



Alabama Department of Environmental Management
adem.alabama.gov

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OCTOBER 5, 2021

Shane Cook, Director of Water Pollution Control
City of Huntsville Water Pollution Control
1800 Vermont Road
Huntsville AL 35802

RE: Draft Permit
NPDES Permit No. AL0056855
Aldridge Creek WWTP
Madison County, Alabama

Dear Mr. Cook:

Transmitted herein is a draft of the referenced permit.

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

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

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

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

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

Should you have any questions, please contact the undersigned by email at nicholas.lowe@adem.alabama.gov or by phone at (334) 271-7811.

Sincerely,

A handwritten signature in black ink that reads "Nicholas Lowe".

Nicholas Lowe
Municipal Section
Water Division

NRL/jsm
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 HUNTSVILLE WATER POLLUTION CONTROL
1800 VERMONT ROAD
HUNTSVILLE, ALABAMA 35802

FACILITY LOCATION: ALDRIDGE CREEK WWTP (8.4 MGD)
13331 MEMORIAL PARKWAY S.E.
HUNTSVILLE, ALABAMA
MADISON COUNTY

PERMIT NUMBER: AL0056855

RECEIVING WATERS: TENNESSEE RIVER (WHEELER LAKE)
ALDRIDGE CREEK (STORMWATER)

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

**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 - Effluent

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

Parameter	Discharge Limitations*							Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
pH 00400 I 0 0	*****	*****	*****	*****	6.0 S.U.	9.0 S.U.	*****	E	GRAB	C	*****
Solids, Total Suspended 00530 I 0 0	2101 lbs/day	3152 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	1401 lbs/day	2101 lbs/day	20.0 mg/l	30.0 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	*****
Flow, In Conduit or Thru Treatment Plant 50050 I 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	CONTIN	A	*****
Chlorine, Total Residual See note (5) 50060 I 0 0	*****	*****	*****	*****	*****	1.0 mg/l	*****	E	GRAB	C	*****
E. Coli 51040 I 0 0	*****	*****	250 col/100mL	*****	*****	970 col/100mL	*****	E	GRAB	C	ECS
E. Coli 51040 I 0 0	*****	*****	1050 col/100mL	*****	*****	5000 col/100mL	*****	E	GRAB	C	ECW
BOD, Carbonaceous 05 Day, 20C 80082 I 0 0	1751 lbs/day	2627 lbs/day	25.0 mg/l	37.5 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. (Upsot)

** 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.

2. Outfall 001T Discharge Limits - Toxicity

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001T, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*							Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
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
- 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.B. for Effluent Toxicity Limitations And Biomonitoring Requirements For Chronic Toxicity.

3. Outfall 002S Discharge Limits - Stormwater

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

Parameter	Discharge Limitations*							Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3)(5) Measurement Frequency	(4) Seasonal
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) See Part IV.F. for Storm Water Requirements.

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

C. DISCHARGE REPORTING REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

Certified and Registered Mail shall be addressed to:

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

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

2. Noncompliance Notifications and Reports

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

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

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

d. Immediate notification

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

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

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

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

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

2. Termination of Discharge

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

3. Updating Information

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

4. Duty to Provide Information

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

E. SCHEDULE OF COMPLIANCE

1. Compliance with discharge limits

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

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. Schedule

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

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

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

2. Best Management Practices (BMP)

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

3. Certified Operator

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

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

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

2. Right of Entry and Inspection

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

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

C. BYPASS AND UPSET

1. Bypass

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

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

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

1. Duty to Comply
- a. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
 - b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a Permittee in an enforcement action.
 - c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
 - d. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.
 - e. Nothing in this permit shall be construed to preclude or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications, or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.
2. Removed Substances
- Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.
3. Loss or Failure of Treatment Facilities
- Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the

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

4. Compliance With Statutes and Rules

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

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

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

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

2. Change in Discharge

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

3. Transfer of Permit

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

4. Permit Modification and Revocation

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

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

5. Termination

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

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

6. Suspension

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

7. Stay

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

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

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

G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

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

H. PROHIBITIONS

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

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

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

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

2. False Statements

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

3. Permit Enforcement

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

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

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

(2) An action for damages;

(3) An action for injunctive relief; or

(4) An action for penalties.

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

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

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

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

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

4. Relief from Liability

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

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

C. PROPERTY AND OTHER RIGHTS

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

D. AVAILABILITY OF REPORTS

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

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

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

F. COMPLIANCE WITH WATER QUALITY STANDARDS

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

G. GROUNDWATER

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

H. DEFINITIONS

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

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

- c. Which has never received a final effective NPDES permit for dischargers at that site.
29. NH₃-N – means the pollutant parameter ammonia, measured as nitrogen.
 30. Notifiable sanitary sewer overflow – means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
 - a. Reaches a surface water of the State; or
 - b. May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
 31. Permit application – means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.
 32. Point source – means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
 33. Pollutant – includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
 34. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
 35. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
 36. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".
 37. Severe property damage – means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 38. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
 39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
 40. TON – means the pollutant parameter Total Organic Nitrogen.
 41. TRC – means Total Residual Chlorine.
 42. TSS – means the pollutant parameter Total Suspended Solids.
 43. 24HC – means 24-hour composite sample, including any of the following:
 - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
 - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
 - c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
 44. Upset – means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
 45. Waters – means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground, or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
 46. Week – means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

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

I. SEVERABILITY

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

PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS**A. SLUDGE MANAGEMENT PRACTICES**

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

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS 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 **5 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. These samples shall be representative of the combined discharge flow from Spring Branch WWTP (AL0058394) and Aldridge Creek WWTP (AL0056855). The samples may be taken after combination of the flows from each facility or prior to combination and flow-weighted based on the actual flow from each facility during the sampling period.
 - d. Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and test samples at the 95% confidence level indicates chronic toxicity and shall constitute noncompliance with this permit.
2. General Test Requirements
 - a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.
 - b. Test results shall be deemed unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period for the following:
 - (1) For testing with *P. promelas*., effluent toxicity tests with control survival of less than 80% or if dry weight per surviving control organism is less than 0.25 mg;
 - (2) For testing with *C. dubia*., if the number of young per surviving control organism is less than 15 or if less than 60% of surviving control females produce three broods; or

- (3) If the other requirements of the EPA Test Procedure are not met.
- c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are to be reported to the Department along with an explanation of the tests performed and the test results.
- d. Toxicity tests shall be conducted for the duration of this permit in the month of **September**. 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 **MARCH, JUNE, SEPTEMBER, and DECEMBER**.

3. Reporting Requirements

- a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
- b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in 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.alabama.gov/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



Alabama Department of Environmental Management
adem.alabama.gov

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

FACT SHEET

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

Date: June 8, 2021

Prepared By: Nicholas Lowe

NPDES Permit No. AL0056855

1. Name and Address of Applicant:

City of Huntsville Water Pollution Control
1800 Vermont Rd
Huntsville, AL 35802

2. Name and Address of Facility:

Aldridge Creek WWTP
13331 Memorial Parkway S.E.
Huntsville, Alabama 35803

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

Waste Water Treatment Plant

4. Applicant's Receiving Waters

<u>Receiving Waters</u>	<u>Classifications</u>
Aldridge Creek (Storm water)	F&W
Tennessee River (Wheeler Lake)	PWS, F&W

For the Outfall latitude and longitude see the permit application.

5. Permit Conditions:

See attached Rationale and Draft Permit.

6. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

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

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

Jeffery W. Kitchens, Chief
ADEM-Water Division
1400 Coliseum Blvd.
[Mailing address: PO Box 301463; Zip 36130-1463]



Montgomery, Alabama 36110-2400
(334) 271-7823
water-permits@adem.alabama.gov

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

b. Public Hearing

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

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

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

c. Issuance of the Permit

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

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

d. Appeal Procedures

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

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

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: **AL0056855** Date: 8/26/2021

Permit Applicant: City of Huntsville Water Pollution Control
1800 Vermont Road
Huntsville, Alabama 35802

Location: Aldridge Creek WWTP
13331 Memorial Parkway S.E.
Huntsville, Alabama 35803

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

Basis for Limitations: Water Quality Model: CBOD, NH3-N
Reissuance with no modification: pH, TSS, NH3-N, CBOD, CBOD %
Removal, TSS % Removal
Instream calculation at 7Q10: 5%
Toxicity based: TRC
Secondary Treatment Levels: CBOD, TSS, CBOD % Removal, TSS
% Removal
Other (described below): pH, E. coli

Design Flow in Million Gallons per Day: 8.4 MGD

Major: Yes

Description of Discharge: Outfall Number 001;
Effluent discharge to Tennessee River (Wheeler Lake),
which is classified as Public Water Supply and Fish &
Wildlife.

