatched Larvae 2 Times Daily.
YCT: Fed 0.1 mL Suspension Containing 1.8 mg/L TSS Daily.
Algae: Fed 0.1 mL Suspension Containing 3.0x10⁷ Algal Cells/mL Daily.

COMMENTS: _____

Facility Name: Clanton WWTP NPDES #: AL0054631 DSN: 001 Date: 12/01/18

8. REFERENCE TOXICANT TESTS:

Toxicant: Potassium Chloride, KCl Source: Omnipur Lot# UK22FZEMS CAS#: 7447-40-7

Solution concentration unit: mg/L X g/L % other (specify):

Test Org.	Test Date MM/DD - MM/DD	Control Water	Reference Test Solution Concentrations (Cont. to Highest Conc.)						
			00	125	250	500	1000	2000	
Pp	10/02/18 – 10/09/18	20%DMW	00	125	250	500	1000	2000	
Cd	10/16/18 – 10/23/18	20%DMW	00	62.5	125	250	500	1000	

Test Org.	Results	95% Confidence Interval	Upper and Lower CUSUM Chart Control Limit (This Test)	Number (N)
Pp	784	798 - 574	838 - 525	20
Cd	184	196 - 167	177 - 121	20

9. TEST CONDITION VARIABILITY:

9.A. Deviations From Standard Test Conditions:

None.

9.B. Test Solution Manipulations or Test Modifications:

None.

10. REQUIRED REPORT ATTACHMENTS:

Attach copies of Chain-of-Custody Forms, Reference Toxicant Tests, and Raw Data (Bench Sheets) Pertaining to Physical, Chemical, and Biological Measurements for All Tests. Include Suspended, Interrupted, or Discontinued Toxicity Tests Data.

COMMENTS:

The raw reference toxicant data is on file with ADEM.

Facility Name: Clanton WWTP NPDES #: AL0054631 DSN: 001 Date: 12/01/18

11.C. CHRONIC SCREENING TOXICITY TESTS RESULTS (Freshwater):

TEST ORGANISM: *Ceriodaphnia dubia*

Were Neonates Used to Begin the Test Within 8 Hours of the Same Age?: Yes: X No:

Did 60% of the CONTROL Females Produce Their Third Brood?: Yes: X No:

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY:

CONTROL(%) 24h 100 48h 100 END 100 EFFLUENT(%) 24h 100 48h 100 END 90

Fishers Exact Test: A = 10 B = 10 a = 10 b = 9

REPRODUCTION (Average Neonates/Female)

CHRONIC TOXICITY INDICATED: YES NO X

NO REPRODUCTION STATISTICAL ANALYSIS NECESSARY:

CONTROL: 30.9 EFFLUENT: 25.1

Normally Distributed: YES X NO

Test Statistic: 0.822 Critical Value: 0.868 (Parametric)

Equal variance: Unequal variance: X

F Statistic: Critical F:

t - Test Statistic: t - Test Critical Value:

Sample Rank Sum: 83.00 # Reps.: 10 Critical Rank Sum: 82.00 (Non - Parametric)

COMMENTS:

TEST ORGANISM: *Pimephale promelas*

SURVIVAL

CHRONIC TOXICITY INDICATED: YES NO X

NO SURVIVAL STATISTICAL ANALYSIS NECESSARY: X

CONTROL(%) 24h 100 48h 100 END 98.3 EFFLUENT(%) 24h 100 48h 100 END 100

Normally Distributed: YES NO

Test Statistic: Critical Value: (Parametric)

Equal variance: Unequal variance:

F Statistic: Critical F:

t - Test Statistic: t - Test Critical Value:

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

GROWTH (Mean Dry Weight - mg)

CHRONIC TOXICITY INDICATED: YES NO X

NO GROWTH STATISTICAL ANALYSIS NECESSARY:

CONTROL: 0.6150 EFFLUENT: 0.5450

Normally Distributed: YES X NO

Test Statistic: 0.933 Critical Value: 0.749 (Parametric)

Equal variance: X Unequal variance:

F Statistic: 7.92 Critical F: 47.47

t - Test Statistic: 1.862 t - Test Critical Value: 1.943

Sample Rank Sum: # Reps.: Critical Rank Sum: (Non - Parametric)

COMMENTS: No fathead minnow survival statistical analysis was necessary since effluent survival exceeded control survival.

Summary Data for Ceriodaphnia Survival and Reproduction Test

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/06/18-11/13/18
Analyst: MMC, CRS, TRT, TLM, AEB

Treatment		Control	Effluent
No. Live Adults	Start	10	10
	24 Hours	10	10
	48 Hours	10	10
	End	10	9
Survival (%)	24 Hours	100.0	100.0
	48 Hours	100.0	100.0
	End	100.0	90.0
Mean number of young/adult		30.9	25.1
Standard Deviation		8.94	10.89
Variance		79.88	118.54
Coefficient of Variation		28.92	43.38

Physical/Chemical Data		CONTROL	EFFLUENT
Temperature °C	Avg	25.0	25.0
	Min	24.2	24.1
	Max	26.0	26.0
D.O. mg/L	Avg	8.0	8.1
	Min	7.2	7.7
	Max	8.3	8.3
pH s.u.	Avg	8.2	8.2
	Min	8.0	7.9
	Max	8.3	8.4
Alkalinity mg/L	Mean	60	153
Hardness mg/L	Mean	80	182
Conductivity umhos/cm	Mean	184	507
Light Intens. ft-c	Mean	75	75

Summary Data for Fathead Minnow Larval Survival and Growth Test

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/06/18-11/13/18
Analyst: MMC, CRS, TRT, TLM, AEB

Treatment		Control	Effluent
No. Live	Start	60	60
Larvae	24 Hours	60	60
	48 Hours	60	60
	End	59	60
Survival (%)	24 Hours	100.0	100.0
	48 Hours	100.0	100.0
	End	98.3	100.0
Mean dry wgt. of larvae (mg)		0.6150	0.5450
Standard Deviation		0.0708	0.0252
Variance		0.0050	0.0006
Coefficient of Variation		11.52	4.62

Physical/Chemical Data		CONTROL	EFFLUENT
Temperature °C	Avg	24.9	25.0
	Min	24.4	24.2
	Max	26.0	26.0
D.O. mg/L	Avg	7.7	7.8
	Min	6.7	6.6
	Max	8.3	8.3
pH s.u.	Avg	8.0	8.0
	Min	7.8	7.9
	Max	8.2	8.2
Alkalinity mg/L	Mean	60	153
Hardness mg/L	Mean	80	182
Conductivity umhos/cm	Mean	183	498
Light Intens. ft-c	Mean	75	75

FATHEAD MINNOW SURVIVAL AND GROWTH DATA

CLIENT/TOXICANT: Clanton ANALYST: MMC, CRS, TRT, AEB, TLM
 LOCATION/SOURCE: Clanton WWTP Effluent TEST CHAMBER: G / P
 TEST START: 11/06/18 FOOD: 0.15 ml Brine shrimp 2 x daily
 TEST END: 11/13/18 TEST TEMP.(mg C): 25 +/- 1
 DILUTION WATER: 20% DMW ORGANISM AGE: <24hrs

Sample: Clanton 75%

Chemical/Physical Data

		1	2	3	4	5	6	7	8	9
Temp C	Initial	26.0	25.0	25.0	25.0	25.0	25.0	25.0		
	Final	24.9	24.2	24.9	25.0	24.9	25.0	25.0		
D.O. mg/L	Initial	8.3	8.3	8.3	8.3	8.3	8.3	8.3		
	Final	7.8	7.5	7.3	7.3	7.1	6.6	7.3		
pH s.u.	Initial	8.0	8.0	7.9	8.0	8.2	8.0	8.1		
	Final	8.1	8.0	8.0	8.1	8.0	7.9	8.1		
Alkalinity mg/L as CaCO ₃		150		150		160				
Hardness mg/L as CaCO ₃		180		185		180				
Conductivity umhos/cm		466	473	571	574	450	456	453		
Chlorine mg/L		<0.01		<0.01		<0.01				
Light Intensity ft-c		73	79	71	73	72	74	84		
pH - Undiluted s.u.		7.7	7.6	7.8	7.7	7.7	7.7	7.8		

Analyst/time Initial MMC/TRT/TLM 1315 MMC,TRT,TLM 1400 TRT/TLM 1450 TRT 1240 TRT/MMC 1310 TRT/TLM 1255 TRT/MMC 1315 Daily electronically entered

Analyst/time Final TRT 1525 TRT 1555 TRT 1420 MMC 1405 TRT 1410 TRT 1450 TLM 1445

Survival Data

		Start (ON)	1	2	Day 3	4	5	6	7 (SN)
Replicate	1	15	15	15	15	15	15	15	15
	2	15	15	15	15	15	15	15	15
	3	15	15	15	15	15	15	15	15
	4	15	15	15	15	15	15	15	15
Organism age <24hrs									
Feeding time am		—	800	800	800	1045	1000	730	NF
Renewal time		1420	1440	1525	1350	1325	1335	1415	1350
Feeding time pm		1600	1600	1600	1600	1430	1420	1600	—
Analyst		MMC/TRT/TLM	TRT	TRT	TRT	MMC	TRT	TRT	TLM

Growth Data

Drying Date: 11/13/2018 Time in: 1500 Time out: 11/14/18 1500 Total drying time: 24.0
 Weighing Date: 11/14/18 Drying temp: 60 Analyst: TRT

Rep #	Boat #	Dry Wgt of Boat (mg)	Dry wgt of boat and larvae (mg)	Total Dry Wgt of Larvae (mg)	SN# of larvae	Mean dry wgt of ON# larvae (mg)	
1		1309.10	1317.20	8.10	15	0.5400	
2		1284.40	1292.20	7.80	15	0.5200	
3		1297.00	1305.70	8.70	15	0.5800	
4		1294.40	1302.50	8.10	15	0.5400	AVG (mg)
							0.545

Comments:

Data approved by:

TRT, Inc. 3516 Greenbrier Ave. Suite 200 Clanton, AL 36027-1255

CERIODAPHNIA SURVIVAL AND REPRODUCTION DATA

CLIENT/TOXICANT:	Clanton	TEST CHAMBER:	G / P	30	ml
LOCATION/SOURCE:	Clanton WWTP Effluent	FOOD:	0.10	ml YTC	1.8
TEST START:	11/06/18	FOOD:	0.10	ml Algae	3.0x10 ⁷
TEST END:	11/13/18	TEST TEMP.(mg C):			25 +/- 1
DILUTION WATER:	20% DMW	ORGANISM AGE:		<24 hrs within 6 hrs of same age	

Sample: Clanton 75%		Chemical/Physical Data						
		Day						
		1	2	3	4	5	6	7
Temp °C	Initial	26.0	25.0	25.0	25.0	25.0	25.0	25.0
	Final	24.9	25.2	25.2	24.5	25.0	25.0	24.1
D.O. mg/L	Initial	8.3	8.3	8.3	8.3	8.3	8.3	8.3
	Final	8.0	8.2	8.1	7.9	8.0	7.7	7.9
pH s.u.	Initial	8.0	8.0	7.9	8.0	8.2	8.0	8.1
	Final	8.3	8.2	8.2	8.3	8.4	8.3	8.3
Alkalinity mg/L as CaCO ₃		150		150		160		
Hardness mg/L as CaCO ₃		180		185		180		
Conductivity µmhos/cm		466	473	571	574	450	456	453
Chlorine mg/L		<0.01		<0.01		<0.01		
Light Intensity µE-c		73	79	71	73	72	74	84
pH - Undiluted s.u.		7.7	7.6	7.8	7.7	7.7	7.7	7.8

Analyst/time Initial	MMC/TRT/TLM 1315	MMC,TRT,TLM 1400	TRT/TLM 1450	TRT 1240	TRT/MMC 1310	TRT/TLM 1255	TRT/MMC 1315	Daily electronically entered	
Analyst/time Final	TLM 1500	TLM 1545	TLM 1430	TRT 1410	TLM 1400	MMC 1410	AEB 1440		
Soln change time	TLM 1445	TLM 1535	TLM 1415	TRT 1340	TLM 1415	MMC 1355	AEB 1420		

Survival & Reproduction Data		REPLICATES									
Parent	A6	A34	B48	A15	B2	B21	A45	B35	A20	B14	
	1	2	3	4	5	6	7	8	9	10	Neonates cntd
DAY 1	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Time/analst ini.
	0	0	0	0	0	0	0	0	0	0	TLM 1445
2	0	0	0	X	0	0	0	0	0	0	TLM 1535
3	0	0	0	0	0	4 ¹	0	6 ¹	9 ¹	0	TLM 1415
4	6 ¹	5 ¹	7 ¹	0	5 ¹	0	6 ¹	0	5 ²	6 ¹	TRT 1340
5	10 ²	6 ²	10 ²	0	12 ²	8 ²	11 ²	10 ²	12 ³	9 ²	TLM 1415
6	17 ³	X	14 ³	0	0	15 ³	16 ³	15 ³	0	0	MMC 1355
7	0	0	0	0	13 ³	0	0	0	0	14 ³	AEB 1420
8											
Total Young	33	11	31	0	30	27	33	31	26	29	AVG 25.1

Numbers = # of young
X = Adult dead;
M = Adult killed or lost by tech

f = fourth brood; not counted
y = adult male

Comments:

Data approved by:

FATHEAD MINNOW SURVIVAL AND GROWTH DATA

CLIENT/TOXICANT: <u>Control</u>	ANALYST: <u>MMC, CRS, TRT, AEB, TLM</u>
LOCATION/SOURCE: <u>TTL, Inc.</u>	TEST CHAMBER: <u>G / P</u> <u>600</u>
TEST START: <u>11/06/18</u>	FOOD: <u>0.15</u> ml Brine shrimp <u>2</u> x daily
TEST END: <u>11/13/18</u>	TEST TEMP. (rng C): <u>25 +/- 1</u>
DILUTION WATER: <u>20% DMW</u>	ORGANISM AGE: <u><24hrs</u>

Sample: <u>Control</u>		Chemical/Physical Data								
		Day								
		1	2	3	4	5	6	7	8	9
Temp C	Initial	26.0	25.0	25.0	25.0	25.0	25.0	25.0		
	Final	24.5	24.5	24.5	25.0	24.4	24.6	25.0		
D.O. mg/L	Initial	8.2	8.3	8.3	8.3	8.3	8.3	8.0		
	Final	8.3	7.4	7.1	7.0	7.2	6.7	6.8		
pH s.u.	Initial	8.2	8.0	8.2	8.0	8.2	8.2	8.2		
	Final	8.1	7.9	7.8	8.0	8.0	7.8	7.8		
Alkalinity mg/L as CaCO ₃		60		60		60				
Hardness mg/L as CaCO ₃		80		80		80				
Conductivity umhos/cm		179	183.6	180	185.9	184.7	187.3	186.6		
Chlorine mg/L		<0.01		<0.01		<0.01				
Light Intensity ft-c		73	79	71	73	72	74	84		
pH - Undiluted s.u.		8.2	8.0	8.2	8.0	8.2	8.2	8.2		

Analyst/time Initial MMC/TRT/TLM 1315 MMC,TRT,TLM 1400 TRT/TLM 1450 TRT 1240 TRT/MMC 1310 TRT/TLM 1255 TRT/MMC 1315 Daily electronically entered

Analyst/time Final TRT 1525 TRT 1555 TRT 1420 MMC 1405 TRT 1410 TRT 1450 TLM 1445

Survival Data		Day							
		Start (ON)	1	2	3	4	5	6	7 (SN)
Replicate	1	15	15	15	15	14	14	14	14
	2	15	15	15	15	15	15	15	15
	3	15	15	15	15	15	15	15	15
	4	15	15	15	15	15	15	15	15
Organism age <u><24hrs</u>									
Feeding time am		—	800	800	800	1045	1000	730	NF
Renewal time		1420	1430	1500	1335	1335	1325	1400	1325
Feeding time pm		1600	1600	1600	1600	1430	1420	1600	—
Analyst		MMC/TRT/TLM	TRT	TRT	TRT	MMC	TRT	TRT	TLM

Growth Data						
Drying Date:	11/13/2018	Time in:	1500	Time out:	11/14/18 1500	Total drying time: 24.0
Weighing Date:	11/14/18	Drying temp:	60	Analyst:	TRT	
Rep #	Boat #	Dry Wgt of Boat (mg)	Dry wgt of boat and larvae (mg)	Total Dry Wgt of Larvae (mg)	SN# of larvae	Mean dry wgt of ON# la
1	TTL-1	1307.60	1316.90	9.30	14	0.6200
2	TTL-2	1309.00	1319.50	10.50	15	0.7000
3	TTL-3	1314.70	1323.90	9.20	15	0.6133
4	TTL-4	1300.50	1308.40	7.90	15	0.5267
						AVG (mg)
						0.6150

Comments:

Data approved by:

CERIODAPHNIA SURVIVAL AND REPRODUCTION DATA

CLIENT/TOXICANT: <u>Control</u>	TEST CHAMBER: <u>G / P</u> <u>30</u> ml
LOCATION/SOURCE: <u>TTL, Inc.</u>	FOOD: <u>0.10</u> ml YTC <u>1.8</u> g/l TSS
TEST START: <u>11/06/18</u>	FOOD: <u>0.10</u> ml Algae <u>3.0x10⁷</u> cell/ml
TEST END: <u>11/13/18</u>	TEST TEMP.(mg C): <u>25 +/- 1</u>
DILUTION WATER: <u>20% DMW</u>	ORGANISM AGE: <u><24 hrs within 6 hrs of same age</u>

Sample: Control

Chemical/Physical Data

		Day								
		1	2	3	4	5	6	7	8	9
Temp °C	Initial	26.0	25.0	25.0	25.0	25.0	25.0	25.0		
	Final	25.0	25.1	25.1	24.3	25.1	25.5	24.2		
D.O. mg/l	Initial	8.2	8.3	8.3	8.3	8.3	8.3	8.0		
	Final	8.0	8.0	8.0	7.8	7.2	7.6	7.7		
pH s.u.	Initial	8.2	8.0	8.2	8.0	8.2	8.2	8.2		
	Final	8.0	8.2	8.2	8.3	8.3	8.2	8.2		
Alkalinity mg/l as CaCO ₃		60		60		60				
Hardness mg/l as CaCO ₃		80		80		80				
Conductivity umhos/cm		179	183.6	180	185.9	184.7	187.3	186.6		
Chlorine mg/l		<0.01		<0.01		<0.01				
Light Intensity ft-c		73	79	71	73	72	74	84		
pH - Undiluted s.u.		8.2	8.0	8.2	8.0	8.2	8.2	8.2		

Analyst/time Initial MMC/TRT/TLM 1315 MMC,TRT,TLM 1400 TRT/TLM 1450 TRT 1240 TRT/MMC 1310 TRT/TLM 1255 TRT/MMC 1315 Daily electronically entered

Analyst/time Final TLM 1500 TLM 1545 TLM 1430 TRT 1410 TLM 1400 MMC 1410 AEB 1440

Soln change time TLM 1425 TLM 1520 TLM 1425 TRT 1400 TLM 1335 MMC 1340 AEB 1435

Survival & Reproduction Data

REPLICATES

Parent		A6	A34	B48	A15	B2	B21	A45	B35	A20	B14	Neonates cntd	
		1	2	3	4	5	6	7	8	9	10		
DAY	1	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Neonates Brd	Time/analst ini.
	2	0	0	0	0	0	0	0	0	0	0	0	TLM 1425
	3	0	0	0	0	0	0	0	0	0	0	0	TLM 1520
	4	7 ¹	0	5 ¹	0	4 ¹	0	0	7 ¹	0	0	0	TLM 1425
	5	3 ²	6 ¹	0	7 ¹	9 ²	5 ¹	7 ¹	0	7 ¹	7 ¹	7 ¹	TRT 1400
	6	12 ³	9 ²	11 ²	13 ²	8 ³	12 ²	10 ²	11 ²	9 ²	7 ²	7 ²	TLM 1335
	7	0	0	19 ³	0	0	0	0	20 ³	15 ³	0	0	MMC 1340
	8	0	18 ³	0	19 ³	0	18 ³	24 ³	0	0	0	0	AEB 1435
	9												
Total Young		22	33	35	39	21	35	41	38	31	14	AVG 30.9	

Numbers = # of young f = fourth brood; not counted

X = Adult dead; y = adult male

M = Adult killed or lost by tech

Comments:

Data approved by:

TTL**DAY 1****LIMS Chain of Custody Form****Composite Sample Info****Sample Security Requirements**

Client: City of Clanton - WWTP

Contact: Mr. Anthony Robinson

Mailing Address: 1574 County Road 51

City, State, Zip: Clanton, AL 35046

Phone No.: (205) 755-2360

Sampled By: Client

Project ID: BIO-Clanton 1

Project Name: WWTP Biotox Day 1

**TTL WORK
ORDER NUMBER
181105036**Sample BiotoxStart 11-04-18 8:01 AMEnd 11-05-18 8:11 AM

DATE/TIME

Sample BiotoxStart 11-04-18 8:11 AMEnd 11-05-18 8:11 AM

DATE/TIME

1. Condition of Contents: _____

2. Sealed for Shipping By: _____

3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____

4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____

5. Condition of Contents: Good - Ice6. Comments: 0.8 °C at Tuscaloosa Lab

7. Reporting Status: Routine; _____ ; Rush By* _____

8. Client P.O. # _____

* SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
------	------	-----------------------	-------------	---------------	-------------------	---------------------

11-05-18 - 8:24 AM Instream

Aqueous

1 QT PL HNO3

200 ZPR

11-05-18 - 8:24 AM Instream

Aqueous

GRAB

1 1/2 PT PL HNO3

HARD_W

11-05-18 - 8:01 AM Clanton WWTP Effluent

Aqueous

COMP24

1 1/2 PT PL HNO3

200 ZPR, HARD_W

11-05-18 - 8:01 AM Clanton WWTP Effluent

Aqueous

COMP24

1 QT PLNP

ALK_W COND PH_LAB

11-05-18 - 8:01 AM Clanton WWTP Effluent

Aqueous

COMP24

2 BIOTOX-1 GAL NP

BIOTOX_C

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 Jim M 11-5-18 2:152 Devin Smith 11-5-18 4:15

3 _____

4 _____

Received by: (signed) Date/Time

1 Devin Smith 11-5-18 2:15

2 _____

3 _____

4 _____

SHIPPING DETAILS Air Bill #: _____

Method of Shipment: TruckReceived By Lab: SuperDate/Time 11-5-18 16:15

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.