Outfall Number 002;
Stormwater discharge to Aldridge Creek, which is
classified as Fish & Wildlife.

Discussion: This is a reissuance due to expiration.

The segment of the Tennessee River (Wheeler Lake), containing the discharge, is classified as a Tier I stream and is on the most recent 303(d) list for Nutrient impairment. Nutrient monitoring is imposed in the reissuance so that sufficient information will be available regarding the nutrient contribution for the purpose of TMDL development. Also, since this reissuance does not include an expansion, an increase in nutrients in the discharge is not expected. There are no TMDLs affecting this discharge. The segment of Aldridge Creek, that receives the stormwater discharge, is classified as a Tier I stream and is not on the most recent 303(d) list. Aldridge Creek has TMDLs for Organic Enrichment/Dissolved Oxygen (OE/DO) and Siltation. The Aldridge Creek Siltation TMDL indicates that, in general for sediment loads to the receiving streams, the point source discharge levels are negligible in relation to the non-point sources.

The OE/DO TMDL for Aldridge Creek indicates that additional data is required before reductions can be calculated. Stormwater monitoring is required so that sufficient information regarding this discharge will be available should the TMDL be revised to calculate the required reductions if applicable.

The limits for Five Day Carbonaceous Biochemical Oxygen Demand (CBOD) and Total Ammonia as Nitrogen (NH₃-N) are based on the Waste Load Allocation (WLA) model that was completed by ADEM's Water Quality Branch on September 16, 2020. The monthly average limit for CBOD is 25.0 mg/L. The monthly average limit for NH₃-N is 20.0 mg/L.

The limits for Total Suspended Solids (TSS), TSS % removal, and CBOD % removal are 30.0 mg/L, 85%, and 85% respectively. These limits are based on requirements of 40 CFR part 133.102 regarding Secondary Treatment.

The Department has revised bacteriological criteria in ADEM Administrative Code R. 335-6-10-.09. As a result, this permit includes updated 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 Tennessee River (Wheeler Lake) is classified as Public Water Supply/Fish & Wildlife, the limits for May – October are 250 col/100mL (monthly average) and 970 col/100mL (daily maximum), while the limits for November – April are 1050 col/100mL (monthly average) and 5000 col/100mL (daily maximum). Based on available dilution, the limits should be protective of the new water quality criteria at the edge of the mixing zone.

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

The Total Residual Chlorine (TRC) limit of 1.0 mg/L (maximum daily) is based on EPA's recommended water quality values and on the current Toxicity Rationale, which considers the available dilution and should be protective of acute and chronic criteria in the receiving stream. Monitoring for TRC is only applicable if chlorine is utilized for disinfection purposes. That is, if chlorine disinfection is not utilized, monitoring would not be applicable during the monitoring period, and "*9" should be entered on the monthly DMR. The Monthly Average limit for TRC has been removed based on flow estimates provided in the WLA model. The change to the limit would result in water quality standards being attained and is consistent with the Department's Antidegradation Policy.

This permit imposes monitoring for the following nutrient-related parameters: Total Kjeldahl Nitrogen (TKN), Nitrite plus Nitrate as Nitrogen (NO₂+NO₃-N), and Total Phosphorus (TP). Monitoring for these nutrient-related parameters is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose nutrient limits on this discharge.

This permit imposes chronic toxicity testing with two species (Ceriodaphnia and Pimephales). Since Spring Branch WWTP and Aldridge Creek WWTP (AL0056855) share an outfall, annual chronic toxicity testing is required with an IWC of 5 percent. The samples taken for toxicity testing are to be representative of the combined flow from the two facilities. Toxicity testing is imposed for both survival and life-cycle impairment (i.e. growth and reproduction).

Since this facility is classified as a Major Municipal Wastewater plant (>1 MGD) and receives industrial wastewater, the Department completed a reasonable potential analysis (RPA) of the discharge based on laboratory data provided in the Permittee's application. The RPA indicates whether pollutants in treated

effluent have the potential to contribute to excursions of Alabama's in-stream water quality standards. Since the discharge to the Tennessee River (Wheeler Lake) is a combination of the flows from this facility and Spring Branch WWTP, the RPA was conducted with flow-weighted data from each facility. Based on the RPA, it appears that there may be reasonable potential to cause an in-stream water quality criterion exceedance for Arsenic and Zinc. The reasonable potential for Arsenic and Zinc in the Tennessee River appears to be mostly due to the background data used in the analysis. Since Arsenic was not detected in the effluent, the discharge is not expected to contribute significant amounts of Arsenic to the receiving stream. The concentrations of zinc in the effluent were significantly below the water quality criteria. Therefore, the discharge is not expected to have a reasonable potential to exceed the Zinc water quality criteria. Monitoring for these parameters is not being imposed because the effluent data is significantly less than the water quality criteria.

In the permit application, the Permittee reported one stormwater outfall at the treatment plant. Stormwater monitoring will be required from outfall 002S on an annual basis.

Monitoring will be conducted three times per week for most parameters. Percent removal for CBOD and TSS will be calculated once per month. Monitoring for nutrient-related parameters will be once per month. Flow will be monitored continuously, 7 days per week.

ADEM Administrative Rule 335-6-10-.04 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 stream, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

Prepared by: Nicholas Lowe

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	Aldridge Creek WWTP	
NPDES Permit Number:	AL0056855	
Receiving Stream:	Tennessee River (Wheeler Lake)	
Facility Design Flow (Q _w):	49.400 MGD	
Receiving Stream 7Q ₁₀ :	6509.000 cfs	
Receiving Stream 1Q ₁₀ :	4214.000 cfs	
Winter Headwater Flow (WHF):	10843.00 cfs	
Summer Temperature for CCC:	28 deg. Celsius	
Winter Temperature for CCC:	28 deg. Celsius	
Headwater Background NH ₃ -N Level:	0.1051 mg/l	
Receiving Stream pH:	7.34 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.

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 1.16\%$$

AMMONIA TOXICITY LIMITATIONS

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

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

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

$$\begin{aligned} \text{Limiting Dilution} &= \frac{Q_w}{7Q_{10} + Q_w} \\ &= 1.16\% \qquad \qquad \qquad \text{Effluent-Dominated, CCC Applies} \end{aligned}$$

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

	<u>CMC</u>	<u>CCC</u>
Allowable Summer Instream NH ₃ -N:	24.90 mg/l	2.07 mg/l
Allowable Winter Instream NH ₃ -N:	24.90 mg/l	2.07 mg/l

$$\begin{aligned} \text{Summer NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (7Q_{10})]}{Q_w} \\ &= 169.7 \text{ mg/l NH}_3\text{-N at } 7Q_{10} \end{aligned}$$

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

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	20.00 mg/l NH ₃ -N	169.70 mg/l NH ₃ -N
Winter	N/A.	N/A.

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

Winter limits are not applicable.

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

The following factors trigger toxicity testing requirements:

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

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

Chronic toxicity testing is required

Instream Waste Concentration (IWC) = $\frac{\text{Based on Cormix Model}}{\text{Based on Cormix Model}}$ = **4.65%** 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: **Public Water Supply, 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	1050
Monthly limit as monthly average (May through October):	126	250
Daily Max (November through April):	2507	5000
Daily Max (May through October):	298	970
<u>Enterococci (applies to Coastal)</u>		
Monthly limit as geometric mean (November through April):	Not applicable	Not applicable
Monthly limit as geometric mean (May through October):	Not applicable	Not applicable
Daily Max (November through April):	Not applicable	Not applicable
Daily Max (May through October):	Not applicable	Not applicable

MAXIMUM ALLOWABLE CHLORINATION LIMITS

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

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

Maximum allowable TRC in effluent:	0.948 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	1.637 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: Nicholas Lowe Date: 6/8/2021

Waste Load Allocation Summary

Page 1

REQUEST INFORMATION

Request Number:

3716

From:	Nicholas Lowe	In Branch/Section	Municipal
Date Submitted	7/17/2020	Date Required	8/16/2020
FUND Code	605		
Date Permit application received by NPDES program		6/3/2020	

Receiving Waterbody	Tennessee River (Wheeler Lake)		
Previous Stream Name	Tennessee River		
Facility Name	Huntsville Aldridge Creek WWTP	(Name of Discharger-WQ will use to file)	
Previous Discharger Name			
River Basin	Tennessee	Outfall Latitude	34.584179 (decimal degrees)
*County	Madison	Outfall Longitude	-86.586025 (decimal degrees)
Permit Number	AL0056855	Permit Type	Permit Reissuance
Permit Status		Active	
Type of Discharger		MUNICIPAL	

Do other discharges exist that may impact the model?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
--	---	-----------------------------

If yes, impacting dischargers names.	H'ville Spring Branch WWTP, Redstone Arsenal Central WWTP, Huntsville West Area WWTP, Madison WWTF, Priceville WWTP, Decatur Dry Creek WWTP, Joe Wheeler Lagoon, IP Courtland TVA Brown Ferry, 3M Decatur, Daikin, BP Amoco, Ascend	Impacting dischargers permit numbers.	AL0058394, AL0062863, AL0049531, AL0071897, AL0060577, AL0048593, AL0032387, AL0000396, AL0022080, AL0000205, AL0064351, AL0000108, AL0000116,
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Existing Discharge Design Flow	8.4	MGD	Note: The flow rates given should be those requested for modeling.
Proposed Discharge Design Flow		MGD	

Comments included	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Information Verified By	JJM	Year File Was Created	2003
				Response ID Number	1777
			Lat/Long Method	Arcview	

12 Digit HUC Code	060300020904	Date of Site Visit	8/11/2020
Use Classification	PWS / F&W	Date of WLA Response	9/16/2020
Site Visit Completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Approved TMDL?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Waterbody Impaired?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Waterbody Tier Level	Tier I
Antidegradation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Use Support Category	5
		Approval Date of TMDL	

Waste Load Allocation Information

Modeled Reach Length	74.1	Miles	Date of Allocation	9/16/2020
Name of Model Used	QUAL2K	Allocation Type	Annual	
Model Completed by	James Mooney	Type of Model Used	Data-based	
Allocation Developed by	Water Quality Branch			

Waste Load Allocation Summary

Annual Effluent Limits	Conventional Parameters				Other Parameters						
	Qw	MGD	Qw	MGD	Qw	MGD	Qw	MGD			
Season			Season			Season			Season		
From			From			From			From		
Through			Through			Through			Through		
CBOD5	25	mg/L	CBOD5		CBOD5		TP		TP		
NH3-N	20	mg/L	NH3-N		NH3-N		TN		TN		
TKN			TKN		TKN		TSS		TSS		
D.O.			D.O.		D.O.						

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

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	1.55	mg/l		mg/l
NH3-N	0.1051	mg/l		mg/l
Temperature	28	°C		°C
pH	7.34	su		su

Hydrology at Discharge Location

Drainage Area Qualifier	Drainage Area	Value	Unit
Exact	25610		sq mi
	Stream 7Q10	6509	cfs
	Stream 1Q10	4214	cfs
	Stream 7Q2	10843	cfs
	Annual Average	42970	cfs

Method Used to Calculate

ADEM Estimate w/TVA Data
ADEM Estimate w/TVA Data
ADEM Estimate w/TVA Data
ADEM Estimate w/TVA Data

Comments and/or Notations The Huntsville Aldridge Creek WWTP (8.4 MGD) and the Huntsville Spring Branch WWTP (41 MGD) share a discharge pipe to the Tennessee River (Wheeler Lake).

Mixing Zone Analysis Summary

REQUEST INFORMATION

request number: 3717

From: (Responsible Engineer) Nicholas Lowe In Branch/Section: Municipal
Date Submitted: 7/17/2020 Date Required: 8/16/2020 FUND Code: 605
Date Permit application received by NPDES program: 6/3/2020

Receiving Waterbody: Tennessee River (Wheeler Lake)
Previous Stream Name: Tennessee River
Facility Name: Huntsville Aldridge Creek WWTP (Name of Discharger-WQ will use to file)
Previous Discharger Name: _____
River Basin: Tennessee Outfall Latitude: 34.584179 (decimal degrees)
*County: Madison Outfall Longitude: -86.586025 (decimal degrees)
Permit Number: AL0056855 Permit Type: Permit Reissuance
Permit Status: Active
Type of Discharger: MUNICIPAL

Do other discharges exist that may impact the model? Yes No
If yes, impacting dischargers names: Huntsville Spring Branch WWTP
Impacting dischargers permit numbers: AL0058394

Existing Discharge Design Flow: 8.4 MGD
Proposed Discharge Design Flow: _____ MGD
Note: The flow rates given should be those requested for modeling.

Seasonal limits requested? Yes No
If not seasonal, only the summer sections will be used

Comments included: Yes No
Information Verified By: JJM Year File Was Started: 2003

12 Digit HUC Code: 060300020904 Date of MZ Response: 10/9/2020
Use Classification: PWS / F&W
Site Visit Completed? Yes No Date of Site Visit: 8/11/2020

Hydrology		
Drainage Area	25610	sq mi
Stream 7Q10	6509	cfs
Stream 1Q10	4214	cfs
Stream 7Q2	10843	cfs
Annual Average	42970	cfs
Date of MZ Analysis	<u>10/9/2020</u>	

Method Used to Calculate
ADEM Estimate w/TVA Data
ADEM Estimate w/TVA Data
ADEM Estimate w/TVA Data
ADEM Estimate w/TVA Data
Model Completed by: James Mooney

Pollutant Category
Whole Effluent Toxicity (WET) Thermal Pathogens

WET Parameters

Summer

Acute

Ambient Streamflow	cfs
ZID Length	Meters
ZID IWC	%

Chronic

Ambient Streamflow	6509	cfs
Mixing Zone Length	421.87	Meters
Mixing Zone IWC	4.65	%

Winter

Acute

Ambient Streamflow	cfs
ZID Length	Meters
ZID IWC	%

Chronic

Ambient Streamflow	cfs	
Mixing Zone Length	421.87	Meters
Mixing Zone IWC	%	

Thermal Parameters

Summer

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

Winter

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

Pathogen Parameters

Summer

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

Winter

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

Comments and/or Notations:

The Huntsville Aldridge Creek WWTP (8.4 MGD) and the Huntsville Spring Branch WWTP (41 MGD) share a discharge pipe to the Tennessee River (Wheeler Lake). The IWC above is for the combined discharge of 49.4 MGD. The IWC for the Aldridge Creek WWTP can be calculated based on their proportion of the total flowrate (i.e., $(8.4 \text{ MGD} \div 49.4 \text{ MGD}) \times 4.65\%$). The resulting IWC for the Aldridge Creek WWTP is 0.79%.

Facility Name: Aldridge Creek WWTP (Combined with Spring Branch WWTP AL0058394)