DAY 2

LIMS Chain of Custody Form

Sheet 1 of 1

Composite Sample Info

Sample Security Requirements

Client: City of Clanton - WWTP

Contact: Mr. Anthony Robinson

Mailing Address: 1574 County Road 51

City, State, Zip: Clanton, AL 35046

Phone No.: (205) 755-2380

Sampled By: Client

Project ID: BIO-Clanton 23

Project Name: WWTP Biotox Day 2-3

Sample Bio ToxStart 11-06-18 - 8:00 AMEnd 11-07-18 - 8:00 AMSample Bio ToxStart 11-06-18 - 8:00 AMEnd 11-07-18 - 8:00 AM

1. Condition of Contents: _____

2. Sealed for Shipping By: _____

3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____

4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____

5. Condition of Contents: Good - Ice6. Comments: 10.5°C at Tuscaloosa Lab

7. Reporting Status: Routine; _____; Rush By* _____

8. Client P.O. # _____

*SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
11-07-18	8:00	Clanton WWTP Effluent	Aqueous	COMP24	1 1/2 PT PL HNO3	200.7PR, HARD_W
11-07-18	8:00	Clanton WWTP Effluent	Aqueous	COMP24	1 QT PLNP	ALK_W, COND, PH_LAB
11-07-18	8:00	Clanton WWTP Effluent	Aqueous	COMP24	2 BIOTOX-1GAL NP	BIOTOX_C

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 Jin He 11/7/18 8:422 Harlan Clardy 11/7/18 14:00

3 _____

4 _____

Received by: (signed) Date/Time

1 Harlan Clardy 11/7/18 8:42

2 _____

3 _____

4 _____

SHIPPING DETAILS

Air Bill #: _____

Method of Shipment: HandReceived By Lab: ASCEDate/Time: 11/7/18 14:00

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.



LIMS Chain of Custody Form

DAY 3

A-T

Sheet 1 of 1

Client: City of Clanton - WWTP

Contact: Mr. Anthony Robinson

Mailing Address: 1574 County Road 51

City, State, Zip: Clanton, AL 35046

Phone No.: (205) 755-2890

Sampled By: client

Project ID: BIO-Clanton 23

Project Name: WWTP Biotox Day 2-3

TTL WORK
ORDER NUMBER
181109036

Composite Sample Info

Sample BiotoxStart 11-08-18 - 8:00amEnd 11-08-18 - 5:00pmSample BiotoxStart 11-08-18 - 8:00amEnd 11-09-18 - 5:00pm

Sample Security Requirements

1. Condition of Contents: _____

2. Sealed for Shipping By: _____

3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____

4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____

5. Condition of Contents: Good - Ice6. Comments: 0-1 °C at Tuscaloosa Lab

7. Reporting Status: Routine; _____; Rush By* _____

8. Client P.O. # _____

* SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
<u>11-08-18 - 8:00am</u>		Clanton WWTP Effluent	Aqueous	COMP24	1 1/2 FT PL HNO3	200 TPF, HARD_W
<u>11-08-18 - 5:00pm</u>		Clanton WWTP Effluent	Aqueous	COMP24	1 QT PUMP	ALK_W COND PH_LAB
<u>11-09-18 - 5:00pm</u>		Clanton WWTP Effluent	Aqueous	COMP24	2 BIOTOX-100AL NF	BIOTOX_C

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 [Signature] 11/9/18 12:00pm2 Landon Courington 11/9/18 3:35pm

3 _____

4 _____

Received by: (signed) Date/Time

1 Landon Courington 11/9/18 12:00pm

2 _____

3 _____

4 _____

SHIPPING DETAILS

Air Bill #: _____

Method of Shipment: HandReceived By Lab: [Signature]Date/Time: 11-9-18 3:35pm

ATTACHMENT 3
REFERENCE TOXICANT DATA

Raw Data and CUSUM charts on file with ADEM.

STATISTICAL ANALYSIS OF BIOTOXICITY DATA

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/06/18-11/13/18

CERIODAPHNIA REPRODUCTION

	CONTROL	EFFLUENT
	22	33
	33	11
	35	31
	39	0
	21	30
	35	27
	41	33
	38	31
	31	26
	14	29
MEAN	30.9	25.1
STANDARD DEVIATION	8.94	10.89
COEFFICIENT OF VARIATION	28.92	43.38

SHAPIRO-WILKS	Calculated W	Critical W
	0.822	< 0.868

THE DATA ARE NOT NORMALLY DISTRIBUTED
USE WILCOXON RANK SUM TEST

F - TEST	Calculated F	Critical F
	1.48	< 6.54

VARIANCES EQUAL, USE EQUAL VARAINCE t - TEST

t - TEST	Calculated t	Critical t
	1.302	< 1.743

DATA SETS ARE NOT SIGNIFICANTLY DIFFERENT

Clanton Ceriodaphnia Reproduction 11/18

File: cl1118cr

Transform: NO TRANSFORMATION

WILCOXON'S RANK SUM TEST W/ BONFERRONI ADJUSTMENT - Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	RANK SUM	CRIT. VALUE	REPS	SIG
1	0	30.900				
2	75	25.100	83.00	82.00	10	

Critical values use $k = 1$, are 1 tailed, and $\alpha = 0.05$

STATISTICAL ANALYSIS OF BIOTOXICITY DATA

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/06/18-11/13/18

CERIODAPHNIA SURVIVAL

FISHER'S EXACT TEST

	ALIVE	DEAD	TOTAL
CONTROL	10	0	10
EFFLUENT	9	1	10
TOTAL	19	1	20

CRITICAL FISHER'S VALUE (10,10,10) (0.05)

b VALUE

6

<

9

THE DATA SETS ARE NOT SIGNIFICANTLY DIFFERENT.

STATISTICAL ANALYSIS OF BIOTOXICITY DATA

Discharger: Clanton
Location: WWTP Effluent

Test Dates: 11/06/18-11/13/18

FATHEAD MINNOW GROWTH

	CONTROL	EFFLUENT
	0.6200	0.5400
	0.7000	0.5200
	0.6133	0.5800
	0.5267	0.5400
MEAN	0.6150	0.5450
STANDARD DEVIATION	0.0708	0.0252
COEFFICIENT OF VARIATION	11.5189	4.6176

SHAPIRO-WILKS	Calculated W	Critical W
	0.933 >	0.749

THE DATA ARE NORMALLY DISTRIBUTED
USE t-TEST

F - TEST	Calculated F	Critical F
	7.92 <	47.47

VARIANCES EQUAL, USE EQUAL VARAINCE t - TEST

t - TEST	Calculated t	Critical t
	1.862 <	1.943

DATA SETS ARE NOT SIGNIFICANTLY DIFFERENT

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
002	0.45 acres	2.93 acres	003	0.93 acres	2.83 acres

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

All chemicals are stored inside to keep out of contact with stormwater. some herbicides and pesticides are used around plant, but only the minimum. no fertilizers or soil conditioners are used. sludge is removed from drying beds and disposed at landfill. N

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff, and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
n/a		

V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
billy joe driver	<i>Billy Joe Driver</i>	8-29-2019

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

storm water discharge points are inspected daily.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

N/A

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☒ Yes (list all such pollutants below)

☐ No (go to Section IX)

Chlorine, and sulfur dioxide

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such pollutants below)

☒ No (go to Section IX)

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☒ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

X. 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 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.

A. Name & Official Title (Type Or Print)

billy joe driver

B. Area Code and Phone No.

(205) 755-4051

C. Signature

Billy Joe Driver

D. Date Signed

8-29-2019

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

0025

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
11/01/2018		.72 inches		420 gpm	63500 gal

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

1 inch of rain on 1 acre is 27154 gal 002s drains 2.93 acres. assume 20% infiltration

0025

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Continue on Reverse

0035

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

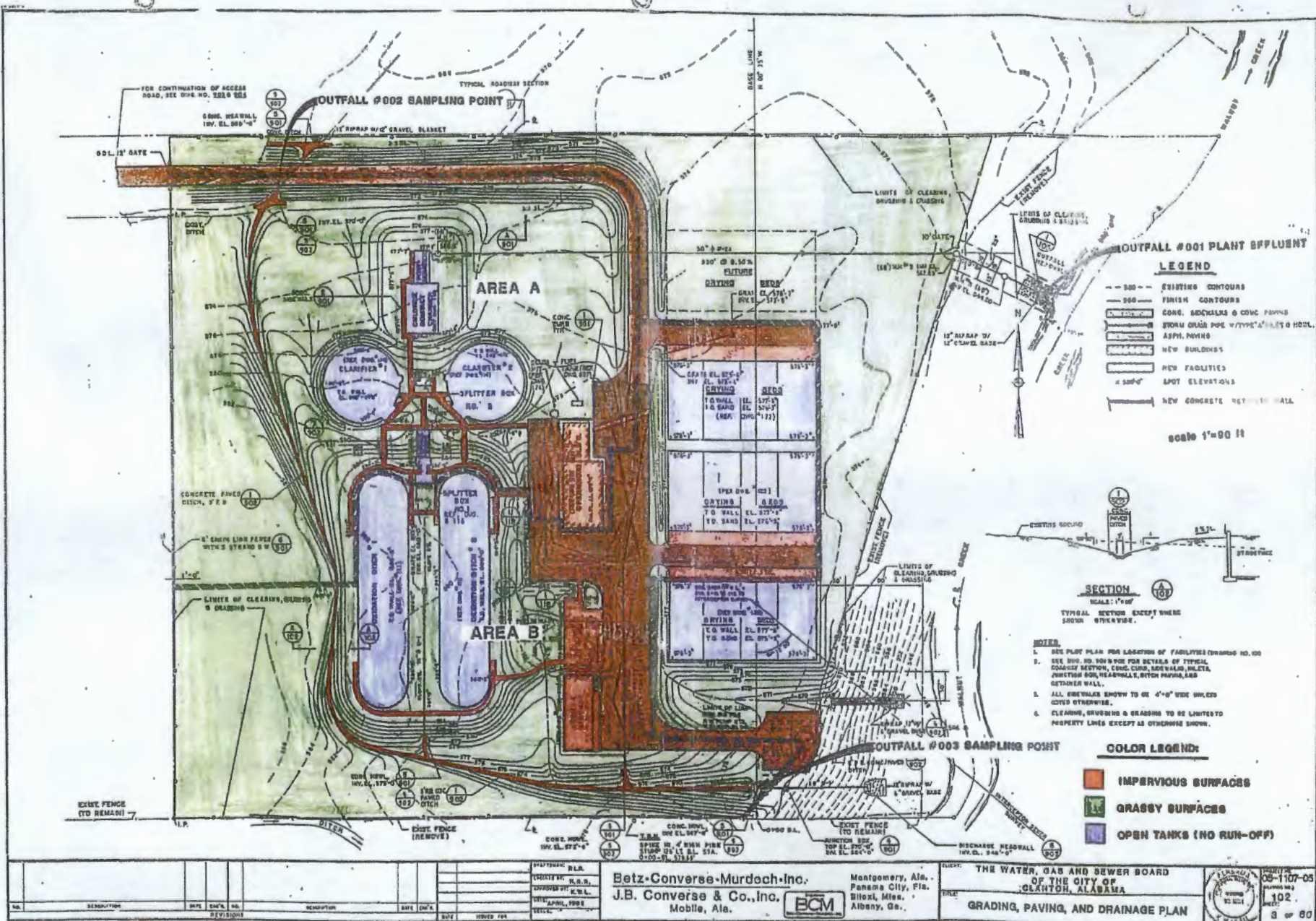
[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)
11/01/2019		0.72		405	61,500

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

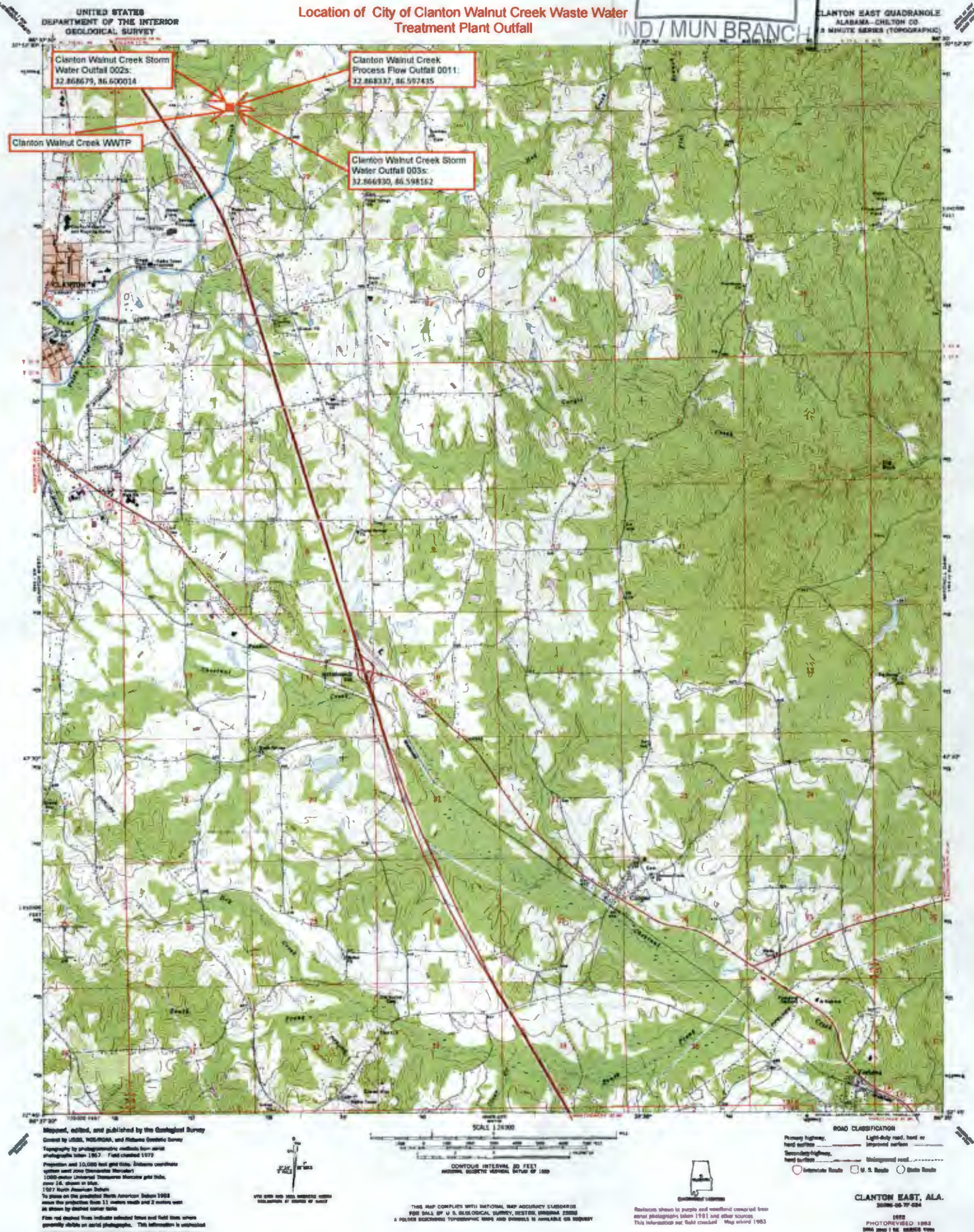
Outfall 003s drains 2.83 acres. 1 Inch of Rain on 1 acre is 27,154 gallons. Assumed 20% infiltration.



RECEIVED
OCT 31 2019
IND / MUN BRANCH

Location of City of Clanton Walnut Creek Waste Water Treatment Plant Outfall

CLANTON EAST QUADRANGLE
ALABAMA-CHLTON CO
3 MINUTE SERIES (TOPOGRAPHIC)



Mapwork, edited, and published by the Geological Survey
Control by U.S.G.S., NAD 83, and Alabama Geologic Survey
Topography by photogrammetric methods from aerial
photographs taken 1967. Field checked 1972
Projection and 10,000 foot grid lines. Spheroid coordinate
system used is Universal Transverse Mercator
1000 meter Universal Transverse Mercator grid zone
18N. Zone 18N. U.S. datum is NAD 83.
1987 North American Datum
To pass on the projected North American Datum 1983
datum the projection from 11 meters north and 2 meters west
as shown by dashed corner lines
Data not shown from indicate indicated flow and field lines shown
generally derive from aerial photographs. This information is unverified
Red line indicates areas in which only landmark buildings are shown



SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
HORIZONTAL SCALE 1:24,000



ROAD CLASSIFICATION
Primary highway: Light-duty road, hard or
Road surface: improved surface
Secondary highway: Unimproved road
Road surface: U.S. Road
State Road

This map complies with NATIONAL MAP ACTUALLY CLASSIFIED
FOR SCALE BY U.S. GEOLOGICAL SURVEY, BOSTON, MASSACHUSETTS
A POLAR PROJECTION TOPOGRAPHIC MAP AND SYMBOLS IS AVAILABLE ON REQUEST
This information was field checked. Map volume 1983

CLANTON EAST, ALA.
30000-00-77-004
1983
PHOTOGRAPHED 1982
DATA 1982 1:24,000 SCALE

Instructions – Form 2F

Application for Permit to Discharge Storm Water Associated with Industrial Activity

Who Must File Form 2F

Form 2F must be completed by operators of facilities which discharge storm water associated with industrial activity or by operators of storm water discharges that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.

Operators of discharges which are composed entirely of storm water must complete Form 2F (EPA Form 3510-2F) in conjunction with Form 1 (EPA Form 3510-1).

Operators of discharges of storm water which are combined with process wastewater (process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater) must complete and submit Form 2F, Form 1, and Form 2C (EPA Form 3510-2C).

Operators of discharges of storm water which are combined with nonprocess wastewater (nonprocess wastewater includes noncontact cooling water and sanitary wastes which are not regulated by effluent guidelines or a new source performance standard, except discharges by educational, medical, or commercial chemical laboratories) must complete Form 1, Form 2F, and Form 2E (EPA Form 3510-2E).

Operators of new sources or new discharges of storm water associated with industrial activity which will be combined with other nonstormwater new sources or new discharges must submit Form 1, Form 2F, and Form 2D (EPA Form 3510-2D).

Where to File Applications

The application forms should be sent to the EPA Regional Office which covers the State in which the facility is located. Form 2F must be used only when applying for permits in States where the NPDES permits program is administered by EPA. For facilities located in States which are approved to administer the NPDES permits program, the State environmental agency should be contacted for proper permit application forms and instructions.

Information on whether a particular program is administered by EPA or by a State agency can be obtained from your EPA Regional Office. Form 1, Table 1 of the "General Instructions" lists the addresses of EPA Regional Offices and the States within the jurisdiction of each Office.

Completeness

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

Public Availability of Submitted Information

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. Section 402(j) of the Clean Water Act requires that all permit applications will be available to the public. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form, Form 1, or Form 2C you may claim as confidential, but claims for information which are effluent data will be denied.

If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

EPA ID Number

Fill in your EPA Identification Number at the top of each odd numbered page of Form 2F. You may copy this number directly from item I of Form 1.

Item I

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

Item 11-A

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing the same information.

Item 11-B

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item III

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including:

each of its drainage and discharge structures;

the drainage area of each storm water outfall;

paved areas and building within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34);

each well where fluids from the facility are injected underground; and

springs, and other surface water bodies which receive storm water discharges from the facility;

Item IV-A

For each outfall, provide an estimate of the area drained by the outfall which is covered by impervious surfaces. For the purpose of this application, impervious surfaces are surfaces where storm water runs off at rates that are significantly higher than background rates (e.g., predevelopment levels) and include paved areas, building roofs, parking lots, and roadways. Include an estimate of the total area (including all impervious and pervious areas) drained by each outfall. The site map required under item III can be used to estimate the total area drained by each outfall.

Item IV-B

Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of these materials; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Significant materials should be identified by chemical name, form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101 (14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Item IV-C

For each outfall, structural controls Include structures which enclose material handling or storage areas, covering materials, berms, dikes, or diversion ditches around manufacturing, production, storage or treatment units, retention ponds, etc. Nonstructural controls include practices such as spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures that are used to prevent or minimize the potential for releases of pollutants.

Item V

Provide a certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by an NPDES permit. Tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. Part B must include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test. All non-storm water discharges must be identified in a Form 2C or Form 2E which must accompany this application (see beginning of instructions under section titled "Who Must File Form 2F" for a description of when Form 2C and Form 2E must be submitted).

Item VI

Provide a description of existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years.

Item VII-A, B, and C

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

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

- A. Sampling:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or storm water discharges. You may contact EPA or your State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used (you are not required to analyze a flow-weighted composite for these parameters). For all other pollutants both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

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

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

Grab and composite samples are defined as follows:

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

Flow-weighted Composite sample: A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of fifteen minutes between aliquot collections. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. Where GC/MS Volatile Organic Analysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in storm water treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rainfall), protocols for collecting samples under 40 CFR Part 136, and additional time for submitting data on a case-by-case basis.

- B. Reporting:** All levels must be reported as concentration and mass (note: grab samples are reported in terms of concentration). You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 and VII-2 if the separate sheets contain all the required information in a format which is constant with pages VII-1 and VII-2 in spacing and identification of pollutants and columns. Use the following abbreviations in the columns headed "Units."

Concentration		Mass	
ppm	parts per million	lbs	pounds
mg/l	milligrams per liter	ton	tons (English tons)
ppb	parts per billion	mg	milligrams
ug/l	micrograms per liter	g	grams
kg	kilograms	T	tonnes (metric tons)

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

- (1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or
- (2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- (3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA. If you measure only one grab sample and one flow-weighted composite

sample for a given outfall, complete only the "Maximum Values" columns and insert "1" into the "Number of Storm Events Sampled" column. The permitting authority may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are representative of your discharge, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Average Values" columns, and the total number of storm events sampled under the "Number of Storm Events Sampled" columns.

- C. Analysis:** You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

Part VII-A

Part VII-A must be completed by all applicants for all outfalls who must complete Form 2F.

Analyze a grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results except use only grab samples for pH and oil and grease. See discussion in General Instructions to Item VII for definitions of grab sample collected during the first thirty minutes of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Part VII B

List all pollutants that are limited in an effluent guideline which the facility is subject to (see 40 CFR Subchapter N to determine which pollutants are limited in effluent guidelines) or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See discussion in General instructions to item VII for definitions of grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Analyze a grab sample collected during the first thirty minutes of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results, except as provided in the General Instructions.

Part VII-C

Part VII-C must be completed by all applicants for all outfalls which discharge storm water associated with industrial activity, or that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard. Use both a grab sample and a composite sample for all pollutants you analyze for in this part except use grab samples for residual chlorine and fecal coliform. The "Average Values" column is not compulsory but should be filled out if data are available. Part C requires you to address the pollutants in Table 2F-2, 2F-3, and 2F-4 for each outfall. Pollutants in each of these Tables are addressed differently.

Table 2F-2: For each outfall, list all pollutants in Table 2F-2 that you know or have reason to believe are discharged (except pollutants previously listed in Part VII-B). If a pollutant is limited in an effluent guideline limitation which the facility is subject to, the pollutant must be analyzed and reported in Part VII-B. If a pollutant in Table 2F-2 is indirectly limited by an effluent guideline limitation through an indicator (e.g., use of TSS as an indicator to control the discharge of iron and aluminum), you must analyze for it and report the data in Part VII-B. For other pollutants listed in Table 2F-2 (those not limited directly or indirectly by an effluent limitation guideline), that you know or have reason to believe are discharged, you must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Table 2F-3: For each outfall, list all pollutants in Table 2F-3 that you know or have reason to believe are discharged. For every pollutant in Table 2F-3 expected to be discharged in concentrations of 10 ppb or greater, you must submit quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, you must submit quantitative data if any of these four pollutants is expected to be discharged in concentrations of 100 ppb or greater. For every pollutant expected to be discharged in concentrations less than 10 ppb (or 100 ppb for the four pollutants listed above), then you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Small Business Exemption - If you are a "small business," you are exempt from the reporting requirements for the organic toxic pollutants listed in Table 2F-3. There are two ways in which you can qualify as a small business". If your facility is a coal mine, and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants. If your facility is not a coal mine, and if your gross total annual sales for the most recent three years average less than \$100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production or sales data must be for the facility which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980=100). This index is available in National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis).

Table 2F-4: For each outfall, list any pollutant in Table 2F-4 that you know or believe to be present in the discharge and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report them. Note: Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed at 40 CFR 177.21 or 40 CFR 302.4) may be exempted from the requirements of section 311 of CWA, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of section 311, attach additional sheets of paper to your form, setting forth the following information:

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

See 40 CFR 117.12(a)(2) and (c), published on August 29, 1979, in 44 FR 50766, or contact your Regional Office (Table I on Form 1, Instructions), for further information on exclusions from section 311.

Part VII-D

If sampling is conducted during more than one storm event, you only need to report the information requested in Part VII-D for the storm event(s) which resulted in any maximum pollutant concentration reported in Part VII-A, VII-B, or VII-C.

Provide flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, the method of flow measurement, or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements, or estimates of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

Part VII-E

List any toxic pollutant listed in Tables 2F-2, 2F-3, or 2F-4 which you currently use or manufacture as an intermediate or final product or byproduct. In addition, if you know or have reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is discharged or if you use or manufacture 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); then list TCDD. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item VIII

Self explanatory. The permitting authority may ask you to provide additional details after your application is received.

Item X

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(4) of the Clean Water Act provides that "Any person who knowingly makes any false material statement, representation, or certification in any application, . . . shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction of such person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both." 40 CFR Part 122.22 requires the certification to be signed as follows:

(A) For a corporation: by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in 122.22(a)(1)(i) The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under 122.22(a)(1)(ii) rather than to specific individuals.

(B) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

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

**Table 2F-1
Codes for Treatment Units**

Physical Treatment Processes

1-A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstraining
1-C	Diatomaceous Earth Filtration	1-O	Mixing
1-D	Distillation	1-P	Moving Bed Filters
1-E	Electrodialysis	1-Q	Multimedia Filtration
1-F	Evaporation	1-R	Rapid Sand Filtration
1-G	Flocculation	1-S	Reverse Osmosis (Hyperfiltration)
1-H	Flotation	1-T	Screening
1-I	Foam Fractionation	1-U	Sedimentation (Setting)
1-J	Freezing	1-V	Slow Sand Filtration
1-K	Gas-Phase Separation	1-W	Solvent Extraction
1-L	Grinding (Comminutors)	1-X	Sorption

Chemical Treatment Processes

2-A	Carbon Adsorption	2-G	Disinfection (Ozone)
2-B	Chemical Oxidation	2-H	Disinfection (Other)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (Chlorine)	2-L	Reduction

Biological Treatment Processes

3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filtration

Other Processes

4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection

Sludge Treatment and Disposal Processes

5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

Table 2F-2

Conventional and Nonconventional Pollutants

Bromide
Chlorine, Total Residual
Color
Fecal Coliform
Fluoride
Nitrate-Nitrite
Nitrogen, Total Organic
Oil and Grease
Phosphorus, Total
Radioactivity
Sulfate
Sulfite
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt Total
Iron, Total
Magnesium, Total
Molybdenum, Total
Manganese, Total
Tin, Total
Titanium, Total

Table 2F-3

Toxic Pollutants

Toxic Pollutants and Total Phenol

Antimony, Total
Arsenic, Total
Beryllium, Total
Cadmium, Total
Chromium, Total

Copper, Total
Lead, Total
Mercury, Total
Nickel, Total
Selenium, Total

Silver, Total
Thallium, Total
Zinc, Total
Cyanide, Total
Phenols, Total

GC/MS Fraction Volatiles Compounds

Acrolein
Acrylonitrile
Benzene
Bromoform
Carbon Tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
2-Chloroethylvinyl Ether
Chloroform

Dichlorobromomethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropylene
Ethylbenzene
Methyl Bromide
Methyl Chloride
Methylene Chloride

1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
1,2-Trans-Dichloroethylene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl Chloride

Acid Compounds

2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-O-Cresol

2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
p-Chloro-M-Cresol

Pentachlorophenol
Phenol
2,4,6-Trichlorophenol
2-methyl-4,6 dinitrophenol

Base/Neutral

Acenaphthene
Acenaphthylene
Anthracene
Benzidine
Benzo(a)anthracene
Benzo(a)pyrene
3,4-Benzofluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
4-Bromophenyl Phenyl Ether
Butylbenzyl Phthalate

2-Chloronaphthalene
4-Chlorophenyl Phenyl Ether
Chrysene
Dibenzo(a,h)anthracene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3'-Dichlorobenzidine
Diethyl Phthalate
Dimethyl Phthalate
Di-N-Butyl Phthalate
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-N-Octylphthalate
1,2-Diphenylhydrazine (as Azobenzene)

Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodi-N-Propylamine
N-Nitrosodiphenylamine
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene

Pesticides

Aldrin
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC
Chlordane
4,4'-DDT
4,4'-DDE
4,4'-DDD

Dieldrin
Alpha-Endosulfan
Beta-Endosulfan
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Heptachlor
Heptachlor Epoxide
PCB-1242

PCB-1254
PCB-1221
PCB-1232
PCB-1248
PGB-1260
PCB-1016
Toxaphene

Table 2F-4

Hazardous Substances

Toxic Pollutant

Asbestos

Hazardous Substances

Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos

Cresol
Crotonaldehyde

Cyclohexane
2,4-D (2,4-Dichlorophenoxyacetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone
2,2-Dichloropropionic acid
Dichlorvos
Diethyl amine
Dimethyl amine

Dinitrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
Kelthane

Kepone
Malathion

Mercaptodimethur
Methoxychlor

Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled

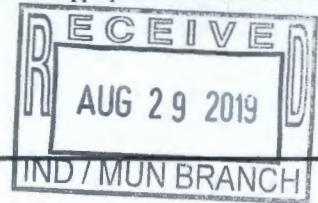
Napthenic acid
Nitrotoluene
Parathion
Phenolsulfonate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Stronthium
Strychnine
Styrene
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
TDE (Tetrachlorodiphenyl ethane)
2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Trichlorofan
Triethylamine

Trimethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

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

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

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



PURPOSE OF THIS APPLICATION

- | | |
|--|---|
| <input type="checkbox"/> Initial Permit Application for New Facility*
<input type="checkbox"/> Modification of Existing Permit
<input type="checkbox"/> Revocation & Reissuance of Existing Permit | <input type="checkbox"/> Initial Permit Application for Existing Facility*
<input checked="" type="checkbox"/> Reissuance of Existing Permit
<small>* An application for participation in the ADEM's Electronic Environmental (E2) Reporting must be submitted to allow permittee to electronically submit reports as required.</small> |
|--|---|

SECTION A – GENERAL INFORMATION

1. Facility Name: walnut creek waste water treatment plant
city of clanton
- a. Operator Name: _____
- b. Is the operator identified in A.1.a, the owner of the facility? ☒ Yes ☐ No
If no, provide name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.

- c. Name of Permittee* if different than Operator: _____
**Permittee will be responsible for compliance with the conditions of the permit*
2. NPDES Permit Number: AL 0054631 (Not applicable if initial permit application)
3. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)
Street: 1574 county road 51
City: clanton County: chilton State: alabama Zip: 35046
Facility Location (Front Gate): Latitude: 32deg52' 07" Longitude: 86deg36' 01"
4. Facility Mailing Address: po box 580
City: clanton County: chilton State: alabama Zip: 35046
5. Responsible Official (as described on last page of this application):
Name and Title: billy joe driver mayor
Address: po box 580
City: clanton State: alabama Zip: 35046
Phone Number: 2057554051 Email Address: Dorange@cityofclanton.com

6. Designated Facility/DMR Contact:

Name and Title: Anthony Robinson

Phone Number: 205-755-2380

Email Address: clantonwwtp@hotmail.com

7. Designated Emergency Contact:

Name and Title: Anthony Robinson

Phone Number: 205-755-2380

Email Address: clantonwwtp@hotmail.com

8. Please complete this section if the Applicant's business entity is a Proprietorship or Limited Liability Company (LLC) with a responsible official not listed in A.5.

Name and Title: _____

Address: _____

City: _____

State: _____

Zip: _____

Phone Number: _____

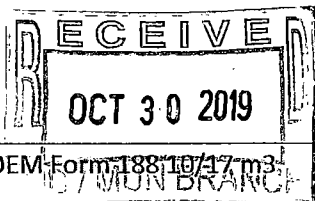
Email Address: _____

9. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State Environmental Permits presently held by the Applicant within the State of Alabama:

Permit Type	Permit Number	Held By
Clanton Water Filtration Plant	ALG640005	City of Clanton
Walnut Creek WWTP	AL0054631	City of Clanton
_____	_____	_____
_____	_____	_____
_____	_____	_____

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

Facility Name	Permit Number	Type of Action	Date of Action
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



SECTION B – WASTEWATER DISCHARGE INFORMATION

1. List the following historical monthly flow rates recorded for the past five years for each outfall:

Outfall No.	Highest Flow in Last 12 Months (MGD)	Highest Daily Flow (MGD)	Average Flow (MGD)
0011	3.522	5.184	1.649

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

3. Do you share an outfall with another facility? ☐ Yes ☒ No (If no, continue to B.4)

For each shared outfall, provide the following:

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

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

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

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

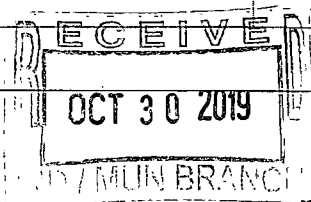
5. Are any wastewater collection or treatment modifications or expansions planned during the next three years that could alter wastewater volumes or characteristics (Note: Permit Modification may be required)? ☐ Yes ☒ No

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

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

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

Description of Waste	Description of Storage Location
sludge	Drying beds
scum	Drying beds



Describe the location of any sites used for the ultimate disposal of solid or liquid waste materials or residuals (e.g. sludges) generated by any wastewater treatment system located at the facility.

Description of Waste	Quantity (lbs/day)	Disposal Method*
sludge	651 drylbs/dy	shelby county landfill as of 04/01/2019
scum	58 drylbs/dy	shelby county land fill

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

SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS

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

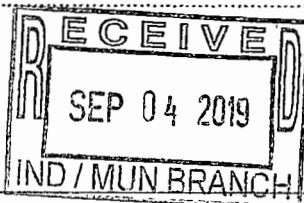
Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit?	
oflex	metal finishing	existing	.090	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
adient	metal finishing	existing	.0135	<input type="checkbox"/> Yes	<input type="checkbox"/> No
				<input type="checkbox"/> Yes	<input type="checkbox"/> No
				<input type="checkbox"/> Yes	<input type="checkbox"/> No

- b. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance? ☐ Yes ☒ No
If yes, please attach a copy of the ordinance.

SECTION E – COASTAL ZONE INFORMATION

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

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



SECTION F – ANTI-DEGRADATION EVALUATION

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

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

If yes, do not complete this section.

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

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

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

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

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

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

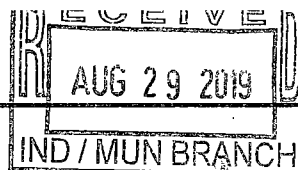
- E. What public service to the community will the discharger be providing?

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

SECTION G – EPA Application Forms

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

1. All applicants must submit Form 1.
2. 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.
3. Applicants for new or existing land application of sanitary wastewater must submit Form 2A and, if the land application site is not completely bermed to prevent runoff, applicants must also submit Form 2F.
4. Applicants for new and existing discharges of process wastewater from water treatment facilities (i.e. public water supply treatment plants) must submit Form 2C.
5. Applicants that generate sewage sludge, derive a material from sewage sludge, or dispose of sewage sludge must submit Part 2 of Form 2S.



SECTION H- ENGINEERING REPORT/BMP PLAN REQUIREMENTS

Any Engineering Report or Best Management Practice (BMP) Plans required to be submitted to ADEM by the applicant must be in accordance with ADEM 335-6-6-.08(i) & (j).

SECTION I- RECEIVING WATERS

Outfall No.	Receiving Water(s)	303(d) Segment?		Included in TMDL?*	
0011	walnut creek	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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

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

SECTION J - APPLICATION CERTIFICATION

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

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

Signature of Responsible Official: Billy Joe Driver
Name and Title: billy joe driver

Date Signed: 8-27-2019

If the Responsible Official signing this application is not identified in Section A.5 or A.8, provide the following information:

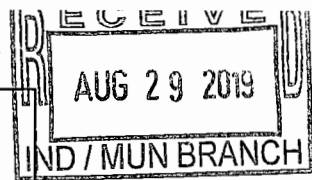
Mailing Address: po box 580

City: clanton State: al Zip: 35046

Phone Number: 2057554051 Email Address: Dorange@cityofclanton.com

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

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



FACILITY NAME AND PERMIT NUMBER:

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

FORM
2S
NPDES

NPDES FORM 2S APPLICATION OVERVIEW

PRELIMINARY INFORMATION

This page is designed to indicate whether the applicant is to complete Part 1 or Part 2. Review each category, and then complete Part 1 or Part 2, as indicated. For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

FACILITIES INCLUDED IN ANY OF THE FOLLOWING CATEGORIES MUST COMPLETE PART 2 (PERMIT APPLICATION INFORMATION).

1. Facilities with a currently effective NPDES permit.
2. Facilities which have been directed by the permitting authority to submit a full permit application at this time.

ALL OTHER FACILITIES MUST COMPLETE PART 1 (LIMITED BACKGROUND INFORMATION).

FACILITY NAME AND PERMIT NUMBER:

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

PART 1: LIMITED BACKGROUND INFORMATION

This part should be completed only by "sludge-only" facilities - that is, facilities that do not currently have, and are not applying for, an NPDES permit for a direct discharge to a surface body of water.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

1. Facility Information.

- a. Facility name _____
- b. Mailing Address _____

- c. Contact person _____
Title _____
Telephone number _____
- d. Facility Address (not P.O. Box) _____

- e. Indicate the type of facility
_____ Publicly owned treatment works (POTW) _____ Privately owned treatment works
_____ Federally owned treatment works _____ Blending or treatment operation
_____ Surface disposal site _____ Sewage sludge incinerator
_____ Other (describe) _____

2. Applicant Information.

- a. Applicant name _____
- b. Mailing Address _____

- c. Contact person _____
Title _____
Telephone number _____
- d. Is the applicant the owner or operator (or both) of this facility?
_____ owner _____ operator
- e. Should correspondence regarding this permit be directed to the facility or the applicant?
_____ facility _____ applicant

FACILITY NAME AND PERMIT NUMBER:

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

3. Sewage Sludge Amount. Provide the total dry metric tons per latest 365 day period of sewage sludge handled under the following practices:

- a. Amount generated at the facility _____ dry metric tons
- b. Amount received from off site _____ dry metric tons
- c. Amount treated or blended on site _____ dry metric tons
- d. Amount sold or given away in a bag or other container for application to the land _____ dry metric tons
- e. Amount of bulk sewage sludge shipped off site for treatment or blending _____ dry metric tons
- f. Amount applied to the land in bulk form _____ dry metric tons
- g. Amount placed on a surface disposal site _____ dry metric tons
- h. Amount fired in a sewage sludge incinerator _____ dry metric tons
- i. Amount sent to a municipal solid waste landfill _____ dry metric tons
- j. Amount used or disposed by another practice _____ dry metric tons

Describe _____

4. Pollutant Concentrations. Using the table below or a separate attachment, provide existing sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR part 503 for this facility's expected use or disposal practices. If available, base data on three or more samples taken at least one month apart and no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC			
CADMIUM			
CHROMIUM			
COPPER			
LEAD			
MERCURY			
MOLYBDENUM			
NICKEL			
SELENIUM			
ZINC			

5. Treatment Provided At Your Facility.

- a. Which class of pathogen reduction does the sewage sludge meet at your facility?

_____ Class A _____ Class B _____ Neither or unknown

- b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

- ☐ Option 1 (Minimum 38 percent reduction in volatile solids)
☐ Option 2 (Anaerobic process, with bench-scale demonstration)
☐ Option 3 (Aerobic process, with bench-scale demonstration)
☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
☐ Option 5 (Aerobic processes plus raised temperature)
☐ Option 6 (Raise pH to 12 and retain at 11.5)
☐ Option 7 (75 percent solids with no unstabilized solids)
☐ Option 8 (90 percent solids with unstabilized solids)
☐ Option 9 (Injection below land surface)
☐ Option 10 (Incorporation into soil within 6 hours)
☐ Option 11 (Covering active sewage sludge unit daily)
☐ None or unknown

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

6. **Sewage Sludge Sent to Other Facilities.** Does the sewage sludge from your facility meet the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements, and one of the vector attraction options 1-8?

☐ Yes ☐ No

If yes, go to question 8 (Certification).

If no, is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disposal?

☐ Yes ☐ No

If no, go to question 7 (Use and Disposal Sites).

If yes, provide the following information for the facility receiving the sewage sludge:

- a. Facility name
b. Mailing address
c. Contact person
Title
Telephone number

d. Which activities does the receiving facility provide? (Check all that apply)

- ☐ Treatment or blending ☐ Sale or give-away in bag or other container
☐ Land application ☐ Surface disposal
☐ Incineration ☐ Other (describe):

FACILITY NAME AND PERMIT NUMBER:

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

7. Use and Disposal Sites. Provide the following information for each site on which sewage sludge from this facility is used or disposed:

a. Site name or number _____

b. Contact person _____

Title _____

Telephone _____

c. Site location (Complete 1 or 2)

1. Street or Route # _____

County _____

City or Town _____ State _____ Zip _____

2. Latitude _____ Longitude _____

d. Site type (Check all that apply)

☐ Agricultural ☐ Lawn or home garden ☐ Forest
☐ Surface disposal ☐ Public Contact ☐ Incineration
☐ Reclamation ☐ Municipal Solid Waste Landfill ☐ Other (describe): _____

8. Certification. Sign the certification statement below. (Refer to instructions to determine who is an officer for purposes of this certification.)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the 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 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 and official title _____

Signature _____

Telephone number _____

Date signed _____

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwtp AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**PART 2: PERMIT APPLICATION INFORMATION**

Complete this part if you have an effective NPDES permit or have been directed by the permitting authority to submit a full permit application at this time. In other words, complete this part if your facility has, or is applying for, an NPDES permit.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

APPLICATION OVERVIEW — SEWAGE SLUDGE USE OR DISPOSAL INFORMATION

Part 2 is divided into five sections (A-E). Section A pertains to all applicants. The applicability of Sections B, C, D, and E depends on your facility's sewage sludge use or disposal practices. The information provided on this page indicates which sections of Part 2 to fill out.

1. SECTION A: GENERAL INFORMATION.

Section A must be completed by all applicants

2. SECTION B: GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE.

Section B must be completed by applicants who either:

- 1) Generate sewage sludge, or
- 2) Derive a material from sewage sludge.

3. SECTION C: LAND APPLICATION OF BULK SEWAGE SLUDGE.

Section C must be completed by applicants who either:

- 1) Apply sewage to the land, or
- 2) Generate sewage sludge which is applied to the land by others.