NPDES No.: AL0056855

01/20/17

$Q_d * C_d + Q_{d2} * C_{d2} + Q_s * C_s = Q_r * C_r$							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	µg/l	µg/l
1	Antimony		Metals	0	0	0	0	0	0
2	Arsenic**	YES	Metals	0	0	1.5	0.6	0	0.574
3	Beryllium		Metals	0	0	0	0	0	0
4	Cadmium**		Metals	0	0	0.51	0.02	0	0.236
5	Chromium / Chromium III**		Metals	0	0	0	0	0.18	0.05
6	Chromium / Chromium VI**		Metals	0	0	0	0	0.18	0.05
7	Copper**		Metals	0	0	1.4	0.69	43.2	16.2
8	Lead**		Metals	0	0	6.1	0.3	0	0.388
9	Mercury**		Metals	0	0	0	0	0.2	0.206
10	Nickel**		Metals	0	0	1.4	0.4	0.65	0.2
11	Selenium		Metals	0	0	1.2	0.08	0	0.302
12	Silver		Metals	0	0	0	0	0	0.505
13	Thallium		Metals	0	0	0	0	0	0
14	Zinc**		Metals	0	0	550	29.4	73.4	26.1
15	Cyanide		Metals	0	0	0	0	0.87	0.29
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0
17	Hardness (As CaCO3)		Metals	0	0	88000	66000	122000	104460
18	Acrolein		VOC	0	0	0	0	0	0
19	Acrylonitrile*	YES	VOC	0	0	0	0	0	0
20	Aldrin	YES	VOC	0	0	0	0	0	0
21	Benzene*	YES	VOC	0	0	0	0	0	0
22	Bromoform*	YES	VOC	0	0	0	0	0	0
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	0
24	Chlordane	YES	VOC	0	0	0	0	0	0
25	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-Ethyl Vinyl Ether		VOC	0	0	0	0	0	0
29	Chloroform*	YES	VOC	0	0	0	0	5.3	2
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	0.27	0.09
34	1,1-Dichloroethane		VOC	0	0	0	0	0	0
35	1,2-Dichloroethane*	YES	VOC	0	0	0	0	0	0
36	Trans-1,2-Dichloro-Ethylene		VOC	0	0	0	0	0	0
37	1,1-Dichloroethylene*	YES	VOC	0	0	0	0	0	0
38	1,2-Dichloropropane		VOC	0	0	0	0	0	0
39	1,3-Dichloro-Propylene		VOC	0	0	0	0	0	0
40	Dieldrin	YES	VOC	0	0	0	0	0	0
41	Ethylbenzene		VOC	0	0	0	0	0	0
42	Methyl Bromide		VOC	0	0	0	0	0	0
43	Methyl Chloride		VOC	0	0	0	0	0	0
44	Methylene Chloride*	YES	VOC	0	0	0	0	0	0
45	1,1,2,2-Tetrachloro-Ethane*	YES	VOC	0	0	0	0	0	0
46	Tetrachloro-Ethylene*	YES	VOC	0	0	0	0	0	0
47	Toluene		VOC	0	0	0	0	0	0
48	Toxaphene	YES	VOC	0	0	0	0	0	0
49	Tributyltine (TBT)	YES	VOC	0	0	0	0	0	0
50	1,1,1-Trichloroethane		VOC	0	0	0	0	0	0
51	1,1,2-Trichloroethane*	YES	VOC	0	0	0	0	0	0
52	Trichloroethylene*	YES	VOC	0	0	0	0	0	0
53	Vinyl Chloride*	YES	VOC	0	0	0	0	0	0
54	p-Chloro-m-Cresol		Acids	0	0	0	0	0	0
55	2-Chlorophenol		Acids	0	0	0	0	0	0
56	2,4-Dichlorophenol		Acids	0	0	0	0	0	0
57	2,4-Dimethylphenol		Acids	0	0	0	0	0	0
58	4,6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0
59	2,4-Dinitrophenol		Acids	0	0	0	0	0	0
60	4,6-Dinitro-2-methylphenol	YES	Acids	0	0	0	0	0	0
61	Dioxin (2,3,7,8-TCDD)	YES	Acids	0	0	0	0	0	0
62	2-Nitrophenol		Acids	0	0	0	0	0	0
63	4-Nitrophenol		Acids	0	0	0	0	0	0
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	0
65	Phenol		Acids	0	0	0	0	0	0
66	2,4,6-Trichlorophenol*	YES	Acids	0	0	0	0	0	0
67	Acenaphthene		Bases	0	0	0	0	0	0
68	Acenaphthylene		Bases	0	0	0	0	0	0
69	Anthracene		Bases	0	0	0	0	0	0
70	Benzidine		Bases	0	0	0	0	0	0
71	Benzo(A)Anthracene*	YES	Bases	0	0	0	0	0	0
72	Benzo(A)Pyrene*	YES	Bases	0	0	0	0	0	0
73	3,4 Benzo-Fluoranthene		Bases	0	0	0	0	0	0
74	Benzo(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

49.4	Enter Q _d = wastewater discharge flow from facility (MGD)
76.4331126	Q _d = 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)
6509	Enter 7Q10, Q _s = background stream flow in cfs above point of discharge
4214	Enter or estimated, 1Q10, Q _s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
42970	Enter Mean Annual Flow, Q _s = background stream flow in cfs above point of discharge
10843	Enter 7Q2, Q _s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C _s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Calculated on other sheets	Q _r = resultant in-stream flow, after discharge
66	C _r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs) (enter background in-stream concentration above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham))
7.00 s.u.	Enter, Background pH above point of discharge
YES	Enter, Is discharge to a stream? "YES" Other option would be to a Lake. (This changes the partition coefficients for the metals)

** Using Partition Coefficients

August 30, 2011

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	

Aldridge Creek WWTP AL0056855
Expanded Effluent Data Summary

Parameter	1/14/2016	9/16/2019	2/27/2020	Maximum	Average
Hardness as CaCO ₃	144000	113000	92400	144000	116467
Chromium	1.04	0	0	1.04	0.35
Copper	5.29	27.1	64	64	32.13
Nickel	3.84	0	0	3.84	1.28
Cyanide	5.09	0	0	5.09	1.70
Zinc	29.6	63.5	0	63.5	31.0
Chloroform	3.7	16.5	0	16.5	6.7
Dichlorobromomethane	0	1.57	0	1.57	0.52

*All values entered in µg/L

Reasonable Potential Calculations:

Spring Branch WWTP (AL0058394)

Aldridge Creek WWTP (AL0056855)

$$C_{RPA} = \frac{C_{SB} \times F_{SB} + C_{AC} \times F_{AC}}{F_T}$$

Where:

C_{RPA} = Flow-weighted pollutant concentration

C_{SB} = Reported pollutant concentration from Spring Branch WWTP

F_{SB} = Design Flow of Spring Branch WWTP

C_{AC} = Reported pollutant concentration from Aldridge Creek WWTP

F_{AC} = Design flow of Aldridge Creek WWTP

F_T = Combined design flow from Spring Branch WWTP and Aldridge Creek WWTP

Hardness:

$$C_{RPA} = \frac{118000 \times 41 + 144000 \times 8.4}{49.4} = 122000 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{102000 \times 41 + 116467 \times 8.4}{49.4} = 104460 \text{ ug/L (average)}$$

Chromium:

$$C_{RPA} = \frac{0 \times 41 + 1.04 \times 8.4}{49.4} = 0.18 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{0 \times 41 + 0.3 \times 8.4}{49.4} = 0.05 \text{ ug/L (average)}$$

Copper:

$$C_{RPA} = \frac{38.9 \times 41 + 64.0 \times 8.4}{49.4} = 43.2 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{13.0 \times 41 + 32.1 \times 8.4}{49.4} = 16.2 \text{ ug/L (average)}$$

Nickel:

$$C_{RPA} = \frac{0 \times 41 + 3.84 \times 8.4}{49.4} = 0.65 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{0 \times 41 + 1.28 \times 8.4}{49.4} = 0.22 \text{ ug/L (average)}$$

Cyanide:

$$C_{RPA} = \frac{0 \times 41 + 5.09 \times 8.4}{49.4} = 0.87 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{0 \times 41 + 1.70 \times 8.4}{49.4} = 0.29 \text{ ug/L (average)}$$

Zinc:

$$C_{RPA} = \frac{75.4 \times 41 + 63.5 \times 8.4}{49.4} = 73.4 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{25.1 \times 41 + 31.0 \times 8.4}{49.4} = 26.1 \text{ ug/L (average)}$$

Chloroform:

$$C_{RPA} = \frac{3.0 \times 41 + 16.5 \times 8.4}{49.4} = 5.3 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{1.0 \times 41 + 6.7 \times 8.4}{49.4} = 2.0 \text{ ug/L (average)}$$

Dichlorobromomethane:

$$C_{RPA} = \frac{0 \times 41 + 1.57 \times 8.4}{49.4} = 0.27 \text{ ug/L (maximum)}$$

$$C_{RPA} = \frac{0 \times 41 + 0.52 \times 8.4}{49.4} = 0.09 \text{ ug/L (average)}$$

Shane Cook, P.E.
Director



HUNTSVILLE

Water Pollution Control

May 27, 2020

Alabama Department of Environmental Management
ATTN: Nicholas Lowe, Municipal Section / NPDES Permit Branch / Water Division
1400 Coliseum Blvd.
Montgomery, AL 36110

RE: City of Huntsville ALDRIDGE CREEK WWTP NPDES PERMIT RENEWAL
NPDES Permit No. AL0056855

Dear Mr. Lowe,

Enclosed you will find two (2) copies of the 2020 Aldridge Creek WWTP NPDES Permit Renewal Package.

Should you have any questions or need any additional information, please contact office at (256) 883-3719.

Sincerely,

Shane L. Cook, P.E.
Director
Water Pollution Control
City of Huntsville Alabama

ENCLOSURES:

- NPDES PERMIT RENEWAL PACKAGE
- PERMIT FEE

The Star of Alabama

ALDRIDGE CREEK 2020 PERMIT RENEWAL

FEE SCHEDULE D WATER PERMITS

<u>Type of Activity</u>	Initial Registration/Issuance Reissuance or Modification (effluent limit change) (injection zone change or <u>compatibility study</u>)	Modification (no effluent limit change) (no injection zone change or no <u>compatibility study</u>)
Major Industrial Discharger	\$17,990	\$3,940
Minor Industrial Discharger	\$5,615	\$3,120
Major Municipal & Private	\$7,060	\$3,140
Minor Municipal & Private & Water Treatment	\$4,290	\$2,250
Municipal Stormwater (MS-4)	\$7,060	\$3,275
Mineral/Resource Extraction Mining, Storage Transloading, Dry Processing	\$5,820	\$3,400
Wet Preparation, Processing, Beneficiation	\$6,860	\$3,940
Coalbed Methane	\$6,860	\$3,940
General Permit	\$1,385	\$800
Minor NPDES Modifications	-----	\$800
ADDITIVE FEES		
Modeling with Data Collection (10 Stations)	\$60,390	\$60,390
Modeling with Data Collection (5 Stations)	\$49,315	\$49,315
Modeling - desktop	\$4,855	\$4,855
Review of Model Performed by Others	\$2,705	\$2,705
Seasonal Limits	\$4,855/ additional season	\$4,855/ additional season
Biomonitoring & Toxicity Limits	\$1,015	\$1,015
316b Phase I, Phase II, and Phase III Facilities [Permit Issuance/Re-issuance Modification]	\$5,065	0

RECEIVED
JUN 05 2020

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program <i>(Read the "General Instructions" before starting.)</i>	EPA I.D. NUMBER ALR000029421
LABEL ITEMS		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 preprint fill-in area below. Also, if any of the preprinted data is incorrect (the area to the left of the label space lists the location that should appear), please provide it in the proper area(s) below. If the label is complete and correct, you do not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label is provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this information was collected.	
I. EPA I.D. NUMBER	ALR000029421		
III. FACILITY NAME	ALDRIDGE CREEK WWTP		
V. FACILITY MAILING ADDRESS	13331 MEMORIAL PARKWAY SE HUNTSVILLE, AL 35803		
VI. FACILITY LOCATION	HUNTSVILLE, MADISON COUNTY, AL		

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"			SPECIFIC QUESTIONS	Mark "X"		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)	X		X	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)		X	
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)		X		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)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)		X		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)		X	
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)		X		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)		X	
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)		X		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)		X	

III. NAME OF FACILITY

c	SKIP	ALDRIDGE CREEK WWTP
15	19 - 29	30

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)		B. PHONE (area code & no.)	
c	2 SHANE COOK, PE	(256)	883-3719
15	19	45	48 49 51 52- 55

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX	
c	3 1800 VERMONT ROAD
15	15

B. CITY OR TOWN		C. STATE	D. ZIP CODE
c	4 HUNTSVILLE	AL	35802
15	16	40 41 42	47 51

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER	
c	5 13331 MEMORIAL PARKWAY SE
15	16

B. COUNTY NAME	
c	MADISON
45	70

C. CITY OR TOWN		D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)
c	6 HUNTSVILLE	AL	35803	045
15	16	40 41 42	47 51	52 -54

CONTINUED FROM THE FRONT

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

A. FIRST				B. SECOND			
C	7	4	952	(specify) SEWAGE TREATMENT PLANT	C	7	
15	16	17	18		15	16	18
C. THIRD				D. FOURTH			
C	7			(specify)	C	7	
15	16	17	18		15	16	18

VIII. OPERATOR INFORMATION

A. NAME												B. Is the name listed in Item VIII-A also the owner?				
C	B	CITY OF HUNTSVILLE ALABAMA - WATER POLLUTION CONTROL											<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
15	16											55 60				
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)				(specify)				A (256) 883-3719				
S = STATE				O = OTHER (specify)								15 16 18 19 21 22 28				
P = PRIVATE																

E. STREET OR P.O. BOX											
1802 VERMONT ROAD											
26 30											

F. CITY OR TOWN								G. STATE		H. ZIP CODE		IX. INDIAN LAND	
C	B	HUNTSVILLE						AL		35802		Is the facility located on Indian lands?	
15	16						40 41		42 47 51		52		
												<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	AL0056855			C	T	I			
9	N					9	P				
15	16	17	18	30		15	16	17	18	30	
B. UIC (Underground Injection of Fluids)						E. OTHER (specify)					
C	T	I				C	T	I	(specify)		
9	U					9					
15	16	17	18	30		15	16	17	18	30	
C. RCRA (Hazardous Wastes)						E. OTHER (specify)					
C	T	I				C	T	I	(specify)		
9	R					9					
15	16	17	18	30		15	16	17	18	30	

XI. MAP

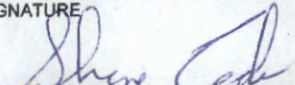
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal 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)

THIS IS A MUNICIPAL WASTEWATER TREATMENT FACILITY HAVING A DESIGN CAPACITY OF 8.4 MGD, HYDRAULIC TREATMENT PROCESSES INCLUDE LIFT PUMPING, SCREENING, GRTI REMOVAL, PRIMARY TRICKLING FILTERS, CONVENTIONAL AND EXTENDED AIR ACTIVATED SLUDGE, SECONDARY CLARIFICATION, AND CHLORINE DISINFECTON. SLUDGE TREATMENT CONSISTS OF HOLDING TANKS, SLUDGE DRYING BEDS AND INCENERATION AT MUNICIPAL SOLID WASTE DISPOSAL AUTHORITY. THERE ARE NO UNDERGROUND INJECTION OR HAZARDOUS WASTE STORAGE, TREATMENT, OR DISPOSAL AT THIS LOCATION.


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			
SHANE COOK, PE DIRECTOR HUNTSVILLE-WPC								05/27/2020			

COMMENTS FOR OFFICIAL USE ONLY

C												
15	16											55

EPA Identification Number ALR000029421		NPDES Permit Number AL0056855		Facility Name ALDRIDGE CREEK WWTP		Form Approved 03/05/19 OMB No. 2040-0004	
Form 2A NPDES				U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater NEW AND EXISTING PUBLICLY OWNED TREATMENT WORKS			
SECTION 1. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS (40 CFR 122.21(j)(1) and (9))							
Facility Information	1.1	Facility name ALDRIDGE CREEK WWTP			JUN 05 2020		
		Mailing address (street or P.O. box) 1802 VERMONT ROAD			IND/MUN BRANCH		
		City or town HUNTSVILLE		State ALABAMA	ZIP code 35802		
		Contact name (first and last) MATTHEW B. REYNOLDS, PE	Title OPERATIONS SUPER	Phone number (256) 883-3719	Email address MATTHEW.REYNOLDS@HUNT		
		Location address (street, route number, or other specific identifier) <input type="checkbox"/> Same as mailing address 13331 MEMORIAL PARKWAY SE					
		City or town HUNTSVILLE		State AL	ZIP code 35803		
		1.2	Is this application for a facility that has yet to commence discharge? <input type="checkbox"/> Yes → See instructions on data submission requirements for new dischargers. <input checked="" type="checkbox"/> No				
Applicant Information	1.3	Is applicant different from entity listed under Item 1.1. above? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 1.4.					
		Applicant name CITY OF HUNTSVILLE WATER POLLUTION CONTROL					
		Applicant address (street or P.O. box) 1800 VERMONT ROAD					
		City or town HUNTSVILLE		State AL	ZIP code 35802		
		Contact name (first and last) SHANE COOK	Title DIRECTOR	Phone number (256) 883-3719	Email address SHANE.COOK@HUNTSVILLE		
	1.4	Is the applicant the facility's owner, operator, or both? (Check only one response.) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both					
	1.5	To which entity should the NPDES permitting authority send correspondence? (Check only one response.) <input type="checkbox"/> Facility <input type="checkbox"/> Applicant <input checked="" type="checkbox"/> Facility and applicant (they are one and the same)					
Existing Environmental Permits	1.6	Indicate below any existing environmental permits. (Check all that apply and print or type the corresponding permit number for each.)					
		Existing Environmental Permits					
		<input checked="" type="checkbox"/> NPDES (discharges to surface water) AL0056855	<input type="checkbox"/> RCRA (hazardous waste)	<input type="checkbox"/> UIC (underground injection control)			
		<input type="checkbox"/> PSD (air emissions)	<input type="checkbox"/> Nonattainment program (CAA)	<input type="checkbox"/> NESHAPs (CAA)			
	<input type="checkbox"/> Ocean dumping (MPRSA)	<input type="checkbox"/> Dredge or fill (CWA Section 404)	<input type="checkbox"/> Other (specify)				

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Outfalls Other Than to Waters of the United States				
Outfalls and Other Discharge or Disposal Methods	1.12	Does the POTW discharge wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 1.14.		
	1.13	Provide the location of each surface impoundment and associated discharge information in the table below.		
	Surface Impoundment Location and Discharge Data			
		Location	Average Daily Volume Discharged to Surface Impoundment	Continuous or Intermittent (check one)
			gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
			gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
			gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	1.14	Is wastewater applied to land? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 1.16.		
	1.15	Provide the land application site and discharge data requested below.		
	Land Application Site and Discharge Data			
	Location	Size	Average Daily Volume Applied	Continuous or Intermittent (check one)
		acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
1.16	Is effluent transported to another facility for treatment prior to discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 1.21.			
1.17	Describe the means by which the effluent is transported (e.g., tank truck, pipe).			
1.18	Is the effluent transported by a party other than the applicant? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 1.20.			
1.19	Provide information on the transporter below.			
Transporter Data				
Entity name		Mailing address (street or P.O. box)		
City or town		State	ZIP code	
Contact name (first and last)		Title		
Phone number		Email address		