NOTE: Applicants who meet either or both of the two above criteria are exempted from this requirement if all sewage sludge from their facility falls into one of the following three categories:

- 1) The sewage sludge from this facility meets the ceiling and pollutant concentrations, Class A pathogen reduction requirements, and one of vector attraction reduction options 1-8, as identified in the instructions, or
- 2) The sewage sludge from this facility is placed in a bag or other container for sale or give-away for application to the land, or
- 3) The sewage sludge from this facility is sent to another facility for treatment or blending.

4. SECTION D: SURFACE DISPOSAL

Section D must be completed by applicants who own or operate a surface disposal site.

5. SECTION E: INCINERATION

Section E must be completed by applicants who own or operate a sewage sludge incinerator.

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwtp AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**A. GENERAL INFORMATION****All applicants must complete this section.****A.1. Facility Information.**

- a. Facility name walnut creek wwtp
- b. Mailing Address po box 580 clanton al 35046
- c. Contact person anthony robinson
Title supervisor
Telephone number (205) 755-2380
- d. Facility Address (not P.O. Box) 1574 county road 51 clanton al 35046
- e. Is this facility a Class I sludge management facility? ☐ Yes ☒ No
- f. Facility design flow rate: 2.25 mgd
- g. Total population served: 6,000.00
- h. Indicate the type of facility:
☒ Publicly owned treatment works (POTW) ☐ Privately owned treatment works
☐ Federally owned treatment works ☐ Blending or treatment operation
☐ Surface disposal site ☐ Sewage sludge incinerator
☐ Other (describe) _____

A.2. Applicant Information. If the applicant is different from the above, provide the following:

- a. Applicant name city of clanton
- b. Mailing Address po box 580 clanton al 35046
- c. Contact person billy joe driver
Title mayor
Telephone number (205) 755-4051
- d. Is the applicant the owner or operator (or both) of this facility?
☒ owner ☐ operator
- e. Should correspondence regarding this permit should be directed to the facility or the applicant.
☐ facility ☒ applicant

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwtp AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**A.3. Permit Information.**

- a. Facility's NPDES permit number (if applicable): AL0054631
- b. List, on this form or an attachment, all other Federal, State, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number

Type of Permit

_____	_____
_____	_____
_____	_____

A.4. Indian Country. Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country?☐ Yes

No

If yes, describe: _____

A.5. Topographic Map. Provide a topographic map or maps (or other appropriate map(s) if a topographic map is unavailable) that show the following information. Map(s) should include the area one mile beyond all property boundaries of the facility:

- a. Location of all sewage sludge management facilities, including locations where sewage sludge is stored, treated, or disposed.
- b. Location of all wells, springs, and other surface water bodies, listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundaries.

A.6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit, including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.**A.7. Contractor Information.**Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? ☐ Yes ☒ No

If yes, provide the following for each contractor (attach additional pages if necessary):

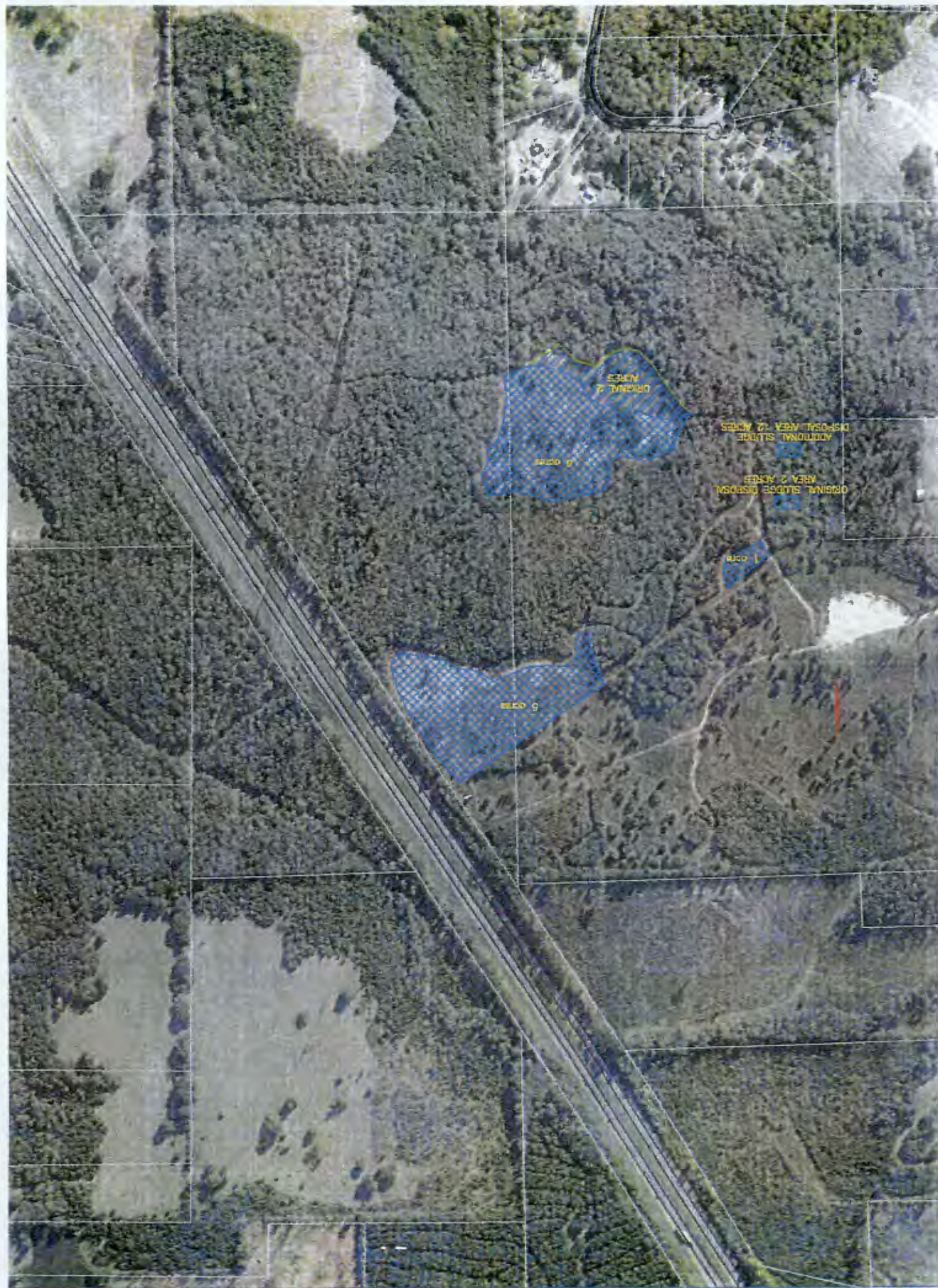
- a. Name _____
- b. Mailing Address _____
- c. Telephone Number _____
- d. Responsibilities of contractor _____



Drying Beds

Clarifiers generate a sludge blanket which is partially wasted to the drying beds each day.

Drying Beds, Concentrate the sludge and reduce moisture content prior to transport of sludge to the land application site or to the landfill.





FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

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

A.8. Pollution 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 Part 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 four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC	1.44	sw6010b	.96
CADMIUM	0.22	sw6010b	.095
CHROMIUM	27.30	sw6010b	.96
COPPER	247.00	sw6010b	.96
LEAD	4.45	sw6010b	.48
MERCURY	0.82	sw7471a	.094
MOLYBDENUM	10.61	sw6010b	4.76
NICKEL	926.00	sw6010b	17.67
SELENIUM	1.44	sw6010b	.96
ZINC	1,176.00	sw6010b	21

A.9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of Form 2S you have completed and are submitting:

_____ Part 1 Limited Background Information packet

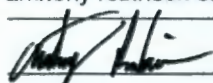
Part 2 Permit Application Information packet:

- ☒ Section A (General Information)
- ☒ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
- ☒ Section C (Land Application of Bulk Sewage Sludge)
- ☒ Section D (Surface Disposal)
- _____ Section E (Incineration)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the 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 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 and official title anthony robinson supervisor

Signature



Date signed 08/26/2019

Telephone number

(205) 755-2380

Upon request of the permitting authority, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF
A MATERIAL DERIVED FROM SEWAGE SLUDGE****Complete this section if your facility generates sewage sludge or derives a material from sewage sludge.****B.1. Amount Generated On Site.**Total dry metric tons per 365-day period generated at your facility: 107.80 dry metric tons**B.2. Amount Received from Off Site.** If your facility receives sewage sludge from another facility for treatment, use, or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.

- a. Facility name n/a
- b. Mailing Address _____
- c. Contact person _____
- Title _____
- Telephone number _____
- d. Facility Address (not P.O. Box) _____
- e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons
- f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics.

B.3. Treatment Provided At Your Facility.

- a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
- _____ Class A ☒ Class B _____ Neither or unknown
- b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:
- _____
- c. Which vector attraction reduction option is met for the sewage sludge at your facility?
- _____ Option 1 (Minimum 38 percent reduction in volatile solids)
- _____ Option 2 (Anaerobic process, with bench-scale demonstration)
- _____ Option 3 (Aerobic process, with bench-scale demonstration)
- ☒ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
- _____ Option 5 (Aerobic processes plus raised temperature)
- _____ Option 6 (Raise pH to 12 and retain at 11.5)
- _____ Option 7 (75 percent solids with no unstabilized solids)
- _____ Option 8 (90 percent solids with unstabilized solids)
- _____ None or unknown

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**B.3. Treatment Provided At Your Facility. (con't)**

- d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:
drying beds

- e. Describe, on this form or another sheet of paper, any other sewage sludge treatment or blending activities not identified in (a) - (d) above:

Complete Section B.4 if sewage sludge from your facility meets the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of §503.13, the Class A pathogen reduction requirements in §503.32(a), and one of the vector attraction reduction requirements in § 503.33(b)(1)-(8) and is land applied. Skip this section if sewage sludge from your facility does not meet all of these criteria.

B.4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1-8.

- a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: _____ dry metric tons
- b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away for application to the land?
_____ Yes _____ No

Complete Section B.5. if you place sewage sludge in a bag or other container for sale or give-away for land application. Skip this section if the sewage sludge is covered in Section B.4.

B.5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

- a. 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: _____ dry metric tons
- b. Attach, with this application, 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.

Complete Section B.6 if sewage sludge from your facility is provided to another facility that provides treatment or blending. This section does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this section if the sewage sludge is covered in Sections B.4 or B.5. If you provide sewage sludge to more than one facility, attach additional pages as necessary.

B.6. Shipment Off Site for Treatment or Blending.

- a. Receiving facility name _____
- b. Mailing address _____

- c. Contact person _____
Title _____
Telephone number _____
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: _____

B.6. Shipment Off Site for Treatment or Blending. (con't)

- e. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? ____ Yes ____ No

Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?

____ Class A ____ Class B ____ Neither or unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

- f. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge?

____ Yes ____ No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

- ____ Option 1 (Minimum 38 percent reduction in volatile solids)
____ Option 2 (Anaerobic process, with bench-scale demonstration)
____ Option 3 (Aerobic process, with bench-scale demonstration)
____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
____ Option 5 (Aerobic processes plus raised temperature)
____ Option 6 (Raise pH to 12 and retain at 11.5)
____ Option 7 (75 percent solids with no unstabilized solids)
____ Option 8 (90 percent solids with unstabilized solids)
____ None

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge.

- g. Does the receiving facility provide any additional treatment or blending activities not identified in (c) or (d) above? ____ Yes ____ No

If yes, describe, on this form or another sheet of paper, the treatment or blending activities not identified in (c) or (d) above:

- h. If you answered yes to (e), (f), or (g), 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).

- i. 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

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

Complete Section B.7 if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in:

- Section B.4 (it meets Table 1 ceiling concentrations, Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8); or
- Section B.5 (you place it in a bag or other container for sale or give-away for application to the land); or
- Section B.6 (you send it to another facility for treatment or blending).

B.7. Land Application of Bulk Sewage Sludge.

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: 75.00 dry metric tons

B.7. Land Application of Bulk Sewage Sludge. (con't)

- b. Do you identify all land application sites in Section C of this application? ☒ Yes ☐ No

If no, submit a copy of the land application plan with application (see instructions).

- c. 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

If yes, describe, on this form or another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

Complete Section B.8 if sewage sludge from your facility is placed on a surface disposal site.**B.8. Surface Disposal.**

- a. Total dry metric tons of sewage sludge from your facility placed on all surface disposal sites per 365-day period: _____ dry metric tons

- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?

☐ Yes ☐ No

If no, answer B.8.c through B.8.f for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one such surface disposal site, attach additional pages as necessary.

- c. Site name or number _____

- d. Contact person _____

Title _____

Telephone number _____

Contact is _____ Site owner _____ Site operator

- e. Mailing address _____

- f. Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period: _____ dry metric tons

Complete Section B.9 if sewage sludge from your facility is fired in a sewage sludge incinerator.**B.9. Incineration.**

- a. Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period: _____ dry metric tons

- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? ☐ Yes ☐ No

If no, complete B.9.c through B.9.f for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one such sewage sludge incinerator, attach additional pages as necessary.

- c. Incinerator name or number: _____

- d. Contact person: _____

Title: _____

Telephone number: _____

Contact is: _____ Incinerator owner _____ Incinerator operator

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**B.9. Incineration. (con't)**

- e. Mailing address: _____

- f. Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period: _____ dry metric tons

Complete Section B.10 if sewage sludge from this facility is placed on a municipal solid waste landfill.**B.10. Disposal in a Municipal Solid Waste Landfill.** Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

- a. Name of landfill shelby county land fill
- b. Contact person _____
Title _____
Telephone number (205) 669-4169
- Contact is _____ Landfill owner ☒ Landfill operator
- c. Mailing address 4154 AL-70 columbia AL 35051
- d. Location of municipal solid waste landfill:
Street or Route # 4154 AL-70 clombiana AL
County shelby
City or Town clombiana State al Zip 35051
- e. Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period:
50 dry metric tons
- f. List, on this form or an attachment, 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 |
|---------------|----------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
- g. Submit, with this 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)
- h. Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR Part 258?
☒ Yes _____ No

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**C. LAND APPLICATION OF BULK SEWAGE SLUDGE**

Complete Section C for sewage sludge that is applied to the land, unless any of the following conditions apply:

- The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8 (fill out B.4 Instead); or
- The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 Instead); or
- You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).

Complete Section C for every site on which the sewage sludge that you reported in Section B.7 is applied.

C.1. Identification of Land Application Site.

- a. Site name or number collage site
- b. Site location (Complete 1 and 2).
1. Street or Route # plant site
- County chilton
- City or Town clanton State al Zip 35046
2. Latitude 32-52-07 Longitude 86-36-58
- Method of latitude/longitude determination
- ☐ USGS map ☒ Field survey ☐ Other
- c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

C.2. Owner Information.

- a. Are you the owner of this land application site? ☒ Yes ☐ No
- b. If no, provide the following information about the owner:

Name _____

Telephone number _____

Mailing Address _____

C.3. Applier Information.

- a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site?
☒ Yes ☐ No
- b. If no, provide the following information for the person who applies:

Name _____

Telephone number _____

Mailing Address _____

C.4. Site Type: Identify the type of land application site from among the following.

☐ Agricultural land ☒ Forest ☐ Public contact site

☐ Reclamation site ☐ Other. Describe: _____

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**C.5. Crop or Other Vegetation Grown on Site.**

- a. What type of crop or other vegetation is grown on this site?
bahaia grass and other native grass
- b. What is the nitrogen requirement for this crop or vegetation?

C.6. Vector Attraction Reduction.

Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?

☒ Yes ☐ No

If yes, answer C.6.a and C.6.b;

- a. Indicate which vector attraction reduction option is met:

☐ Option 9 (Injection below land surface)☒ Option 10 (Incorporation into soil within 6 hours)

- b. Describe, on this form or another sheet of paper, any treatment processes used at the land application site to reduce vector attraction properties of sewage sludge:

spread and disc under with in 6 hrs

Complete Question C.7 only if the sewage sludge applied to this site since July 20, 1993, is subject to the cumulative pollutant loading rates (CPLRs) in 40 CFR 503.13(b)(2).**C.7. Cumulative Loadings and Remaining Allotments.**

- a. Have you contacted the 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

If no, sewage sludge subject to CPLRs may not be applied to this site.If yes, provide the following information:

Permitting authority

Contact Person

Telephone number

- b. Based upon this inquiry, has bulk sewage sludge subject to CPLRs been applied to this site since July 20, 1993?

☐ Yes ☐ No

If no, skip C.7.c.

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

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OMB Number 2040-0086*

- c. Provide the following information for every facility other than yours that is sending, or has sent, bulk sewage sludge 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.

Facility name

Mailing Address

Contact person

Title

Telephone number

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**D. SURFACE DISPOSAL**

Complete this section if you own or operate a surface disposal site.

Complete Sections D.1 - D.5 for each active sewage sludge unit.

D.1. Information on Active Sewage Sludge Units.

- a. Unit name or number: _____
- b. Unit location (Complete 1 and 2).
1. Street or Route # _____
- County _____
- City or Town _____ State _____ Zip _____
2. Latitude _____ Longitude _____
- Method of latitude/longitude determination: _____ USGS map _____ Field survey _____ Other _____
- c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
- d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period: _____ dry metric tons
- e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit: _____ dry metric tons
- f. Does the active sewage sludge unit have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec? _____ Yes _____ No
- If yes, describe the liner (or attach a description):

- g. Does the active sewage sludge unit have a leachate collection system? _____ Yes _____ No

If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and provide the numbers of any Federal, State, or local permit(s) for leachate disposal:

- h. If you answered no to either D.1.f. or D.1.g., answer the following question:

Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site?
_____ Yes _____ No

If yes, provide the actual distance in meters: _____

Provide the following information:

Remaining capacity of active sewage sludge unit, in dry metric tons: _____ dry metric tons

Anticipated closure date for active sewage sludge unit, if known: _____ (MM/DD/YYYY)

Provide, with this application, a copy of any closure plan that has been developed for this active sewage sludge unit.

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**E. INCINERATION****Complete this section if you fire sewage sludge in a sewage sludge incinerator.****Complete this section once for each incinerator in which you fire sewage sludge. If you fire sewage sludge in more than one sewage sludge incinerator, attach additional copies of this section s necessary.****E.1. Incinerator Information.**

a. Incinerator name or number: _____

b. Incinerator location (Complete 1 and 2).

1. Street or Route # _____

County _____

City or Town _____ State _____ Zip _____

2. Latitude _____ Longitude _____

Method of latitude/longitude determination: _____ USGS map _____ Field survey _____ Other _____

E.2. Amount Fired. Dry metric tons per 365-day period of sewage sludge fired in the sewage sludge incinerator: _____ dry metric tons**E.3. Beryllium NESHAP.**

a. Is the sewage sludge fired in this incinerator "beryllium-containing waste," as defined in 40 CFR Part 61.31? _____ Yes _____ No

Submit, with this application, information, test data, and description of measures taken that demonstrate whether the sewage sludge incinerated is beryllium-containing waste, and will continue to remain as such.

b. If the answer to (a) is yes, **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.**E.4. Mercury NESHAP.**

a. How is compliance with the mercury NESHAP being demonstrated?

_____ Stack testing (if checked, complete E.4.b)

_____ Sewage sludge sampling (if checked, complete E.4.c)

b. If stack testing is conducted, submit the following information with this application:

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.

Copies of mercury emission rate tests for the two most recent years in which testing was conducted.

c. If sewage sludge sampling is used to demonstrate compliance, 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.

E.5. Dispersion Factor.

a. Dispersion factor, in micrograms/cubic meter per gram/second: _____

b. Name and type of dispersion model: _____

c. Submit a copy of the modeling results and supporting documentation with this application.

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

Form Approved 1/14/99
OMB Number 2040-0086**E.6. Control Efficiency.**

- a. Control efficiency, in hundredths, for the following pollutants:

Arsenic: _____ Chromium: _____ Nickel: _____
Cadmium: _____ Lead: _____

- b. Submit a copy of the results or performance testing and supporting documentation (including testing dates) with this application.

E.7. Risk Specific Concentration for Chromium.

- a. Risk specific concentration (RSC) used for chromium, in micrograms per cubic meter: _____

- b. Which basis was used to determine the RSC?

____ Table 2 in 40 CFR 503.43
____ Equation 6 in 40 CFR 503.43 (site-specific determination)

- c. If Table 2 was used, identify the type of incinerator used as the basis:

____ Fluidized bed with wet scrubber
____ Fluidized bed with wet scrubber and wet electrostatic precipitator
____ Other types with wet scrubber
____ Other types with wet scrubber and wet electrostatic precipitator

- d. If Equation 6 was used, provide the following:

Decimal fraction of hexavalent chromium concentration to total chromium concentration in stack exit gas: _____

Submit results of incinerator stack tests for hexavalent and total chromium concentrations, including date(s) of test, with this application.

E.8. Incinerator Parameters

- a. Do you monitor Total Hydrocarbons (THC) in the sewage sludge incinerator's exit gas? _____ Yes _____ No

Do you monitor Carbon Monoxide (CO) in the sewage sludge incinerator's exit gas? _____ Yes _____ No

- b. Incinerator type: _____

- c. Incinerator stack height, in meters: _____

Indicate whether value submitted is: _____ Actual stack height _____ Creditable stack height

E.9. Performance Test Operating Parameters

- a. Maximum Performance Test Combustion Temperature: _____

- b. Performance test sewage sludge feed rate, in dry metric tons/day: _____

indicate whether value submitted is:

____ Average use _____ Maximum design

Submit, with this application, supporting documents describing how the feed rate was calculated.

- c. Submit, with this application, information documenting the performance test operating parameters for the air pollution control device(s) used for this sewage sludge incinerator.

FACILITY NAME AND PERMIT NUMBER:

walnut creek wwto AL0054631

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E.10. Monitoring Equipment. List the equipment in place to monitor the following parameters:

- a. Total hydrocarbons or carbon monoxide: _____
- b. Percent oxygen: _____
- c. Moisture content: _____
- d. Combustion temperature: _____
- e. Other: _____

E.11. Air Pollution Control Equipment. Submit, with this application, a list of all air pollution control equipment used with this sewage sludge incinerator.