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Outfalls and Other Discharge or Disposal Methods Continued	1.20	In the table below, indicate the name, address, contact information, NPDES number, and average daily flow rate of the receiving facility.						
	Receiving Facility Data							
	Facility name				Mailing address (street or P.O. box)			
	City or town				State	ZIP code		
	Contact name (first and last)				Title			
	Phone number				Email address			
	NPDES number of receiving facility (if any) <input type="checkbox"/> None				Average daily flow rate			mgd
Outfalls and Other Discharge or Disposal Methods Continued	1.21	Is the wastewater disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States (e.g., underground percolation, underground injection)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 1.23.						
	1.22	Provide information in the table below on these other disposal methods.						
		Information on Other Disposal Methods						
		Disposal Method Description	Location of Disposal Site	Size of Disposal Site	Annual Average Daily Discharge Volume	Continuous or Intermittent (check one)		
		acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent				
		acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent				
		acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent				
Variance Requests	1.23	Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(n)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.) <input type="checkbox"/> Discharges into marine waters (CWA Section 301(h)) <input type="checkbox"/> Water quality related effluent limitation (CWA Section 302(b)(2)) <input checked="" type="checkbox"/> Not applicable						
	Contractor Information	1.24	Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 2.					
1.25		Provide location and contact information for each contractor in addition to a description of the contractor's operational and maintenance responsibilities.						
		Contractor Information						
			Contractor 1		Contractor 2		Contractor 3	
		Contractor name (company name)						
		Mailing address (street or P.O. box)						
		City, state, and ZIP code						
		Contact name (first and last)						
Phone number								
Email address								
Operational and maintenance responsibilities of contractor								

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

Design Flow	Outfalls to Waters of the United States						
	2.1	Does the treatment works have a design flow greater than or equal to 0.1 mgd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 3.					
Inflow and Infiltration	2.2	Provide the treatment works' current average daily volume of inflow and infiltration.	Average Daily Volume of Inflow and Infiltration 537,000 gpd				
	Indicate the steps the facility is taking to minimize inflow and infiltration. HUNTSVILLE WATER POLLUTION CONTROL HAS AN ACTIVE CMOM PROGRAM AND ANNUAL REOCCURRING FUNDING TO SUPPORT CAPITAL IMPROVEMENTS AND REHABILITATION TO THE COLLECTION SYSTEM. IN ADDITION, WPC HAS A FULL TIME STAFF OF 60 PERSONNEL TASKED WITH REPAIR, MAINTENANCE AND INSPECTION OF THE COLLECTION SYSTEM.						
Topographic Map	2.3	Have you attached a topographic map to this application that contains all the required information? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Flow Diagram	2.4	Have you attached a process flow diagram or schematic to this application that contains all the required information? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Scheduled Improvements and Schedules of Implementation	2.5	Are improvements to the facility scheduled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 3.					
	Briefly list and describe the scheduled improvements.						
	1. UPGRADES TO WWTP DISINFECTION FACILITY TO INCLUDE NEW SODIUM HYPOCHLORITE TREATMENT						
	2. IMPROVEMENTS TO WWTP HEADWORK FACILITY TO INCLUDE NEW SCREENING EQUIPMENT						
	3.						
	4.						
Scheduled Improvements and Schedules of Implementation	2.6	Provide scheduled or actual dates of completion for improvements.					
	Scheduled or Actual Dates of Completion for Improvements						
		Scheduled Improvement (from above)	Affected Outfalls (list outfall number)	Begin Construction (MM/DD/YYYY)	End Construction (MM/DD/YYYY)	Begin Discharge (MM/DD/YYYY)	Attainment of Operational Level (MM/DD/YYYY)
		1.	001	05/01/2019	09/01/2019		
		2.	001	05/01/2021	12/31/2021		
		3.					
	4.						
Scheduled Improvements and Schedules of Implementation	2.7	Have appropriate permits/clearances concerning other federal/state requirements been obtained? Briefly explain your response. <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> None required or applicable					
	Explanation:						

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

Description of Outfalls	3.1	Provide the following information for each outfall. (Attach additional sheets if you have more than three outfalls.)		
		Outfall Number <u>001</u>	Outfall Number _____	Outfall Number _____
	State	ALABAMA		
	County	MADISON		
	City or town	HUNTSVILLE		
	Distance from shore	240 ft.	ft.	ft.
	Depth below surface	20 ft.	ft.	ft.
	Average daily flow rate	19.37 mgd	mgd	mgd
	Latitude	34° 35' 3.48" N	" ' "	" ' "
Longitude	86° 35' 9.5" W	" ' "	" ' "	
Seasonal or Periodic Discharge Data	3.2	Do any of the outfalls described under Item 3.1 have seasonal or periodic discharges? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 3.4.		
	3.3	If so, provide the following information for each applicable outfall.		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
	Number of times per year discharge occurs			
	Average duration of each discharge (specify units)			
Average flow of each discharge	mgd	mgd	mgd	
Months in which discharge occurs				
Diffuser Type	3.4	Are any of the outfalls listed under Item 3.1 equipped with a diffuser? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.6.		
	3.5	Briefly describe the diffuser type at each applicable outfall:		
	Outfall Number <u>0011</u>	Outfall Number _____	Outfall Number _____	
	78" RCP OUTFALL LINE WITH 16" DIP DIFFUSERS.			
Waters of the U.S.	3.6	Does the treatment works discharge or plan to discharge wastewater to waters of the United States from one or more discharge points? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 6.		

Receiving Water Description	3.7	Provide the receiving water and related information (if known) for each outfall.			
		Outfall Number <u>0011</u>	Outfall Number _____	Outfall Number _____	
	Receiving water name	WHEELER RESERVIOR			
	Name of watershed, river, or stream system	TENNESSEE RIVER			
	U.S. Soil Conservation Service 14-digit watershed code	06030002230			
	Name of state management/river basin	AL DEPT OF ENVIRO MGMT			
	U.S. Geological Survey 8-digit hydrologic cataloging unit code	06030002			
	Critical low flow (acute)	4720 cfs	cfs	cfs	
	Critical low flow (chronic)	6290 cfs	cfs	cfs	
	Total hardness at critical low flow	mg/L of CaCO ₃	mg/L of CaCO ₃	mg/L of CaCO ₃	
Treatment Description	3.8	Provide the following information describing the treatment provided for discharges from each outfall.			
		Outfall Number <u>0011</u>	Outfall Number _____	Outfall Number _____	
	Highest Level of Treatment (check all that apply per outfall)	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input checked="" type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify)	
	Design Removal Rates by Outfall	85			
	BOD ₅ or CBOD ₅	85 %	%	%	
	TSS	85 %	%	%	
	Phosphorus	<input checked="" type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	
	Nitrogen	<input type="checkbox"/> Not applicable 50 %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	
	Other (specify)	<input checked="" type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	

Treatment Description Continued	3.9	Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe below.						
		SODIUM HYPOCHLORITE (12.5% BLEACH)						
			Outfall Number <u>0011</u>	Outfall Number _____	Outfall Number _____			
		Disinfection type	SODIUM HYPOCHLORITE					
		Seasons used	ALL					
	Dechlorination used?	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No			
Effluent Testing Data	3.10	Have you completed monitoring for all Table A parameters and attached the results to the application package? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
	3.11	Have you conducted any WET tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.13.						
	3.12	Indicate the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges by outfall number or of the receiving water near the discharge points.						
			Outfall Number <u>0011</u>	Outfall Number _____	Outfall Number _____			
			Acute	Chronic	Acute	Chronic	Acute	Chronic
		Number of tests of discharge water	4	4				
		Number of tests of receiving water	0	0				
	3.13	Does the treatment works have a design flow greater than or equal to 0.1 mgd? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.16.						
	3.14	Does the POTW use chlorine for disinfection, use chlorine elsewhere in the treatment process, or otherwise have reasonable potential to discharge chlorine in its effluent? <input checked="" type="checkbox"/> Yes → Complete Table B, including chlorine. <input type="checkbox"/> No → Complete Table B, omitting chlorine.						
	3.15	Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
3.16	Does one or more of the following conditions apply? <ul style="list-style-type: none"> The facility has a design flow greater than or equal to 1 mgd. The POTW has an approved pretreatment program or is required to develop such a program. The NPDES permitting authority has informed the POTW that it must sample for the parameters in Table C, must sample other additional parameters (Table D), or submit the results of WET tests for acute or chronic toxicity for each of its discharge outfalls (Table E). <input checked="" type="checkbox"/> Yes → Complete Tables C, D, and E as applicable. <input type="checkbox"/> No → SKIP to Section 4.							
3.17	Have you completed monitoring for all applicable Table C pollutants and attached the results to this application package? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
3.18	Have you completed monitoring for all applicable Table D pollutants required by your NPDES permitting authority and attached the results to this application package? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No additional sampling required by NPDES permitting authority.							