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October 03, 2018



Mr. Anthony Robinson
City of Clanton - WWTP
1574 County Road 51
P. O. Box 580
Clanton, AL 35046

RE: NPDES AL0054631 - EPA Form 2A - Sampling #1
Work Order Number: **180905048**


Dear Client:

TTL, Inc. received sample(s) and/or data on Wednesday, September 05, 2018 for the information presented in the attached report.

If you should have any questions regarding this information, please feel free to call. The work order number shown above will assist us in accessing your data more efficiently.

Thank you for the opportunity to provide these services.

Sincerely,
TTL, Inc.



Steve Martin
Senior Vice President

Attachments

cc: Mr. Jonah Taylor
jonah.taylor@krebsseng.com
cc: Mr. Danny Holmberg
danny.holmberg@krbseng.com



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Date: 03-Oct-18

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1
Lab Order: 180905048

CASE NARRATIVE

The samples were analyzed in general accordance with Method 1631 E outlined in "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40 CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

To help with completing the EPA Form 2A, the following is a list of compounds that are listed by one name in our report and another on the Form:

Report = Form 2A

VOLATILES

Bromodichloromethane = Dichlorobromo-methane
Dibromochloromethane = Chlorodibromo-methane
trans-1,2-dichloroethene = trans-1,2-dichloro-ethylene
1,1-dichloroethene = 1,1-dichloroethylene
cis-1,3-dichloropropene plus trans-1,3-dichloropropene = 1,3-dichloro-propylene
Bromomethane = Methyl Bromide
Chloromethane = Methyl Chloride
Tetrachloroethene = Tetrachloro-ethylene
Trichloroethene = Trichloro-ethylene

BASE-NEUTRAL/ACID-EXTRACTABLE

4-Chloro-3-methylphenol = P-Chloro-M-Cresol
4,6-Dinitro-2-methylphenol = 4,6-Dinitro-O-Cresol
Benzo(b)fluoranthene = 3,4 Benzo-Fluoranthene

A "L" qualifier in the "Qual" column indicates analyte exceeded LCS acceptance limits.

A "Q" qualifier in the "Qual" column indicates analyte out of range in quality control check.



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Date: 03-Oct-18

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1

Lab Order: 180905048**Lab ID:** 180905048-001**Collection Date:** 09/05/2018 8:00**Client Sample ID:** Effluent - Composite**Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
METALS BY ICP-MS IN AQUEOUS SAMP					
		200.8	Prep:(200.8)	09/07/2018 10:00	Analyst: TBC
Antimony, as Sb	< 0.0005	0.0005	mg/L	1	09/27/2018 15:00
Arsenic, as As	< 0.0005	0.0005	mg/L	1	09/27/2018 15:00
Beryllium, as Be	< 0.0005	0.0005	mg/L	1	09/27/2018 15:00
Cadmium, as Cd	< 0.0005	0.0005	mg/L	1	09/27/2018 15:00
Chromium, as Cr	< 0.0005	0.0005	mg/L	1	09/27/2018 15:00
Copper, as Cu	0.0021	0.0005	mg/L	1	09/27/2018 15:00
Lead, as Pb	0.0012	0.0005	mg/L	1	09/27/2018 15:00
Nickel, as Ni	0.0639	0.0005	mg/L	1	09/27/2018 15:00
Selenium, as Se	< 0.0005	0.0005	mg/L	1	09/27/2018 15:00
Silver, as Ag	< 0.0005	0.0005	mg/L	1	09/27/2018 15:00
Thallium, as Tl	< 0.0010	0.0010	mg/L	1	09/27/2018 15:00
Zinc, as Zn	0.0208	0.0010	mg/L	1	09/27/2018 15:00
TOTAL HARDNESS					
		E200.7	Prep:(E200.7)	09/07/2018 10:00	Analyst: SFC
Hardness, Calcium/Magnesium (As CaCO ₃)	94.7	1.00	mg/L	1	10/01/2018 0:00
Hardness, Calcium (As CaCO ₃)	73.1	1.00	mg/L	1	10/01/2018 0:00
Hardness, Magnesium (As CaCO ₃)	21.6	1.00	mg/L	1	10/01/2018 0:00
TOTAL DISSOLVED SOLIDS					
		M2540 C	Prep:		Analyst: AEB
Total Dissolved Solids	328	20.0	mg/L	1	09/07/2018 9:00

Lab ID: 180905048-002**Collection Date:** 09/05/2018 8:00**Client Sample ID:** Effluent - Grab**Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
CYANIDE, TOTAL					
		M4500-CN CE	Prep:		Analyst: TRT
Cyanide, Total	< 0.010	0.010	mg/L	1	08/16/2018 8:00
OIL AND GREASE BY 1664A					
		E1664A	Prep:		Analyst: JTL
Oil and Grease	2.7	1.4	mg/L	1	09/12/2018 3:00
PHENOLS, TOTAL					
		M5330 BD 2005	Prep:		Analyst: KMC
Phenols	< 0.10	0.10	mg/L	1	09/26/2018 7:00



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Date: 03-Oct-18

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1

Lab Order: 180905048**Lab ID:** 180905048-003**Collection Date:** 09/05/2018 9:35**Client Sample ID:** HG-LL - Effluent**Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	1.26	0.50	ng/L	1	09/15/2018 15:15

Lab ID: 180905048-004**Collection Date:** 09/05/2018 9:35**Client Sample ID:** HG-LL - Spike**Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	70	0.50	%	1	09/15/2018 15:15

Lab ID: 180905048-005**Collection Date:** 09/05/2018 9:35**Client Sample ID:** HG-LL - Spike/Duplicate**Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	72	0.50	%	1	09/15/2018 15:15

Lab ID: 180905048-006**Collection Date:** 09/05/2018 9:35**Client Sample ID:** HG-LL - Field Blank**Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	< 0.50	0.50	ng/L	1	09/15/2018 15:15

Lab ID: 180905048-007**Collection Date:** 09/05/2018 9:35**Client Sample ID:** HG-LL - Field Duplicate**Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	1.23	0.50	ng/L	1	09/15/2018 15:15



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Date: 03-Oct-18

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1

Lab Order: 180905048

Lab ID: 180905048-001

Collection Date: 09/05/2018 8:00

Client Sample ID: Effluent - Composite

Matrix: Aqueous

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY 625		E625		Prep:(E625)	09/10/2018 7:30	Analyst: ShMK
1,2,4-Trichlorobenzene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
1,2-Diphenylhydrazine	< 0.050	0.050		mg/L	1	09/18/2018 16:32
2,4,6-Trichlorophenol	< 0.010	0.010		mg/L	1	09/18/2018 16:32
2,4-Dichlorophenol	< 0.010	0.010		mg/L	1	09/18/2018 16:32
2,4-Dimethylphenol	< 0.010	0.010		mg/L	1	09/18/2018 16:32
2,4-Dinitrophenol	< 0.050	0.050		mg/L	1	09/18/2018 16:32
2,4-Dinitrotoluene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
2,6-Dinitrotoluene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
2-Chloronaphthalene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
2-Chlorophenol	< 0.010	0.010		mg/L	1	09/18/2018 16:32
2-Nitrophenol	< 0.010	0.010		mg/L	1	09/18/2018 16:32
3,3'-Dichlorobenzidine	< 0.020	0.020		mg/L	1	09/18/2018 16:32
4,6-Dinitro-2-methylphenol	< 0.050	0.050		mg/L	1	09/18/2018 16:32
4-Bromophenyl phenyl ether	< 0.010	0.010		mg/L	1	09/18/2018 16:32
4-Chloro-3-methylphenol	< 0.010	0.010		mg/L	1	09/18/2018 16:32
4-Chlorophenyl phenyl ether	< 0.010	0.010		mg/L	1	09/18/2018 16:32
4-Nitrophenol	< 0.050	0.050		mg/L	1	09/18/2018 16:32
Acenaphthene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Acenaphthylene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Anthracene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Benz(A)anthracene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Benzidine	< 0.050	0.050	L	mg/L	1	09/18/2018 16:32
Benzo(a)pyrene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Benzo(b)fluoranthene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Benzo(g,h,i)perylene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Benzo(k)fluoranthene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Bis(2-chloroethoxy)methane	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Bis(2-chloroethyl)ether	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Bis(2-chloroisopropyl)ether	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Bis(2-ethylhexyl)phthalate	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Butyl benzyl phthalate	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Chrysene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Dibenz(a,h)anthracene	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Diethyl phthalate	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Dimethyl phthalate	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Di-n-butyl phthalate	< 0.010	0.010		mg/L	1	09/18/2018 16:32
Di-n-octyl phthalate	< 0.010	0.010		mg/L	1	09/18/2018 16:32

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at or above the Method Detection Limit
X %D Exceeds limits



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3516 Greensboro Avenue
P O Drawer 1128 (35403)
Tuscaloosa, AL 35401

205.345.0816 tel
205.343.0635 fax
www.TTLINC.com

Date: 03-Oct-18

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1

Lab Order: 180905048

SEMIVOLATILE ORGANICS BY 625		E625	Prep:(E625)	09/10/2018 7:30	Analyst: ShMK
Fluoranthene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Fluorene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Hexachlorobenzene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Hexachlorobutadiene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Hexachlorocyclopentadiene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Hexachloroethane	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Indeno(1,2,3-cd)pyrene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Isophorone	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Naphthalene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Nitrobenzene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
N-Nitrosodimethylamine	< 0.010	0.010	mg/L	1	09/18/2018 16:32
N-Nitrosodi-n-propylamine	< 0.010	0.010	mg/L	1	09/18/2018 16:32
N-Nitrosodiphenylamine	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Pentachlorophenol	< 0.025	0.025	mg/L	1	09/18/2018 16:32
Phenanthrene	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Phenol	< 0.010	0.010	mg/L	1	09/18/2018 16:32
Pyrene	< 0.010	0.010	mg/L	1	09/18/2018 16:32

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at or above the Method Detection Limit
X %D Exceeds limits



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Tuscaloosa, AL 35401

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205.343.0635 fax
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Date: 03-Oct-18

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1

Lab Order: 180905048

Lab ID: 180905048-002

Collection Date: 09/05/2018 8:00

Client Sample ID: Effluent - Grab

Matrix: Aqueous

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS METHOD 624		E624		Prep:		Analyst: LAA
1,1,1-Trichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,1,2,2-Tetrachloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,1,2-Trichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,1-Dichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,1-Dichloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,2-Dichlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,2-Dichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,2-Dichloropropane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,3-Dichlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
1,4-Dichlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
2-Chloroethyl vinyl ether	< 0.010	0.010		mg/L	1	09/07/2018 20:14
Acrolein	< 0.100	0.100	Q	mg/L	1	09/07/2018 20:14
Acrylonitrile	< 0.100	0.100		mg/L	1	09/07/2018 20:14
Benzene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Bromodichloromethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Bromoform	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Bromomethane	< 0.010	0.010		mg/L	1	09/07/2018 20:14
Carbon tetrachloride	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Chlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Chloroethane	< 0.010	0.010		mg/L	1	09/07/2018 20:14
Chloroform	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Chloromethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
cis-1,3-Dichloropropene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Dibromochloromethane	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Ethylbenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Methylene chloride	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Tetrachloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Toluene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
trans-1,2-Dichloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
trans-1,3-Dichloropropene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Trichloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:14
Vinyl chloride	< 0.002	0.002		mg/L	1	09/07/2018 20:14

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at or above the Method Detection Limit
X %D Exceeds limits



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Tuscaloosa, AL 35401

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205.343.0635 fax
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Date: 03-Oct-18

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1

Lab Order: 180905048

Lab ID: 180905048-008

Collection Date: 09/05/2018 0:00

Client Sample ID: Trip Blank

Matrix: Aqueous

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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VOLATILES BY GC/MS METHOD 624

E624

Prep:

Analyst: LAA

1,1,1-Trichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,1,2,2-Tetrachloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,1,2-Trichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,1-Dichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,1-Dichloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,2-Dichlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,2-Dichloroethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,2-Dichloropropane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,3-Dichlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
1,4-Dichlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
2-Chloroethyl vinyl ether	< 0.010	0.010		mg/L	1	09/07/2018 20:42
Acrolein	< 0.100	0.100	Q	mg/L	1	09/07/2018 20:42
Acrylonitrile	< 0.100	0.100		mg/L	1	09/07/2018 20:42
Benzene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Bromodichloromethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Bromoform	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Bromomethane	< 0.010	0.010		mg/L	1	09/07/2018 20:42
Carbon tetrachloride	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Chlorobenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Chloroethane	< 0.010	0.010		mg/L	1	09/07/2018 20:42
Chloroform	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Chloromethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
cis-1,3-Dichloropropene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Dibromochloromethane	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Ethylbenzene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Methylene chloride	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Tetrachloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Toluene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
trans-1,2-Dichloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
trans-1,3-Dichloropropene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Trichloroethene	< 0.005	0.005		mg/L	1	09/07/2018 20:42
Vinyl chloride	< 0.002	0.002		mg/L	1	09/07/2018 20:42

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at or above the Method Detection Limit
X %D Exceeds limits



LIMS Chain of Custody Form

Composite Sample Info

SH

Sheet 1 of 1

Sample Security Requirements

Client: City of Clanton - WWTP

Contact: Mr. Anthony Robinson

Mailing Address: 1574 County Road 51

City, State, Zip: Clanton, AL 35046

Phone No.: 205 755-2380

Sampled By: CURET

Project ID: Clanton-WWTP-2A-2018

Project Name: NPDES AL0054631 - EPA Form 2A - Sampling # 1

TTL WORK
ORDER NUMBER
180905 048

TTL WORK

Sample _____

Start _____ DATE/TIME

End _____ DATE/TIME

Sample _____

Start _____ DATE/TIME

End _____ DATE/TIME

1. Condition of Contents: _____

2. Sealed for Shipping By: _____

3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____

4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____

5. Condition of Contents: Good Seal6. Comments: 0.9° Cat Tusco

7. Reporting Status: Routine; _____; Rush By* _____

8. Client P.O. # _____

*SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
9/5/18	8:00 AM	Effluent - Composite	Aqueous	COMP24	1 1/2 PT PL HNO3	200.7PR, 200.6_W, 200.6PR, HARD_W
	8:00 AM	Effluent - Composite	Aqueous	COMP24	4 1LAMGU627G	625_WW, 625PR
	8:00 AM	Effluent - Composite	Aqueous	COMP24	1 QT PLNP	TDS_DW
	8:00 AM	Effluent - Grab	Aqueous	GRAB	4 AQ6260	624_2A
	8:00 AM	Effluent - Grab	Aqueous	GRAB	1 QT PL NAOH	CN-DW
	8:00 AM	Effluent - Grab	Aqueous	GRAB	1 1LWMOG H2SO4	O&G 1664
	8:00 AM	Effluent - Grab	Aqueous	GRAB	1 1LAMGH2SO4	PHENOLS_TRW
	9:35	HG-LL - Effluent	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
	9:35	HG-LL - Spike	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
		HG-LL - Spike/Duplicate	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
	9:35	HG-LL - Field Blank	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
	9:35	HG-LL - Field Duplicate	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
		Trip Blank	Aqueous	GRAB	4 AQ6260	624_2ABLANK

Duplicate LLHg

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 Anthony Kelly 9/5/18 10:20 AM2 Hudson Cloudy 9/5/18 15:40

3 _____

4 _____

Received by (signed) Date/Time

1 Hudson Cloudy 9/5/18 10:20

2 _____

3 _____

4 _____

SHIPPING DETAILS

Air Bill #: _____

Method of Shipment: TruckReceived By Lab: SydneyDate/Time 9-5-18 15:40

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.

Client CLANTON WWTP

Sample Site/ID 0011 WWTP

Date/Time 9/5/18

Weather cond. OVERCAST

Sampling Personnel:

Clean Hands (CH): HARLAN CLARKE, TTL

Dirty Hands (DH): Anthony Kelley

Equipment Documentation:

CH & DH have a wind suit on?	<input checked="" type="radio"/> YES	NO	(ULINE #S-17924 XL 2XL)
CH has shoulder length gloves on?	<input checked="" type="radio"/> YES	NO	(ULINE #S-20329)
CH & DH have latex, powder free gloves on?	<input checked="" type="radio"/> YES	NO	(American Osment #8645)

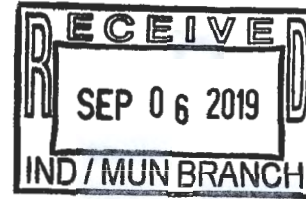
TTL LIMS Work order number added at Log Review 180 905048

3516 Greensboro Avenue
P. O. Drawer 1128 (35403)
Tuscaloosa, AL 35401



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205.343.0635 fax
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March 01, 2019



Mr. Anthony Robinson
City of Clanton - WWTP
1574 County Road 51
P. O. Box 580
Clanton, AL 35046

RE: NPDES AL0054631 - EPA Form 2A - Sampling #2
Work Order Number: **190206035**

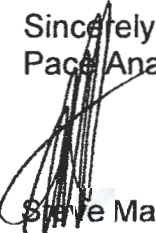
Dear Client:

Pace Analytical Services, LLC received sample(s) on Wednesday, February 06, 2019 for the analyses presented in the attached report.

If you should have any questions regarding this information, please feel free to call. The work order number shown above will assist us in accessing your data more efficiently.

Thank you for the opportunity to provide these services.

Sincerely,
Pace Analytical Services



Steve Martin
Manager - Lab Operations

Attachments

cc: Mr. Danny Holmberg
danny.holmberg@krbseng.com

cc: Mr. Jonah Taylor
jonah.taylor@krebseng.com

Date: 01-Mar-19

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #2
Lab Order: 190206035

CASE NARRATIVE

The samples were analyzed in general accordance with Method 1631 E outlined in "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40 CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

To help with completing the EPA Form 2A, the following is a list of compounds that are listed by one name in our report and another on the Form:

Report = Form 2A

VOLATILES

Bromodichloromethane = Dichlorobromo-methane

Dibromochloromethane = Chlorodibromo-methane

trans-1,2-dichloroethene = trans-1,2-dichloro-ethylene

1,1-dichloroethene = 1,1-dichloroethylene

cis-1,3-dichloropropene plus trans-1,3-dichloropropene = 1,3-dichloro-propylene

Bromomethane = Methyl Bromide

Chloromethane = Methyl Chloride

Tetrachloroethene = Tetrachloro-ethylene

Trichloroethene = Trichloro-ethylene

BASE-NEUTRAL/ACID-EXTRACTABLE

4-Chloro-3-methylphenol = P-Chloro-M-Cresol

4,6-Dinitro-2-methylphenol = 4,6-Dinitro-O-Cresol

Benzo(b)fluoranthene = 3,4 Benzo-Fluoranthene



Date: 01-Mar-19

CLIENT: City of Clanton - WWTP **Lab Order:** 190206035
Project: NPDES AL0054631 - EPA Form 2A - Sampling #2

Lab ID: 190206035-001 **Collection Date:** 02/06/2019 8:00
Client Sample ID: Effluent - Composite **Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
METALS BY ICP-MS IN AQUEOUS SAMP					
		200.8	Prep:(200.8)	02/07/2019 10:10	Analyst: TBC
Antimony, as Sb	0.0006	0.0005	mg/L	1	02/13/2019 13:37
Arsenic, as As	< 0.0005	0.0005	mg/L	1	02/08/2019 11:11
Beryllium, as Be	< 0.0005	0.0005	mg/L	1	02/08/2019 11:11
Cadmium, as Cd	< 0.0005	0.0005	mg/L	1	02/08/2019 11:11
Chromium, as Cr	0.0006	0.0005	mg/L	1	02/08/2019 11:11
Copper, as Cu	0.0032	0.0005	mg/L	1	02/08/2019 11:11
Lead, as Pb	< 0.0005	0.0005	mg/L	1	02/08/2019 11:11
Nickel, as Ni	0.0280	0.0005	mg/L	1	02/08/2019 11:11
Selenium, as Se	< 0.0005	0.0005	mg/L	1	02/08/2019 11:11
Silver, as Ag	< 0.0005	0.0005	mg/L	1	02/08/2019 11:11
Thallium, as Tl	< 0.0010	0.0010	mg/L	1	02/08/2019 11:11
Zinc, as Zn	0.0132	0.0010	mg/L	1	02/08/2019 11:11
TOTAL HARDNESS					
		E200.7	Prep:(E200.7)	02/07/2019 10:10	Analyst: SFC
Hardness, Calcium/Magnesium (As CaCO ₃)	70.4	1.00	mg/L	1	02/14/2019 0:00
Hardness, Calcium (As CaCO ₃)	56.7	1.00	mg/L	1	02/14/2019 0:00
Hardness, Magnesium (As CaCO ₃)	13.7	1.00	mg/L	1	02/14/2019 0:00
TOTAL DISSOLVED SOLIDS					
		M2540 C	Prep:		Analyst: AAT
Total Dissolved Solids	40.0	20.0	mg/L	1	02/09/2019 9:00

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Tuscaloosa, AL 35401



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Date: 01-Mar-19

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #2

Lab Order: 190206035

Lab ID: 190206035-002

Collection Date: 02/06/2019 8:00

Client Sample ID: Effluent - Grab

Matrix: Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
VOLATILES BY GC/MS METHOD 624		E624	Prep:		Analyst: LAA
1,1,1-Trichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,1,2,2-Tetrachloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,1,2-Trichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,1-Dichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,1-Dichloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,2-Dichlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,2-Dichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,2-Dichloropropane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,3-Dichlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
1,4-Dichlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
2-Chloroethyl vinyl ether	< 0.010	0.010	mg/L	1	02/19/2019 16:18
Acrolein	< 0.100	0.100	mg/L	1	02/19/2019 16:18
Acrylonitrile	< 0.100	0.100	mg/L	1	02/19/2019 16:18
Benzene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Bromodichloromethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Bromoform	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Bromomethane	< 0.010	0.010	mg/L	1	02/19/2019 16:18
Carbon tetrachloride	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Chlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Chloroethane	< 0.010	0.010	mg/L	1	02/19/2019 16:18
Chloroform	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Chloromethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
cis-1,3-Dichloropropene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Dibromochloromethane	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Ethylbenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Methylene chloride	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Tetrachloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Toluene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
trans-1,2-Dichloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
trans-1,3-Dichloropropene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Trichloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:18
Vinyl chloride	< 0.002	0.002	mg/L	1	02/19/2019 16:18
CYANIDE, TOTAL		M4500-CN CE	Prep:		Analyst: AEB
Cyanide, Total	< 0.010	0.010	mg/L	1	02/11/2019 8:00
OIL AND GREASE BY 1664A		E1664A	Prep:		Analyst: AEB
Oil and Grease	< 1.4	1.4	mg/L	1	02/18/2019 15:00



Date: 01-Mar-19

CLIENT: City of Clanton - WWTP **Lab Order:** 190206035
Project: NPDES AL0054631 - EPA Form 2A - Sampling #2

PHENOLS, TOTAL **M5330 BD 2005** Prep: Analyst: KMC
Phenols < 0.10 0.10 mg/L 1 02/26/2019 8:00

Lab ID: 190206035-003 **Collection Date:** 02/06/2019 8:00

Client Sample ID: HG-LL - Effluent **Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
----------	--------	-------	-------	----	---------------

MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	0.53	0.50	ng/L	1	02/20/2019 10:36

Lab ID: 190206035-004 **Collection Date:** 02/06/2019 8:00

Client Sample ID: HG-LL - Spike **Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
----------	--------	-------	-------	----	---------------

MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	124	0.50	%	1	02/20/2019 10:36

Lab ID: 190206035-005 **Collection Date:** 02/06/2019 8:00

Client Sample ID: HG-LL - Spike/Duplicate **Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
----------	--------	-------	-------	----	---------------

MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	82	0.50	%	1	02/20/2019 10:36

Lab ID: 190206035-006 **Collection Date:** 02/06/2019 8:00

Client Sample ID: HG-LL - Field Blank **Matrix:** Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
----------	--------	-------	-------	----	---------------

MERCURY LOW LEVEL		E1631	Prep:		Analyst: PACE
Mercury, Low Level as Hg	< 0.50	0.50	ng/L	1	02/20/2019 10:36

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P. O. Drawer 1128 (35403)
Tuscaloosa, AL 35401



205.345.0816 tel
205.343.0635 fax
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Date: 01-Mar-19

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #2

Lab Order: 190206035

Lab ID: 190206035-007

Collection Date: 02/06/2019 0:00

Client Sample ID: Trip Blank

Matrix: Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
VOLATILES BY GC/MS METHOD 624		E624	Prep:		Analyst: LAA
1,1,1-Trichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,1,2,2-Tetrachloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,1,2-Trichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,1-Dichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,1-Dichloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,2-Dichlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,2-Dichloroethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,2-Dichloropropane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,3-Dichlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
1,4-Dichlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
2-Chloroethyl vinyl ether	< 0.010	0.010	mg/L	1	02/19/2019 16:46
Acrolein	< 0.100	0.100	mg/L	1	02/19/2019 16:46
Acrylonitrile	< 0.100	0.100	mg/L	1	02/19/2019 16:46
Benzene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Bromodichloromethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Bromoform	< 0.005	0.005	mg/L	1	02/19/2019 16:46
nethp/ Bromine - Bromomethane	< 0.010	0.010	mg/L	1	02/19/2019 16:46
Carbon tetrachloride	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Chlorobenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Chloroethane	< 0.010	0.010	mg/L	1	02/19/2019 16:46
Chloroform	< 0.005	0.005	mg/L	1	02/19/2019 16:46
high chloride - Chloromethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
cis-1,3-Dichloropropene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Dibromochloromethane	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Ethylbenzene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Methylene chloride	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Tetrachloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Toluene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
trans-1,2-Dichloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
trans-1,3-Dichloropropene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Trichloroethene	< 0.005	0.005	mg/L	1	02/19/2019 16:46
Vinyl chloride	< 0.002	0.002	mg/L	1	02/19/2019 16:46



Date: 01-Mar-19

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #2

Lab Order: 190206035

Lab ID: 190206035-001

Collection Date: 02/06/2019 8:00

Client Sample ID: Effluent - Composite

Matrix: Aqueous

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANICS BY 625		E625	Prep:(E625)	02/07/2019 8:00	Analyst: ShMK	
1,2,4-Trichlorobenzene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
1,2-Diphenylhydrazine	< 0.052	0.052		mg/L	1	02/14/2019 17:35
2,4,6-Trichlorophenol	< 0.010	0.010		mg/L	1	02/14/2019 17:35
2,4-Dichlorophenol	< 0.010	0.010		mg/L	1	02/14/2019 17:35
2,4-Dimethylphenol	< 0.010	0.010		mg/L	1	02/14/2019 17:35
2,4-Dinitrophenol	< 0.052	0.052	Q	mg/L	1	02/14/2019 17:35
2,4-Dinitrotoluene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
2,6-Dinitrotoluene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
2-Chloronaphthalene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
2-Chlorophenol	< 0.010	0.010		mg/L	1	02/14/2019 17:35
2-Nitrophenol	< 0.010	0.010		mg/L	1	02/14/2019 17:35
3,3'-Dichlorobenzidine	< 0.021	0.021		mg/L	1	02/14/2019 17:35
4,6-Dinitro-2-methylphenol	< 0.052	0.052		mg/L	1	02/14/2019 17:35
4-Bromophenyl phenyl ether	< 0.010	0.010		mg/L	1	02/14/2019 17:35
4-Chloro-3-methylphenol	< 0.010	0.010		mg/L	1	02/14/2019 17:35
4-Chlorophenyl phenyl ether	< 0.010	0.010		mg/L	1	02/14/2019 17:35
4-Nitrophenol	< 0.052	0.052		mg/L	1	02/14/2019 17:35
Acenaphthene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Acenaphthylene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Anthracene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Benz(A)anthracene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Benidine	< 0.052	0.052		mg/L	1	02/14/2019 17:35
Benzo(a)pyrene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Benzo(b)fluoranthene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Benzo(g,h,i)perylene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Benzo(k)fluoranthene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Bis(2-chloroethoxy)methane	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Bis(2-chloroethyl)ether	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Bis(2-chloroisopropyl)ether	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Bis(2-ethylhexyl)phthalate	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Butyl benzyl phthalate	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Chrysene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Dibenz(a,h)anthracene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Diethyl phthalate	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Dimethyl phthalate	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Di-n-butyl phthalate	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Di-n-octyl phthalate	< 0.010	0.010		mg/L	1	02/14/2019 17:35

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at or above the Method Detection Limit
- X %D Exceeds limits



Date: 01-Mar-19

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #2

Lab Order: 190206035

SEMIVOLATILE ORGANICS BY 625			E625	Prep:(E625)	02/07/2019 8:00	Analyst: ShMK
Fluoranthene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Fluorene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Hexachlorobenzene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Hexachlorobutadiene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Hexachlorocyclopentadiene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Hexachloroethane	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Indeno(1,2,3-cd)pyrene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Isophorone	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Naphthalene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Nitrobenzene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
N-Nitrosodimethylamine	< 0.010	0.010		mg/L	1	02/14/2019 17:35
N-Nitrosodi-n-propylamine	< 0.010	0.010		mg/L	1	02/14/2019 17:35
N-Nitrosodiphenylamine	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Pentachlorophenol	< 0.026	0.026		mg/L	1	02/14/2019 17:35
Phenanthrene	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Phenol	< 0.010	0.010		mg/L	1	02/14/2019 17:35
Pyrene	< 0.010	0.010		mg/L	1	02/14/2019 17:35

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at or above the Method Detection Limit
X %D Exceeds limits



LIMS Chain of Custody Form

Composite Sample Info

Sample Security Requirements

Sheet ____ of ____

Client: City of Clanton - WWTP

Contact: Mr. Anthony Robinson

Mailing Address: 1574 County Road 51

City, State, Zip: Clanton, AL 35046

Phone No.: 205 755-2380

Sampled By: C. West

Project ID: Clanton-WWTP-2A-2018

Project Name: NPDES AL0054631 - EPA Form 2A - Sampling #

PACE WORK
ORDER NUMBER
190206 035Sample EFL outStart 2-05-19 - 8:00 AMEnd 2-06-19 - 8:00 AMSample EFL outStart 2-05-19 - 8:00 AMEnd 2-06-19 - 8:00 AM

1. Condition of Contents: _____

2. Sealed for Shipping By: _____

3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____

4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____

5. Condition of Contents: Good - Ice6. Comments: 0.4 °C at Tuscaloosa Lab

7. Reporting Status: Routine; _____ ; Rush By* _____

8. Client P.O. # _____

*SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
<u>2-06-19 - 8:00 AM</u>		Effluent - Composite	Aqueous	COMP24	1 1/2 RT PL HNO3	200 ZPR, 200 S_WW, 200 SPR, HAFD_WW
<u>2-06-19 - 8:00 AM</u>		Effluent - Composite	Aqueous	COMP24	4 1L WMDG H2SO4	625_WW, 625PR
<u>2-06-19 - 8:00 AM</u>		Effluent - Composite	Aqueous	COMP24	1 QT PLNP	TDS_DW
<u>2-06-19 - 8:00 AM</u>		Effluent - Grab	Aqueous	GRAB	4 AQ5260	624_2A
<u>2-06-19 - 8:00 AM</u>		Effluent - Grab	Aqueous	GRAB	1 QT PL NAOH	ON-DW
<u>2-06-19 - 8:00 AM</u>		Effluent - Grab	Aqueous	GRAB	1 1L WMDG H2SO4	02G 1664
<u>2-06-19 - 8:00 AM</u>		Effluent - Grab	Aqueous	GRAB	1 1L WMDG H2SO4	PHENOLS_TFW
<u>2-06-19 - 8:00 AM</u>		HG-LL - Effluent	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
<u>2-06-19 - 8:00 AM</u>		HG-LL - Spike	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
<u>2-06-19 - 8:00 AM</u>		HG-LL - Spike/Duplicate	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
<u>2-06-19 - 8:00 AM</u>		HG-LL - Field Blank	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
<u>2-06-19 - 8:00 AM</u>		Trip Blank	Aqueous	GRAB	4 AQ5260	624_2ABLANK

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1 Tim Ruck 2/6/19 9:192 Heather Clardy 2/6/19 14:57

3 _____

4 _____

Received by: (signed) Date/Time

1 Heather Clardy 2/6/19 9:19

2 _____

3 _____

4 _____

SHIPPING DETAILS Air Bill #: _____

Method of Shipment: TruckReceived By Lab: S. JeterDate/Time 2-6-19 14:57

EPA Method 1669

Manual collection directly into sample bottle

Client City of Canton WWT

Sample Site/ID WWTP OUTFALL 0011

Date/Time 02/04/2019
11:30 AM

Weather cond. CLOUDY

Clean Hands (CH): Anthony J. Kelly

Dirty Hands (DH): Thomas Barrett

CH & DH have a wind suit on?

☒ YES NO (ULINE #S-17924 XL 2XL)

CH has shoulder length gloves on?

☒ YES NO (ULINE #S-20329)

CH & DH have latex, powder free gloves on?

☒ YES NO (ULINE #S-6606)

Sample Kit/Bottles less than 90 days old?

☒ YES NO (Southern Analytical)

Date kit received from Southern Analytical Labs 01/31/2019

TTL LIMS Work order number added at Log Review 190206035

3516 Greensboro Avenue
P. O. Drawer 1128 (35403)
Tuscaloosa, AL 35401



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205.343.0635 fax
www.pacelabs.com

May 25, 2019

Mr. Anthony Robinson
City of Clanton - WWTP
1574 County Road 51
P. O. Box 580
Clanton, AL 35046

RE: NPDES AL0054631 - EPA Form 2A - Sampling #3
Work Order Number: **190508038**

Dear Client:

Pace Analytical, LLC received sample(s) and/or data on Wednesday, May 08, 2019 for the information presented in the attached report.

If you should have any questions regarding this information, please feel free to call. The work order number shown above will assist us in accessing your data more efficiently.

Thank you for the opportunity to provide these services.

Sincerely,
Pace Analytical Services


Steve Martin
Manager - Lab Operations

Attachments

cc: Mr. Danny Holmberg
danny.holmberg@krbseng.com

cc: Mr. Jonah Taylor
jonah.taylor@krebseng.com

3516 Greensboro Avenue
P. O. Drawer 1128 (35403)
Tuscaloosa, AL 35401



205.614.6630 tel
205.343.0635 fax
www.pacelabs.com

Date: 25-May-19

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #3
Lab Order: 190508038

CASE NARRATIVE

The samples were analyzed in general accordance with methods outlined in 40 CFR, Part 136 and Method 1631E outlined in "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40 CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

To help with completing the EPA Form 2A, the following is a list of compounds that are listed by one name in our report and another on the Form:

Report = Form 2A

VOLATILES

Bromodichloromethane = Dichlorobromo-methane
Dibromochloromethane = Chlorodibromo-methane
trans-1,2-dichloroethene = trans-1,2-dichloro-ethylene
1,1-dichloroethene = 1,1-dichloroethylene
cis-1,3-dichloropropene plus trans-1,3-dichloropropene = 1,3-dichloro-propylene
Bromomethane = Methyl Bromide
Chloromethane = Methyl Chloride
Tetrachloroethene = Tetrachloro-ethylene
Trichloroethene = Trichloro-ethylene

BASE-NEUTRAL/ACID-EXTRACTABLE

4-Chloro-3-methylphenol = P-Chloro-M-Cresol
4,6-Dinitro-2-methylphenol = 4,6-Dinitro-O-Cresol
Benzo(b)fluoranthene = 3,4 Benzo-Fluoranthene

3516 Greensboro Avenue
P. O. Drawer 1128 (35403)
Tuscaloosa, AL 35401



205.614.6630 tel
205.343.0635 fax
www.pacelabs.com

Date: 25-May-19

CLIENT: City of Clanton - WWTP Lab Order: 190508038
Project: NPDES AL0054631 - EPA Form 2A - Sampling #3

Lab ID: 190508038-001 Collection Date: 05/08/2019 8:00
Client Sample ID: Effluent - Composite Matrix: Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
METALS BY ICP-MS IN AQUEOUS SAMP					
		200.8	Prep:(200.8)	05/14/2019 9:14	Analyst: PACE
Antimony, as Sb	< 0.0010	0.0010	mg/L	1	05/17/2019 13:05
Arsenic, as As	< 0.0010	0.0010	mg/L	1	05/17/2019 13:05
Beryllium, as Be	< 0.0005	0.0005	mg/L	1	05/17/2019 13:05
Cadmium, as Cd	< 0.0010	0.0010	mg/L	1	05/17/2019 13:05
Calcium, as Ca	24.40	0.1000	mg/L	1	05/17/2019 13:05
Chromium, as Cr	< 0.0010	0.0010	mg/L	1	05/17/2019 13:05
Copper, as Cu	< 0.0030	0.0030	mg/L	1	05/17/2019 13:05
Hardness, Calcium/Magnesium (As CaCO ₃)	77.9	0.0050	mg/L	1	05/17/2019 13:05
Lead, as Pb	< 0.0010	0.0010	mg/L	1	05/17/2019 13:05
Magnesium, as Mg	4.100	0.1000	mg/L	1	05/17/2019 13:05
Nickel, as Ni	0.0260	0.0010	mg/L	1	05/17/2019 13:05
Selenium, as Se	< 0.0010	0.0010	mg/L	1	05/17/2019 13:05
Silver, as Ag	< 0.0005	0.0005	mg/L	1	05/17/2019 13:05
Thallium, as Tl	< 0.0005	0.0005	mg/L	1	05/17/2019 13:05
Zinc, as Zn	0.0310	0.0050	mg/L	1	05/17/2019 13:05
TOTAL DISSOLVED SOLIDS					
Total Dissolved Solids	250	M2540 C 10	Prep: mg/L	1	Analyst: PACE 05/13/2019 16:29

Lab ID: 190508038-002 Collection Date: 05/08/2019 8:10
Client Sample ID: Effluent - Grab Matrix: Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
CYANIDE, TOTAL					
Cyanide, Total	< 0.020	M4500-CN CE 0.020	Prep: mg/L	1	Analyst: PACE 05/15/2019 9:54
OIL AND GREASE BY 1664A					
Oil and Grease	< 5.6	E1664A 5.6	Prep: mg/L	1	Analyst: PACE 05/21/2019 8:01
PHENOLS, TOTAL					
Phenols	< 0.20	M5330 BD 2005 0.20	Prep: mg/L	1	Analyst: PACE 05/16/2019 17:15

3516 Greensboro Avenue
P. O. Drawer 1128 (35403)
Tuscaloosa, AL 35401



205.614.6630 tel
205.343.0635 fax
www.pacelabs.com

Date: 25-May-19

CLIENT: City of Clanton - WWTP			Lab Order: 190508038		
Project: NPDES AL0054631 - EPA Form 2A - Sampling #3					
Lab ID: 190508038-003			Collection Date: 05/08/2019 8:15		
Client Sample ID: HG-LL - Effluent			Matrix: Aqueous		
Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL Mercury, Low Level as Hg	0.51	E1631 0.50	Prep: ng/L	1	Analyst: PACE 05/18/2019 13:25
Lab ID: 190508038-004			Collection Date: 05/08/2019 8:15		
Client Sample ID: HG-LL - Spike			Matrix: Aqueous		
Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL Mercury, Low Level as Hg	90	E1631 0.50	Prep: %	1	Analyst: PACE 05/18/2019 13:25
Lab ID: 190508038-005			Collection Date: 05/08/2019 8:15		
Client Sample ID: HG-LL - Spike/Duplicate			Matrix: Aqueous		
Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL Mercury, Low Level as Hg	76	E1631 0.50	Prep: %	1	Analyst: PACE 05/18/2019 13:25
Lab ID: 190508038-006			Collection Date: 05/08/2019 8:15		
Client Sample ID: HG-LL - Field Blank			Matrix: Aqueous		
Analyses	Result	Limit	Units	DF	Date Analyzed
MERCURY LOW LEVEL Mercury, Low Level as Hg	< 0.50	E1631 0.50	Prep: ng/L	1	Analyst: PACE 05/18/2019 13:25

May 14, 2019

Terry Canterbury
Pace-TTL
3516 Greensboro Avenue
Tuscaloosa, AL 35401

RE: Project: 190508038
Pace Project No.: 20103899

Dear Terry Canterbury:

Enclosed are the analytical results for sample(s) received by the laboratory on May 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Karen Brown
karen.brown@pacelabs.com
(504)469-0333
Project Manager

Enclosures

cc: Brandon Pierce, Pace-TTL



REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

Page 1 of 15

CERTIFICATIONS

Project: 190508038

Pace Project No.: 20103899

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch:
11277CA

Florida Department of Health (NELAC): E87595

Illinois Environmental Protection Agency: 0025721

Kansas Department of Health and Environment (NELAC):
E-10266

Louisiana Dept. of Environmental Quality (NELAC/LELAP):
02005

Pennsylvania Dept. of Env Protection (NELAC): 68-04202

Texas Commission on Env. Quality (NELAC):

T104704405-09-TX

U.S. Dept. of Agriculture Foreign Soil Import: P330-10-
00119

Commonwealth of Virginia (TNI): 480246

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 190508038

Pace Project No.: 20103899

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20103899001	190508038-001B	Water	05/08/19 08:00	05/09/19 09:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 190508038
Pace Project No.: 20103899

Lab ID	Sample ID	Method	Analysts	Analytes Reported
20103899001	190508038-001B	EPA 625	JAB	60

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 190508038
Paca Project No.: 20103899

Sample: 190508038-001B Lab ID: 20103899001 Collected: 05/08/19 08:00 Received: 05/09/19 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
625 MSSV 2DAY Analytical Method: EPA 625 Preparation Method: EPA 625									
Acenaphthene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	83-32-9	
Acenaphthylene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	208-96-8	
Anthracene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	120-12-7	
Benzidine	ND	mg/L	0.029	0.0071	1	05/11/19 12:00	05/13/19 21:54	92-87-5	
Benzo(a)anthracene	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	56-55-3	
Benzo(a)pyrene	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	50-32-8	
Benzo(b)fluoranthene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	205-99-2	
Benzo(g,h,i)perylene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	191-24-2	
Benzo(k)fluoranthene	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	207-08-9	
4-Bromophenylphenyl ether	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	101-55-3	
Butylbenzylphthalate	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	85-68-7	
4-Chloro-3-methylphenol	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	59-50-7	
bis(2-Chloroethoxy)methane	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	111-44-4	
2-Chloronaphthalene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	91-58-7	L2
2-Chlorophenol	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	95-57-8	
4-Chlorophenylphenyl ether	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	7005-72-3	
Chrysene	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	218-01-9	
Dibenz(a,h)anthracene	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	53-70-3	
3,3'-Dichlorobenzidine	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	91-94-1	
2,4-Dichlorophenol	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	120-83-2	
Diethylphthalate	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	84-66-2	
2,4-Dimethylphenol	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	105-67-9	
Dimethylphthalate	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	131-11-3	
Di-n-butylphthalate	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	84-74-2	
4,6-Dinitro-2-methylphenol	ND	mg/L	0.019	0.0024	1	05/11/19 12:00	05/13/19 21:54	534-52-1	
2,4-Dinitrophenol	ND	mg/L	0.038	0.0095	1	05/11/19 12:00	05/13/19 21:54	51-28-5	
2,4-Dinitrotoluene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	121-14-2	
2,6-Dinitrotoluene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	606-20-2	
Di-n-octylphthalate	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	117-84-0	
1,2-Diphenylhydrazine	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	117-81-7	
Fluoranthene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	206-44-0	
Fluorene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	86-73-7	
Hexachloro-1,3-butadiene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	87-68-3	
Hexachlorobenzene	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	118-74-1	
Hexachlorocyclopentadiene	ND	mg/L	0.038	0.0095	1	05/11/19 12:00	05/13/19 21:54	77-47-4	
Hexachloroethane	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	67-72-1	L2
Indeno(1,2,3-cd)pyrene	ND	mg/L	0.0095	0.0012	1	05/11/19 12:00	05/13/19 21:54	193-39-5	
Isophorone	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	78-59-1	
Naphthalene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	91-20-3	
Nitrobenzene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	98-95-3	
2-Nitrophenol	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	88-75-5	
4-Nitrophenol	ND	mg/L	0.038	0.0024	1	05/11/19 12:00	05/13/19 21:54	100-02-7	
N-Nitrosodimethylamine	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	62-75-9	
N-Nitroso-di-n-propylamine	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	621-64-7	