Effluent Testing Data Continued	3.19	Has the POTW conducted either (1) minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No → Complete tests and Table E and SKIP to Item 3.26.	
	3.20	Have you previously submitted the results of the above tests to your NPDES permitting authority?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No → Provide results in Table E and SKIP to Item 3.26.	
	3.21	Indicate the dates the data were submitted to your NPDES permitting authority and provide a summary of the results.			
		Date(s) Submitted (MM/DD/YYYY)	Summary of Results		
		11/30/2019	PASS		
	3.22	Regardless of how you provided your WET testing data to the NPDES permitting authority, did any of the tests result in toxicity?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No → SKIP to Item 3.26.	
	3.23	Describe the cause(s) of the toxicity:			
	3.24	Has the treatment works conducted a toxicity reduction evaluation?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No → SKIP to Item 3.26.	
3.25	Provide details of any toxicity reduction evaluations conducted.				
3.26	Have you completed Table E for all applicable outfalls and attached the results to the application package?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Not applicable because previously submitted information to the NPDES permitting authority.		

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

Industrial Discharges and Hazardous Wastes	4.1	Does the POTW receive discharges from SIUs or NSCIUs?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No → SKIP to Item 4.7.	
	4.2	Indicate the number of SIUs and NSCIUs that discharge to the POTW.			
		Number of SIUs	Number of NSCIUs		
		1	0		
	4.3	Does the POTW have an approved pretreatment program?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	4.4	Have you submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No → SKIP to Item 4.6.	
4.5	Identify the title and date of the annual report or pretreatment program referenced in Item 4.4. SKIP to Item 4.7.				
4.6	Have you completed and attached Table F to this application package?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		

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Industrial Discharges and Hazardous Wastes Continued	4.7	Does the POTW receive, or has it been notified that it will receive, by truck, rail, or dedicated pipe, any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 4.9.					
	4.8	If yes, provide the following information:					
		Hazardous Waste Number	Waste Transport Method (check all that apply)			Annual Amount of Waste Received	Units
			<input type="checkbox"/> Truck <input type="checkbox"/> Dedicated pipe	<input type="checkbox"/> Rail <input type="checkbox"/> Other (specify) _____			
			<input type="checkbox"/> Truck <input type="checkbox"/> Dedicated pipe	<input type="checkbox"/> Rail <input type="checkbox"/> Other (specify) _____			
			<input type="checkbox"/> Truck <input type="checkbox"/> Dedicated pipe	<input type="checkbox"/> Rail <input type="checkbox"/> Other (specify) _____			
4.9	Does the POTW receive, or has it been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and Sections 3004(7) or 3008(h) of RCRA? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 5.						
4.10	Does the POTW receive (or expect to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e)? <input checked="" type="checkbox"/> Yes → SKIP to Section 5. <input type="checkbox"/> No						
4.11	Have you reported the following information in an attachment to this application: identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW? <input type="checkbox"/> Yes <input type="checkbox"/> No						
SECTION 5. COMBINED SEWER OVERFLOWS (40 CFR 122.21(j)(8))							
CSO Map and Diagram	5.1	Does the treatment works have a combined sewer system? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 6.					
	5.2	Have you attached a CSO system map to this application? (See instructions for map requirements.) <input type="checkbox"/> Yes <input type="checkbox"/> No					
	5.3	Have you attached a CSO system diagram to this application? (See instructions for diagram requirements.) <input type="checkbox"/> Yes <input type="checkbox"/> No					

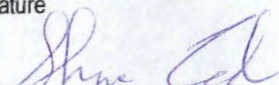
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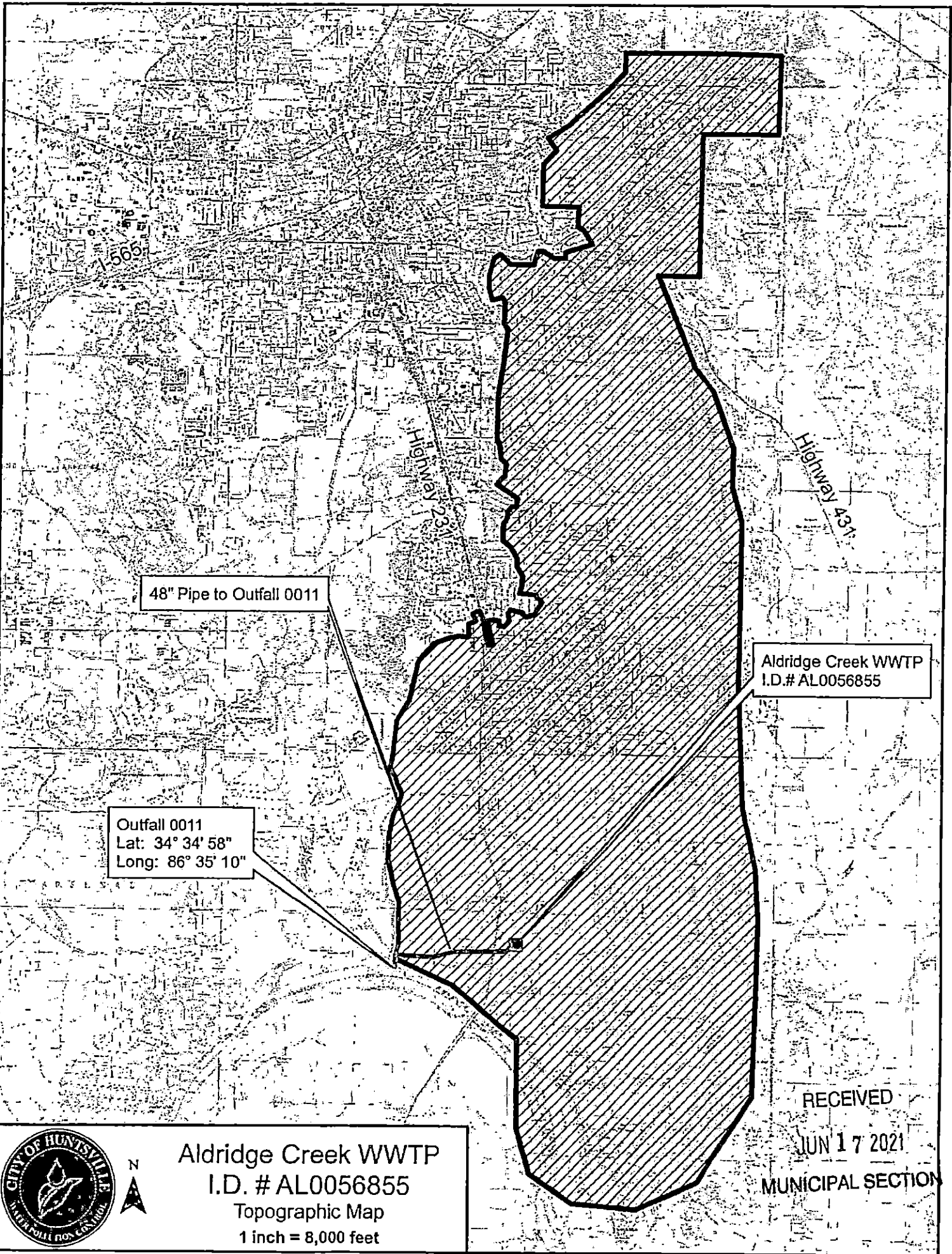
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CSO Outfall Description	5.4	For each CSO outfall, provide the following information. (Attach additional sheets as necessary.)		
		CSO Outfall Number _____	CSO Outfall Number _____	CSO Outfall Number _____
	City or town			
	State and ZIP code			
	County			
	Latitude	° ' "	° ' "	° ' "
	Longitude	° ' "	° ' "	° ' "
	Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.	
CSO Monitoring	5.5	Did the POTW monitor any of the following items in the past year for its CSO outfalls?		
		CSO Outfall Number _____	CSO Outfall Number _____	CSO Outfall Number _____
	Rainfall	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO flow volume	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO pollutant concentrations	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Receiving water quality	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO frequency	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Number of storm events	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
CSO Events in Past Year	5.6	Provide the following information for each of your CSO outfalls.		
		CSO Outfall Number _____	CSO Outfall Number _____	CSO Outfall Number _____
	Number of CSO events in the past year	events	events	events
	Average duration per event	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated
	Average volume per event	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated
	Minimum rainfall causing a CSO event in last year	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated