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ANALYTICAL RESULTS

Project: 190508038

Pace Project No.: 20103899

Sample: 190508038-001B Lab ID: 20103899001 Collected: 05/08/19 08:00 Received: 05/09/19 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
625 MSSV 2DAY Analytical Method: EPA 625 Preparation Method: EPA 625									
N-Nitrosodiphenylamine	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	108-60-1	
Pentachlorophenol	ND	mg/L	0.038	0.0048	1	05/11/19 12:00	05/13/19 21:54	87-86-5	
Phenanthrene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	85-01-8	
Phenol	ND	mg/L	0.0095	0.0026	1	05/11/19 12:00	05/13/19 21:54	108-95-2	
Pyrene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	129-00-0	
1,2,4-Trichlorobenzene	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	120-82-1	L2
2,4,6-Trichlorophenol	ND	mg/L	0.0095	0.0024	1	05/11/19 12:00	05/13/19 21:54	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	77	%	33-120		1	05/11/19 12:00	05/13/19 21:54	4165-60-0	
2-Fluorobiphenyl (S)	62	%	34-117		1	05/11/19 12:00	05/13/19 21:54	321-60-8	
Terphenyl-d14 (S)	69	%	24-133		1	05/11/19 12:00	05/13/19 21:54	1718-51-0	
Phenol-d6 (S)	27	%	10-120		1	05/11/19 12:00	05/13/19 21:54	13127-88-3	
2-Fluorophenol (S)	38	%	10-118		1	05/11/19 12:00	05/13/19 21:54	367-12-4	
2,4,6-Tribromophenol (S)	43	%	25-145		1	05/11/19 12:00	05/13/19 21:54	118-79-6	

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QUALITY CONTROL DATA

Project: 190508038

Pace Project No.: 20103899

QC Batch: 141926

Analysis Method: EPA 625

QC Batch Method: EPA 625

Analysis Description: 625 MSS 2DAY

Associated Lab Samples: 20103899001

METHOD BLANK: 621545

Matrix: Water

Associated Lab Samples: 20103899001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
1,2-Diphenylhydrazine	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2,2'-Oxybis(1-chloropropane)	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2,4,6-Trichlorophenol	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2,4-Dichlorophenol	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2,4-Dimethylphenol	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2,4-Dinitrophenol	mg/L	ND	0.040	0.010	05/13/19 20:12	
2,4-Dinitrotoluene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2,6-Dinitrotoluene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2-Chloronaphthalene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2-Chlorophenol	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2-Nitrophenol	mg/L	ND	0.010	0.0025	05/13/19 20:12	
3,3'-Dichlorobenzidine	mg/L	ND	0.010	0.0012	05/13/19 20:12	
4,6-Dinitro-2-methylphenol	mg/L	ND	0.020	0.0025	05/13/19 20:12	
4-Bromophenylphenyl ether	mg/L	ND	0.010	0.0025	05/13/19 20:12	
4-Chloro-3-methylphenol	mg/L	ND	0.010	0.0025	05/13/19 20:12	
4-Chlorophenylphenyl ether	mg/L	ND	0.010	0.0025	05/13/19 20:12	
4-Nitrophenol	mg/L	ND	0.040	0.0025	05/13/19 20:12	
Acenaphthene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Acenaphthylene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Anthracene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Benzidine	mg/L	ND	0.030	0.0075	05/13/19 20:12	
Benzo(a)anthracene	mg/L	ND	0.010	0.0012	05/13/19 20:12	
Benzo(a)pyrene	mg/L	ND	0.010	0.0012	05/13/19 20:12	
Benzo(b)fluoranthene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Benzo(g,h,i)perylene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Benzo(k)fluoranthene	mg/L	ND	0.010	0.0012	05/13/19 20:12	
bis(2-Chloroethoxy)methane	mg/L	ND	0.010	0.0025	05/13/19 20:12	
bis(2-Chloroethyl) ether	mg/L	ND	0.010	0.0025	05/13/19 20:12	
bis(2-Ethylhexyl)phthalate	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Butylbenzylphthalate	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Chrysene	mg/L	ND	0.010	0.0012	05/13/19 20:12	
Di-n-butylphthalate	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Di-n-octylphthalate	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Dibenz(a,h)anthracene	mg/L	ND	0.010	0.0012	05/13/19 20:12	
Diethylphthalate	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Dimethylphthalate	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Fluoranthene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Fluorene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Hexachloro-1,3-butadiene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Hexachlorobenzene	mg/L	ND	0.010	0.0012	05/13/19 20:12	

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QUALITY CONTROL DATA

Project: 190508038

Pace Project No.: 20103899

METHOD BLANK: 621545

Matrix: Water

Associated Lab Samples: 20103899001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hexachlorocyclopentadiene	mg/L	ND	0.040	0.010	05/13/19 20:12	
Hexachloroethane	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Indeno(1,2,3-cd)pyrene	mg/L	ND	0.010	0.0012	05/13/19 20:12	
Isophorone	mg/L	ND	0.010	0.0025	05/13/19 20:12	
N-Nitroso-di-n-propylamine	mg/L	ND	0.010	0.0025	05/13/19 20:12	
N-Nitrosodimethylamine	mg/L	ND	0.010	0.0025	05/13/19 20:12	
N-Nitrosodiphenylamine	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Naphthalene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Nitrobenzene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Pentachlorophenol	mg/L	ND	0.040	0.0050	05/13/19 20:12	
Phenanthrene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
Phenol	mg/L	ND	0.010	0.0027	05/13/19 20:12	
Pyrene	mg/L	ND	0.010	0.0025	05/13/19 20:12	
2,4,6-Tribromophenol (S)	%	53	25-145		05/13/19 20:12	
2-Fluorobiphenyl (S)	%	55	34-117		05/13/19 20:12	
2-Fluorophenol (S)	%	43	10-118		05/13/19 20:12	
Nitrobenzene-d5 (S)	%	76	33-120		05/13/19 20:12	
Phenol-d6 (S)	%	25	10-120		05/13/19 20:12	
Terphenyl-d14 (S)	%	71	24-133		05/13/19 20:12	

LABORATORY CONTROL SAMPLE: 621546

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	mg/L	0.05	0.018	35	44-142	L2
1,2-Diphenylhydrazine	mg/L	0.05	0.037	73	36-128	
2,2'-Oxybis(1-chloropropane)	mg/L	0.05	0.033	66	36-166	
2,4,6-Trichlorophenol	mg/L	0.05	0.036	71	37-144	
2,4-Dichlorophenol	mg/L	0.05	0.036	72	39-135	
2,4-Dimethylphenol	mg/L	0.05	0.037	74	32-119	
2,4-Dinitrophenol	mg/L	0.05	0.017J	34	0.1-191	
2,4-Dinitrotoluene	mg/L	0.05	0.036	73	39-139	
2,6-Dinitrotoluene	mg/L	0.05	0.036	72	50-158	
2-Chloronaphthalene	mg/L	0.05	0.020	40	60-118	L2
2-Chlorophenol	mg/L	0.05	0.031	61	23-134	
2-Nitrophenol	mg/L	0.05	0.034	68	29-182	
3,3'-Dichlorobenzidine	mg/L	0.05	0.035	70	0.1-262	
4,6-Dinitro-2-methylphenol	mg/L	0.05	0.026	52	0.1-181	
4-Bromophenylphenyl ether	mg/L	0.05	0.032	64	53-127	
4-Chloro-3-methylphenol	mg/L	0.05	0.037	75	22-147	
4-Chlorophenylphenyl ether	mg/L	0.05	0.028	57	25-158	
4-Nitrophenol	mg/L	0.05	0.017J	33	0.1-132	
Acenaphthene	mg/L	0.05	0.025	50	47-145	
Acenaphthylene	mg/L	0.05	0.025	51	33-145	
Anthracene	mg/L	0.05	0.037	73	27-133	

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QUALITY CONTROL DATA

Project: 190508038

Pace Project No.: 20103899

LABORATORY CONTROL SAMPLE: 621546

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzidine	mg/L	0.05	ND	12	10-120	
Benzo(a)anthracene	mg/L	0.05	0.036	72	33-143	
Benzo(a)pyrene	mg/L	0.05	0.036	72	17-163	
Benzo(b)fluoranthene	mg/L	0.05	0.035	71	24-159	
Benzo(g,h,i)perylene	mg/L	0.05	0.034	69	0.1-219	
Benzo(k)fluoranthene	mg/L	0.05	0.039	77	11-162	
bis(2-Chloroethoxy)methane	mg/L	0.05	0.037	74	33-184	
bis(2-Chloroethyl) ether	mg/L	0.05	0.030	59	12-158	
bis(2-Ethylhexyl)phthalate	mg/L	0.05	0.040	81	8-158	
Butylbenzylphthalate	mg/L	0.05	0.036	73	0.1-152	
Chrysene	mg/L	0.05	0.036	73	17-168	
Di-n-butylphthalate	mg/L	0.05	0.039	78	1-118	
Di-n-octylphthalate	mg/L	0.05	0.038	76	4-146	
Dibenz(a,h)anthracene	mg/L	0.05	0.040	81	0.1-227	
Diethylphthalate	mg/L	0.05	0.036	72	0.1-114	
Dimethylphthalate	mg/L	0.05	0.036	72	0.1-112	
Fluoranthene	mg/L	0.05	0.038	76	26-137	
Fluorene	mg/L	0.05	0.034	67	59-121	
Hexachloro-1,3-butadiene	mg/L	0.05	0.016	32	24-116	
Hexachlorobenzene	mg/L	0.05	0.034	69	0.1-152	
Hexachlorocyclopentadiene	mg/L	0.05	0.011J	22	10-115	
Hexachloroethane	mg/L	0.05	0.020	39	40-113 L2	
Indeno(1,2,3-cd)pyrene	mg/L	0.05	0.039	77	0.1-171	
Isophorone	mg/L	0.05	0.038	76	21-196	
N-Nitroso-di-n-propylamine	mg/L	0.05	0.035	71	0.1-230	
N-Nitrosodimethylamine	mg/L	0.05	0.031	61	29-126	
N-Nitrosodiphenylamine	mg/L	0.05	0.036	73	10-146	
Naphthalene	mg/L	0.05	0.021	41	21-133	
Nitrobenzene	mg/L	0.05	0.036	73	35-180	
Pentachlorophenol	mg/L	0.05	0.024J	49	14-176	
Phenanthrene	mg/L	0.05	0.036	73	54-120	
Phenol	mg/L	0.05	0.014	28	5-112	
Pyrene	mg/L	0.05	0.035	70	52-115	
2,4,6-Tribromophenol (S)	%			79	25-145	
2-Fluorobiphenyl (S)	%			64	34-117	
2-Fluorophenol (S)	%			47	10-118	
Nitrobenzene-d5 (S)	%			83	33-120	
Phenol-d6 (S)	%			29	10-120	
Terphenyl-d14 (S)	%			67	24-133	

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QUALIFIERS

Project: 190508038

Pace Project No.: 20103899

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

BATCH QUALIFIERS

Batch: 142060

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 190508038

Pace Project No.: 20103899

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20103899001	190508038-001B	EPA 625	141926	EPA 625	142060

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Pace Analytical

CHAIN-OF-CUSTODY RECORD

WO#: 20103899

TTL, Inc.
3516 Greensboro Avenue
Tuscaloosa, Alabama 35401
Phone (205) 345-0816
Fax (205) 343-0635

Subcontractor:

Pace Analytical Services, LLC
1000 Riverbend Blvd-Suite F
St. Rose, LA 70087

TEL: (504) 469-0333
FAX:



20103899

Page 1 of 1

Acct #:

08-May-19

Sample ID	Matrix	Collection Date	Bottle Type	E625	Requested Tests
190508038-001B	Aqueous	5/8/2019 8:00:00 AM	1LAMGU8270	1	

Comments: Please analyze by method 625 for the analytes listed in the report.

Notice - Please send invoice with results to: terry.canterbury@pacelabs.com

After analysis, the samples do not need to be returned and can be disposed of per your standard laboratory practices.

5.6

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Relinquished by: *[Signature]*
Relinquished by: *Ted E. Smith*

Date/Time

5-8-19 3:30m
5/9/19 0900

Received by:

Received by:

[Signature]
[Signature]

Date/Time

5/9/19 0900

16 /35

09-05-2019

07:18:22 a.m.

2057556799

Report	T	Analyte	MDL	PQL	MCL	RO
Y	A	1,2,4-Trichlorobenzene	0	0.01	0	0
N	A	1,2-Dichlorobenzene	0	0.01	0	0
Y	A	1,2-Diphenylhydrazine	0	0.05	0	0
N	A	1,3-Dichlorobenzene	0	0.01	0	0
N	A	1,4-Dichlorobenzene	0	0.01	0	0
N	A	2,4,6-Trichlorophenol	0	0	0	0
Y	A	2,4,6-Trichlorophenol	0	0.01	0	0
Y	A	2,4-Dichlorophenol	0	0.01	0	0
Y	A	2,4-Dimethylphenol	0	0.01	0	0
Y	A	2,4-Dinitrophenol	0	0.05	0	0
Y	A	2,4-Dinitrotoluene	0	0.01	0	0
Y	A	2,6-Dinitrotoluene	0	0.01	0	0
Y	A	2-Chloronaphthalene	0	0.01	0	0
Y	A	2-Chlorophenol	0	0.01	0	0
Y	A	2-Nitrophenol	0	0.01	0	0
Y	A	3,3'-Dichlorobenzidine	0	0.02	0	0
Y	A	4,6-Dinitro-2-methylphenol	0	0.05	0	0
Y	A	4-Bromophenyl phenyl ether	0	0.01	0	0
Y	A	4-Chloro-3-methylphenol	0	0.01	0	0
Y	A	4-Chlorophenyl phenyl ether	0	0.01	0	0
Y	A	4-Nitrophenol	0	0.05	0	0
Y	A	Acenaphthene	0	0.01	0	0
Y	A	Acenaphthylene	0	0.01	0	0
Y	A	Anthracene	0	0.01	0	0
Y	A	Benzo(a)anthracene	0	0.01	0	0
Y	A	Benzidine	0	0.05	0	0
Y	A	Benzo(a)pyrene	0	0.01	0	0
Y	A	Benzo(b)fluoranthene	0	0.01	0	0
Y	A	Benzo(g,h,i)perylene	0	0.01	0	0
Y	A	Benzo(k)fluoranthene	0	0.01	0	0
Y	A	Bis(2-chloroethoxy)methane	0	0.01	0	0
Y	A	Bis(2-chloroethyl)ether	0	0.01	0	0
Y	A	Bis(2-chloroisopropyl)ether	0	0.01	0	0
Y	A	Bis(2-ethylhexyl)phthalate	0	0.01	0	0
Y	A	Butyl benzyl phthalate	0	0.01	0	0
Y	A	Chrysene	0	0.01	0	0
Y	A	Dibenz(a,h)anthracene	0	0.01	0	0
Y	A	Diethyl phthalate	0	0.01	0	0
Y	A	Dimethyl phthalate	0	0.01	0	0
Y	A	Di-n-butyl phthalate	0	0.01	0	0
Y	A	Di-n-octyl phthalate	0	0.01	0	0
Y	A	Fluoranthene	0	0.01	0	0
Y	A	Fluorene	0	0.01	0	0
Y	A	Hexachlorobenzene	0	0.01	0	0
Y	A	Hexachlorobutadiene	0	0.01	0	0
Y	A	Hexachlorocyclopentadiene	0	0.01	0	0
Y	A	Hexachloroethane	0	0.01	0	0
Y	A	Indeno(1,2,3-cd)pyrene	0	0.01	0	0
Y	A	Isophorone	0	0.01	0	0
N	A	m,p-cresol	0	0	0	0
N	A	m-cresol	0	0	0	0
Y	A	Naphthalene	0	0.01	0	0
Y	A	Nitrobenzene	0	0.01	0	0
Y	A	N-Nitrosodimethylamine	0	0.01	0	0
Y	A	N-Nitrosodi-n-propylamine	0	0.01	0	0
Y	A	N-Nitrosodiphenylamine	0	0.01	0	0

Report	T	Analyte	MDL	PCL	MCL	RO
N	A	o-cresol	0	0	0	0
N	A	p-cresol	0	0	0	0
Y	A	Perchlorophenol	0	0.025	0	0
Y	A	Phenanthrene	0	0.01	0	0
Y	A	Phenol	0	0.01	0	0
Y	A	Pyrene	0	0.01	0	0
Y	S	1,2-Dichlorobenzene-d4	0	0.01	0	0
Y	S	2,4,6-Tribromophenol	0	0.01	0	0
Y	S	2-Chlorophenol-d4	0	0.01	0	0
Y	S	2-Fluorobiphenyl	0	0.01	0	0
Y	S	2-Fluorophenol	0	0.01	0	0
Y	S	4-Terphenyl-d14	0	0.01	0	0
Y	S	Nitrobenzene-d5	0	0.01	0	0
Y	S	Phenol-d5	0	0.01	0	0
Y	S	Phenol-d6	0	0.01	0	0



1000 Riverbend Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon Receipt **WO# : 20103899**

PM: KHB
Project: 20-TTL

Due Date: 05/23/19

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC]

Custody Seals Intact: ☒ Yes ☐ No

Thermometer Used:
☐ Therm Fisher IR 5
☐ Therm Fisher IR 6
☒ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 5/9/19

Temp must be measured from Temperature blank when present

Comments:

Temperature Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	1	
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2	
Chain of Custody Complete:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4	
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8	
Filtered vol. Rec. for Diss. tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10	
All containers received within manufacture's precautionary and/or expiration dates.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13	If No, was preservative added? <input type="checkbox"/> Yes <input type="checkbox"/> No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>8mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14	
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

May 13, 2019

Terry Canterbury
Pace-TTL
3516 Greensboro Avenue
Tuscaloosa, AL 35401

RE: Project: 190508038 / 624
Pace Project No.: 20103903

Dear Terry Canterbury:

Enclosed are the analytical results for sample(s) received by the laboratory on May 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Karen Brown
karen.brown@pacelabs.com
(504)469-0333
Project Manager

Enclosures

cc: Brandon Pierce, Pace-TTL



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 190508038 / 624

Pace Project No.: 20103903

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch:
11277CA

Florida Department of Health (NELAC): E87595

Illinois Environmental Protection Agency: 0025721

Kansas Department of Health and Environment (NELAC):
E-10266

Louisiana Dept. of Environmental Quality (NELAC/LELAP):
02006

Pennsylvania Dept. of Env Protection (NELAC): 68-04202

Texas Commission on Env. Quality (NELAC):

T104704405-09-TX

U.S. Dept. of Agriculture Foreign Soil Import: P330-10-
00119

Commonwealth of Virginia (TNI): 480246

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SAMPLE SUMMARY

Project: 190508038 / 624

Pace Project No.: 20103903

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20103903001	190508038-002C	Water	05/08/19 08:10	05/09/19 09:00
20103903002	190508038-007A	Water	05/08/19 00:00	05/09/19 09:00

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SAMPLE ANALYTE COUNT

Project 190508038 / 624

Pace Project No.: 20103903

Lab ID	Sample ID	Method	Analysts	Analytes Reported
20103903001	190508038-002C	EPA 624	GEM	35
20103903002	190508038-007A	EPA 624	GEM	35

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 190508038 / 624

Pace Project No.: 20103903

Sample: 190508038-002C Lab ID: 20103903001 Collected: 05/08/19 08:10 Received: 05/09/19 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics Analytical Method: EPA 624									
Acrolein	ND	mg/L	0.020	0.0020	1		05/10/19 13:28	107-02-8	
Acrylonitrile	ND	mg/L	0.020	0.0021	1		05/10/19 13:28	107-13-1	
Benzene	ND	mg/L	0.0050	0.0014	1		05/10/19 13:28	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	75-27-4	
Bromoform	ND	mg/L	0.0050	0.0016	1		05/10/19 13:28	75-25-2	
Bromomethane	ND	mg/L	0.0050	0.0014	1		05/10/19 13:28	74-83-9	
Carbon tetrachloride	ND	mg/L	0.0050	0.0011	1		05/10/19 13:28	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	108-90-7	
Chloroethane	ND	mg/L	0.0050	0.0012	1		05/10/19 13:28	75-00-3	
2-Chloroethylvinyl ether	ND	mg/L	0.020	0.0032	1		05/10/19 13:28	110-75-8	M1,C3
Chloroform	0.0024J	mg/L	0.0050	0.0014	1		05/10/19 13:28	67-66-3	
Chloromethane	ND	mg/L	0.0050	0.0012	1		05/10/19 13:28	74-87-3	
Dibromochloromethane	ND	mg/L	0.0050	0.0016	1		05/10/19 13:28	124-48-1	
1,2-Dichlorobenzene	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	0.0014	1		05/10/19 13:28	106-46-7	
1,1-Dichloroethane	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	0.0014	1		05/10/19 13:28	75-35-4	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	0.0013	1		05/10/19 13:28	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	0.0016	1		05/10/19 13:28	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	0.0014	1		05/10/19 13:28	100-41-4	
Methylene Chloride	ND	mg/L	0.0050	0.0046	1		05/10/19 13:28	75-09-2	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	0.0019	1		05/10/19 13:28	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	0.0014	1		05/10/19 13:28	127-18-4	
Toluene	ND	mg/L	0.0050	0.0021	1		05/10/19 13:28	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	0.0012	1		05/10/19 13:28	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	0.0015	1		05/10/19 13:28	79-00-5	
Trichloroethene	ND	mg/L	0.0050	0.0014	1		05/10/19 13:28	79-01-6	
Vinyl chloride	ND	mg/L	0.0050	0.0011	1		05/10/19 13:28	75-01-4	
Surrogates									
1-Bromofluorobenzene (S)	98	%	82-118		1		05/10/19 13:28	460-00-4	
Toluene-d8 (S)	106	%	81-120		1		05/10/19 13:28	2037-26-5	
Dibromofluoromethane (S)	101	%	77-123		1		05/10/19 13:28	1868-53-7	

Sample: 190508038-007A Lab ID: 20103903002 Collected: 05/08/19 00:00 Received: 05/09/19 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
24 Volatile Organics Analytical Method: EPA 624									
Acrolein	ND	mg/L	0.020	0.0020	1		05/10/19 14:22	107-02-8	
Acrylonitrile	ND	mg/L	0.020	0.0021	1		05/10/19 14:22	107-13-1	

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ANALYTICAL RESULTS

Project: 190508038 / 624

Pace Project No.: 20103903

Sample: 190508038-007A Lab ID: 20103903002 Collected: 05/08/19 00:00 Received: 05/09/19 09:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
624 Volatile Organics Analytical Method: EPA 624									
Benzene	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	75-27-4	
Bromoform	ND	mg/L	0.0050	0.0016	1		05/10/19 14:22	75-25-2	
Bromomethane	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	74-83-9	
Carbon tetrachloride	ND	mg/L	0.0050	0.0011	1		05/10/19 14:22	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	108-90-7	
Chloroethane	ND	mg/L	0.0050	0.0012	1		05/10/19 14:22	75-00-3	
2-Chloroethylvinyl ether	ND	mg/L	0.020	0.0032	1		05/10/19 14:22	110-75-8	c3
Chloroform	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	67-66-3	
Chloromethane	ND	mg/L	0.0050	0.0012	1		05/10/19 14:22	74-87-3	
Dibromochloromethane	ND	mg/L	0.0050	0.0016	1		05/10/19 14:22	124-48-1	
1,2-Dichlorobenzene	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	106-46-7	
1,1-Dichloroethane	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	75-35-4	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	0.0013	1		05/10/19 14:22	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	0.0016	1		05/10/19 14:22	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	100-41-4	
Methylene Chloride	ND	mg/L	0.0050	0.0046	1		05/10/19 14:22	75-09-2	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	0.0019	1		05/10/19 14:22	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	127-18-4	
Toluene	ND	mg/L	0.0050	0.0021	1		05/10/19 14:22	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	0.0012	1		05/10/19 14:22	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	0.0015	1		05/10/19 14:22	79-00-5	
Trichloroethene	ND	mg/L	0.0050	0.0014	1		05/10/19 14:22	79-01-6	
Vinyl chloride	ND	mg/L	0.0050	0.0011	1		05/10/19 14:22	75-01-4	
Surrogates									
1-Bromofluorobenzene (S)	102	%	82-118		1		05/10/19 14:22	460-00-4	
Toluene-d8 (S)	104	%	81-120		1		05/10/19 14:22	2037-26-5	
Dibromofluoromethane (S)	103	%	77-123		1		05/10/19 14:22	1868-53-7	

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Date: 05/13/2019 11:50 AM

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QUALITY CONTROL DATA

Project: 190508038 / 624
Pace Project No.: 20103903

QC Batch: 141873 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 20103903001, 20103903002

METHOD BLANK: 621050 Matrix: Water
Associated Lab Samples: 20103903001, 20103903002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/L	ND	0.0050	0.0012	05/10/19 10:52	
1,1,2,2-Tetrachloroethane	mg/L	ND	0.0050	0.0019	05/10/19 10:52	
1,1,2-Trichloroethane	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
1,1-Dichloroethane	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
1,1-Dichloroethene	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
1,2-Dichlorobenzene	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
1,2-Dichloroethane	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
1,2-Dichloropropane	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
1,3-Dichlorobenzene	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
1,4-Dichlorobenzene	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
2-Chloroethylvinyl ether	mg/L	ND	0.020	0.0032	05/10/19 10:52	
Acrolein	mg/L	ND	0.020	0.0020	05/10/19 10:52	
Acrylonitrile	mg/L	ND	0.020	0.0021	05/10/19 10:52	
Benzene	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
Bromodichloromethane	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
Bromoform	mg/L	ND	0.0050	0.0016	05/10/19 10:52	
Bromomethane	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
Carbon tetrachloride	mg/L	ND	0.0050	0.0011	05/10/19 10:52	
Chlorobenzene	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
Chloroethane	mg/L	ND	0.0050	0.0012	05/10/19 10:52	
Chloroform	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
Chloromethane	mg/L	ND	0.0050	0.0012	05/10/19 10:52	
cis-1,3-Dichloropropene	mg/L	ND	0.0050	0.0015	05/10/19 10:52	
Dibromochloromethane	mg/L	ND	0.0050	0.0016	05/10/19 10:52	
Ethylbenzene	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
Methylene Chloride	mg/L	ND	0.0050	0.0046	05/10/19 10:52	
Tetrachloroethene	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
Toluene	mg/L	ND	0.0050	0.0021	05/10/19 10:52	
trans-1,2-Dichloroethene	mg/L	ND	0.0050	0.0013	05/10/19 10:52	
trans-1,3-Dichloropropene	mg/L	ND	0.0050	0.0016	05/10/19 10:52	
Trichloroethene	mg/L	ND	0.0050	0.0014	05/10/19 10:52	
Vinyl chloride	mg/L	ND	0.0050	0.0011	05/10/19 10:52	
1-Bromofluorobenzene (S)	%	100	82-118		05/10/19 10:52	
Dibromofluoromethane (S)	%	101	77-123		05/10/19 10:52	
Toluene-d8 (S)	%	109	81-120		05/10/19 10:52	

LABORATORY CONTROL SAMPLE: 621051

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/L	0.02	0.019	97	76-123	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Date: 05/13/2019 11:50 AM

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QUALITY CONTROL DATA

Project: 190508038 / 624
Pace Project No.: 20103903

LABORATORY CONTROL SAMPLE: 621051

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	mg/L	0.02	0.018	92	64-131	
1,1,2-Trichloroethane	mg/L	0.02	0.018	89	76-118	
1,1-Dichloroethane	mg/L	0.02	0.019	95	69-125	
1,1-Dichloroethene	mg/L	0.02	0.018	90	63-122	
1,2-Dichlorobenzene	mg/L	0.02	0.018	89	80-113	
1,2-Dichloroethane	mg/L	0.02	0.018	88	64-127	
1,2-Dichloropropane	mg/L	0.02	0.018	90	68-125	
1,3-Dichlorobenzene	mg/L	0.02	0.018	88	79-112	
1,4-Dichlorobenzene	mg/L	0.02	0.017	87	79-113	
2-Chloroethylvinyl ether	mg/L	0.04	0.033	83	52-138	
Acrolein	mg/L	0.02	0.017J	84	10-164	
Acrylonitrile	mg/L	0.02	0.018J	92	48-145	
Benzene	mg/L	0.02	0.017	83	72-131	
Bromodichloromethane	mg/L	0.02	0.019	94	72-117	
Bromoform	mg/L	0.02	0.020	101	58-124	
Bromomethane	mg/L	0.02	0.018	90	39-163	
Carbon tetrachloride	mg/L	0.02	0.020	101	73-121	
Chlorobenzene	mg/L	0.02	0.019	93	77-119	
Chloroethane	mg/L	0.02	0.019	93	36-155	
Chloroform	mg/L	0.02	0.018	89	69-115	
Chloromethane	mg/L	0.02	0.016	80	30-148	
cis-1,3-Dichloropropene	mg/L	0.02	0.018	91	70-120	
Dibromochloromethane	mg/L	0.02	0.018	92	63-120	
Ethylbenzene	mg/L	0.02	0.019	93	81-110	
Methylene Chloride	mg/L	0.02	0.019	96	58-136	
Tetrachloroethene	mg/L	0.02	0.020	102	68-126	
Toluene	mg/L	0.02	0.018	92	80-116	
trans-1,2-Dichloroethene	mg/L	0.02	0.019	97	60-126	
trans-1,3-Dichloropropene	mg/L	0.02	0.018	91	71-120	
Trichloroethene	mg/L	0.02	0.019	95	76-113	
Vinyl chloride	mg/L	0.02	0.017	85	45-126	
1-Bromofluorobenzene (S)	%			98	82-118	
1,1-Dibromofluoromethane (S)	%			99	77-123	
Toluene-d8 (S)	%			96	81-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 621052

621053

Parameter	Units	20103903001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,1-Trichloroethane	mg/L	ND	0.02	0.02	0.022	0.021	112	107	76-141	4	20
1,2,2-Tetrachloroethane	mg/L	ND	0.02	0.02	0.023	0.020	117	100	60-144	15	20
1,2-Trichloroethane	mg/L	ND	0.02	0.02	0.022	0.021	108	107	72-132	1	20
1-Dichloroethane	mg/L	ND	0.02	0.02	0.022	0.022	108	110	67-139	2	20
1-Dichloroethene	mg/L	ND	0.02	0.02	0.021	0.020	104	98	62-139	6	20
2-Dichlorobenzene	mg/L	ND	0.02	0.02	0.021	0.021	105	103	77-129	2	20

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 190508038 / 624
Pace Project No.: 20103903

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 621052 621053												
Parameter	Units	20103903001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
1,2-Dichloroethane	mg/L	ND	0.02	0.02	0.023	0.021	115	105	63-139	10	20	
1,2-Dichloropropane	mg/L	ND	0.02	0.02	0.021	0.020	106	100	68-137	5	20	
1,3-Dichlorobenzene	mg/L	ND	0.02	0.02	0.021	0.021	106	104	76-128	2	20	
1,4-Dichlorobenzene	mg/L	ND	0.02	0.02	0.021	0.020	106	100	76-128	6	20	
2-Chloroethylvinyl ether	mg/L	ND	0.04	0.04	ND	ND	0	0	10-65		20	M1
Acrolein	mg/L	ND	0.02	0.02	0.019J	0.018J	93	91	10-200		20	
Acrylonitrile	mg/L	ND	0.02	0.02	0.020	0.022	102	110	31-177	8	20	
Benzene	mg/L	ND	0.02	0.02	0.020	0.019	102	97	52-167	5	20	
Bromodichloromethane	mg/L	ND	0.02	0.02	0.023	0.022	114	106	70-131	7	20	
Bromoform	mg/L	ND	0.02	0.02	0.023	0.023	113	115	58-134	2	20	
Bromomethane	mg/L	ND	0.02	0.02	0.021	0.021	104	104	36-177	0	20	
Carbon tetrachloride	mg/L	ND	0.02	0.02	0.024	0.023	119	117	67-143	2	20	
Chlorobenzene	mg/L	ND	0.02	0.02	0.022	0.022	108	108	73-135	0	20	
Chloroethane	mg/L	ND	0.02	0.02	0.022	0.021	110	103	35-172	7	20	
Chloroform	mg/L	0.0024J	0.02	0.02	0.023	0.023	103	103	65-131	0	20	
Chloromethane	mg/L	ND	0.02	0.02	0.018	0.018	91	88	27-168	4	20	
cis-1,3-Dichloropropene	mg/L	ND	0.02	0.02	0.021	0.023	107	116	67-139	8	20	
Dibromochloromethane	mg/L	ND	0.02	0.02	0.022	0.022	108	111	60-134	3	20	
Ethylbenzene	mg/L	ND	0.02	0.02	0.022	0.021	111	107	75-130	4	20	
Methylene Chloride	mg/L	ND	0.02	0.02	0.022	0.021	109	107	60-138	2	20	
Tetrachloroethene	mg/L	ND	0.02	0.02	0.024	0.024	122	118	65-146	3	20	
Toluene	mg/L	ND	0.02	0.02	0.023	0.024	109	114	32-181	4	20	
trans-1,2-Dichloroethene	mg/L	ND	0.02	0.02	0.023	0.021	113	106	64-139	6	20	
trans-1,3-Dichloropropene	mg/L	ND	0.02	0.02	0.021	0.022	104	109	69-133	5	20	
Trichloroethene	mg/L	ND	0.02	0.02	0.022	0.020	111	98	73-132	11	20	
Vinyl chloride	mg/L	ND	0.02	0.02	0.020	0.019	98	83	47-145	5	20	
1-Bromofluorobenzene (S)	%						102	100	82-118			
Dibromofluoromethane (S)	%						99	104	77-123			
Toluene-d8 (S)	%						99	107	81-120			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 190508038 / 624

Pace Project No.: 20103903

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

ANALYTE QUALIFIERS

- | | |
|----|---|
| M1 | Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. |
| c3 | Analysis of 2-chloroethyl vinyl ether was performed from a sample that was field preserved to pH < 2 with HCl. Acid preservation is not allowed for this parameter by the test method or for NPDES compliance per 40CFR Part 136. |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 190508038 / 624

Pace Project No.: 20103903

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20103903001	190508038-002C	EPA 624	141873		
20103903002	190508038-007A	EPA 624	141873		

REPORT OF LABORATORY ANALYSIS

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Re: 05/13/2019 11:50 AM

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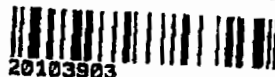
Pace Analytical

CHAIN-OF-CUSTODY RECORD

TTL, Inc.

3516 Greensboro Avenue
Tuscaloosa, Alabama 35401
Phone (205) 345-0816
Fax (205) 343-0835

WO#: 20103903



Subcontractor:

Pace Analytical Services, LLC
1000 Riverbend Blvd-Suite F
St. Rose, LA 70087

TEL: (504) 459-0333

FAX:

Acct #:

Page 1 of 1

08-May-19

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests				
				E624				
190508038-002C	Aqueous	5/8/2019 8:10:00 AM	AQ8260	1				
190508038-007A	Aqueous	5/8/2019	AQ8260	1				

Comments: Please analyze by method 624 for the analytes listed in the report.

Notice - Please send invoice with results to: terry.canterbury@paceabs.com

After analysis, the samples do not need to be returned and can be disposed of per your standard laboratory practices.

4.5

Date/Time	Date/Time
Relinquished by: <u>S. J. [Signature]</u> 5-8-19 3:30	Received by: <u>[Signature]</u>
Relinquished by: <u>Fred Lee</u> 5/9/19 09:00	Received by: <u>[Signature]</u> 5/9/19 09:00

Date: 08-May-19

CLIENT: City of Clanton - WWTP
Project: NPDES AL0054631 - EPA Form 2A - Sampling #1

Lab Order: 180905048

Lab ID: 180905048-002

Collection Date: 09/05/2018 8:00

Client Sample ID: Effluent - Grab

Matrix: Aqueous

Analyses	Result	Limit	Units	DF	Date Analyzed
VOLATILES BY GC/MS METHOD 624		E624	Prep:		Analyst: LAA
1,1,1-Trichloroethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,1,2,2-Tetrachloroethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,1,2-Trichloroethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,1-Dichloroethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,1-Dichloroethene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,2-Dichlorobenzene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,2-Dichloroethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,2-Dichloropropene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,3-Dichlorobenzene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
1,4-Dichlorobenzene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
2-Chloroethyl vinyl ether	< 0.010	0.010	mg/L	1	09/07/2018 20:14
Acrolein	< 0.100	0.100	mg/L	1	09/07/2018 20:14
Acrylonitrile	< 0.100	0.100	mg/L	1	09/07/2018 20:14
Benzene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Bromodichloromethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Bromoform	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Bromomethane	< 0.010	0.010	mg/L	1	09/07/2018 20:14
Carbon tetrachloride	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Chlorobenzene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Chloroethane	< 0.010	0.010	mg/L	1	09/07/2018 20:14
Chloroform	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Chloromethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
cis-1,3-Dichloropropene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Dibromochloromethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Ethylbenzene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Methylene chloride	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Tetrachloroethene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Toluene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
trans-1,2-Dichloroethane	< 0.005	0.005	mg/L	1	09/07/2018 20:14
trans-1,3-Dichloropropene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Trichloroethene	< 0.005	0.005	mg/L	1	09/07/2018 20:14
Vinyl chloride	< 0.002	0.002	mg/L	1	09/07/2018 20:14

Client Notification/ Resolution: _____
 Person Contacted: _____
 Date/Time: _____
 Comments/ Resolution: _____

Temp Blank Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14
If containers preservation checked found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13
If containers needing chemical preservation have been checked (except VOA, collform, & O&G).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12
If containers received within manufacturer's recalculation and/or expiration dates.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10
Filtered vol. Rec. for Diss. tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4
Chain of Custody Complete:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2
Temperature Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1

Temp must be measured from Temperature blank when present

Comments:

Date and Initials of person examining contents: 5/9/19

Temp should be above freezing to 6°C

Cooler Temperature: [see COC]

Samples on ice: [see COC]

Type of ice: Wet Blue None

Thermometer Used:

☒ Therm Fisher IR 5
☐ Therm Fisher IR 6
☐ Therm Fisher IR 7

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present [see COC]

Custody Seals Intact: ☒ Yes ☐ No

Sample Condition Upon Receipt: MO# : 20103903

Client: 20-TTL Due Date: 05/23/19

1000 Riverbend Blvd, Suite F
 St. Rose, LA 70067

Face Analytical

LIMS Chain of Custody Form

Composite Sample Info

Sample Security Requirements

Client: City of Clanton - WWTP

Contact: Mr. Anthony Robinson

Mailing Address: 1574 County Road 51

City, State, Zip: Clanton, AL 35046

Phone No.: 205 755-2360

Sampled By: CLIENT

Project ID: Clanton-wwTP-2A-2019

Project Name: NPDES AL0054631 - EPA Form 24 - Sampling # 3

PACE WORK
ORDER NUMBER
190508 038

Sample EFFLUENT Permit Renewal

Start 5/7/19 8:00 AM

End 5/8/19 8:00 AM

Sample EFFLUENT Permit Renewal

Start 5/7/19 8:00 AM

End 5/8/19 8:00 AM

1. Condition of Contents: _____

2. Sealed for Shipping By: _____

3. Initial Contents Temp.: _____ °C Seal Applied Yes _____ No _____

4. Custody Seal Intact Upon Receipt by Laboratory: Yes _____ No _____

5. Condition of Contents: Good - Ice

6. Comments: 0.2 °C at Tuscaloosa

7. Reporting Status: Routine; _____; Rush By* _____

8. Client P.O. # _____

* SURCHARGES MAY APPLY

Date	Time	Sample ID/Description	Sample Type	Sample Method	Sample Containers	Analysis Parameters
5/8/19	8:00 AM	Effluent - Composite	Aqueous	COMP24	1 1/2 PT PL HNO3	200.7PR, 200.8_W, 200.8PR, HARD_W
5/8/19	8:00 AM	Effluent - Composite	Aqueous	COMP24	4 1LAMGH270	525_VW, 525PR
5/8/19	8:00 AM	Effluent - Composite	Aqueous	COMP24	1 QT PLNP	TDS_OW
5/8/19	8:05 AM	Effluent - Grab	Aqueous	GRAB	4 AQ5250	524_2A
5/8/19	8:05 AM	Effluent - Grab	Aqueous	GRAB	1 QT PL NAOH	CN-OW
5/8/19	8:10 AM	Effluent - Grab	Aqueous	GRAB	1 1LWMOG H2SO4	O&G 1554
5/8/19	8:10 AM	Effluent - Grab	Aqueous	GRAB	1 1LAMGH2SO4	PHENOLS_TRVW
5/8/19	8:15 AM	HG-LL - Effluent	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
5/8/19	8:15 AM	HG-LL - Spike	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
5/8/19	8:20 AM	HG-LL - Spike/Duplicate	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
5/8/19	8:20 AM	HG-LL - Field Blank	Aqueous	GRAB	1 HG_LL_500ml CG TT	HG_LL
5/8/19	8:25 AM	Tripp Blank	Aqueous	GRAB	4 AQ5250	524_2A BLANK

CUSTODY TRANSFERS

Relinquished by: (signed) Date/Time

1. Orth Kelly 5/8/19 9:24

2. Hankin Candy 5/8/19 14:40

3. _____

4. _____

Received by: (signed) Date/Time

1. Hankin Candy 5/8/19 9:24

2. _____

3. _____

4. _____

SHIPPING DETAILS

Air Bill #: _____

Method of Shipment: TruckReceived By Lab: S. J. DyerDate/Time: 5-8-19 14:40

TTL, Inc. - Tuscaloosa Office/Laboratory: 3516 Greensboro Avenue, Tuscaloosa, Alabama 35401, Telephone (205) 345-0816, FAX (205) 345-0992

NOTE: Please read terms and conditions between TTL, Inc. and client on back of form.

EPA Method 1669

Manual collection directly into sample bottle

Client City of Clanton

Sample Site/ID Outfall 0011

Date/Time 5/8/19 8:15am

Weather cond. Sunny

Clean Hands (CH): Anthony Kelly

Dirty Hands (DH): Thomas Barrett

CH & DH have a wind suit on?

☒ YES

NO

(ULINE #S-17924 XL 2XL)

CH has shoulder length gloves on?

☒ YES

NO

(ULINE #S-20329)

CH & DH have latex, powder free gloves on?

☒ YES

NO

(ULINE #S-6606)

Sample Kit/Bottles less than 90 days old?

☒ YES

NO

(Southern Analytical)

Date kit received from Southern Analytical Labs _____

TTL LIMS Work order number added at Log Review 190508038