CSO Receiving Waters	5.7	Provide the information in the table below for each of your CSO outfalls.			
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____	
		Receiving water name			
		Name of watershed/ stream system			
		U.S. Soil Conservation Service 14-digit watershed code (if known)	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
		Name of state management/river basin			
		U.S. Geological Survey 8-Digit Hydrologic Unit Code (if known)	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
		Description of known water quality impacts on receiving stream by CSO (see instructions for examples)			

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

Checklist and Certification Statement	6.1	In Column 1 below, mark the sections of Form 2A that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.	
		Column 1	Column 2
		<input checked="" type="checkbox"/> Section 1: Basic Application Information for All Applicants	<input type="checkbox"/> w/ variance request(s) <input type="checkbox"/> w/ additional attachments
		<input checked="" type="checkbox"/> Section 2: Additional Information	<input checked="" type="checkbox"/> w/ topographic map <input checked="" type="checkbox"/> w/ process flow diagram <input type="checkbox"/> w/ additional attachments
		<input checked="" type="checkbox"/> Section 3: Information on Effluent Discharges	<input checked="" type="checkbox"/> w/ Table A <input checked="" type="checkbox"/> w/ Table D <input checked="" type="checkbox"/> w/ Table B <input checked="" type="checkbox"/> w/ Table E <input checked="" type="checkbox"/> w/ Table C <input type="checkbox"/> w/ additional attachments
		<input checked="" type="checkbox"/> Section 4: Industrial Discharges and Hazardous Wastes	<input checked="" type="checkbox"/> w/ SIU and NSCIU attachments <input checked="" type="checkbox"/> w/ Table F <input type="checkbox"/> w/ additional attachments
		<input checked="" type="checkbox"/> Section 5: Combined Sewer Overflows	<input type="checkbox"/> w/ CSO map <input type="checkbox"/> w/ additional attachments <input type="checkbox"/> w/ CSO system diagram
		<input checked="" type="checkbox"/> Section 6: Checklist and Certification Statement	<input type="checkbox"/> w/ attachments
	6.2	Certification Statement	
		<i>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.</i>	
	Name (print or type first and last name) SHANE COOK, PE	Official title DIRECTOR, HUNTSVILLE - WPC	
	Signature 	Date signed 05/27/2020	



48" Pipe to Outfall 0011

Outfall 0011
Lat: 34° 34' 58"
Long: 86° 35' 10"

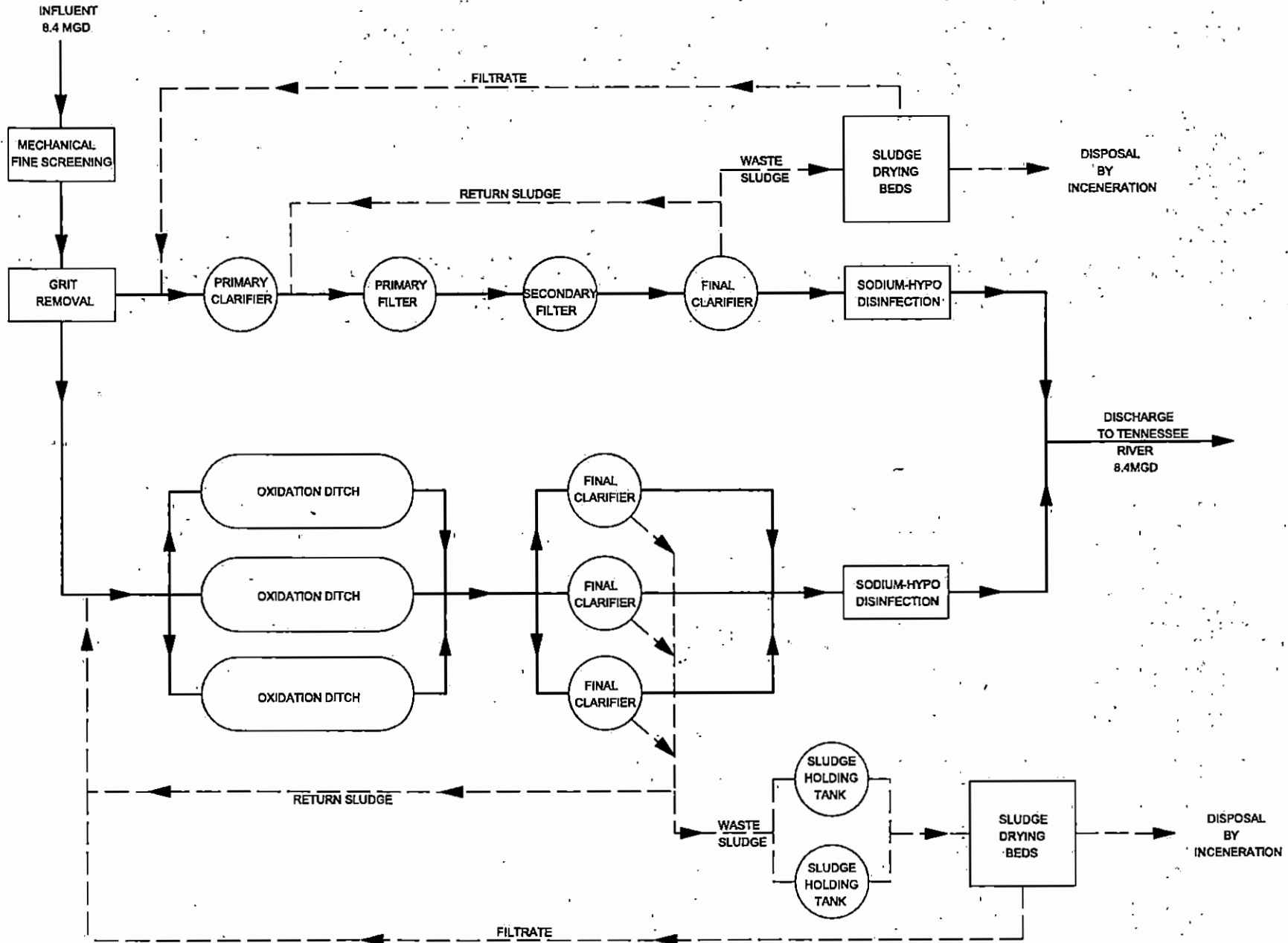
Aldridge Creek WWTP
I.D.# AL0056855



Aldridge Creek WWTP
I.D. # AL0056855
Topographic Map
1 inch = 8,000 feet

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JUN 17 2021
MUNICIPAL SECTION

ALDRIDGE CREEK WASTEWATER TREATMENT FACILITY EPA I.D. NUMBER; AL0056855



EPA Identification Number ALR000029421	NPDES Permit Number AL0056855	Facility Name ALDRIDGE CREEK WWTP	Outfall Number 001
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Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Biochemical oxygen demand <input type="checkbox"/> BOD ₅ or <input checked="" type="checkbox"/> CBOD ₅ (report one)	35.0	mg/L	10.68	mg/L	3 Days/Week	5210	2mg/L <input type="checkbox"/> ML <input type="checkbox"/> MDL
Fecal coliform	2420	col/100mL	97.11	col/100mL	3 Days/Week	9222 D	NA <input type="checkbox"/> ML <input type="checkbox"/> MDL
Design flow rate	22.36	MGD	4.72	MGD	COMP 24		
pH (minimum)	6.20	SU					
pH (maximum)	8.38	SU					
Temperature (winter)	N/A						
Temperature (summer)	N/A						
Total suspended solids (TSS)	26.0	mg/L	4.96	mg/L	3 Days/Week	2540 D	2mg/L <input type="checkbox"/> ML <input type="checkbox"/> MDL

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

EPA Identification Number ALR000029421	NPDES Permit Number AL0056855	Facility Name ALDRIDGE CREEK WWTP	Outfall Number 001
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TABLE B. EFFLUENT PARAMETERS FOR ALL POTWS WITH A FLOW EQUAL TO OR GREATER THAN 0.1 MGD

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Ammonia (as N)	25.90	mg/L	4.70	mg/L	3 Days / Week	4500 NH3D	0.01 <input checked="" type="checkbox"/> ML <input type="checkbox"/> MDL
Chlorine (total residual, TRC) ²	1.00	mg/L	0.64	mg/L	3 Days / Week	4500 CL-G	0.01 <input checked="" type="checkbox"/> ML <input type="checkbox"/> MDL
Dissolved oxygen	-	-	-	-	-	-	<input type="checkbox"/> ML <input type="checkbox"/> MDL
Nitrate/nitrite	20.30	mg/L	5.18	mg/L	3 Days / Week	351.2	<input type="checkbox"/> ML <input type="checkbox"/> MDL
Kjeldahl nitrogen	19.20	mg/L	6.96	mg/L	3 Days / Week	300	<input type="checkbox"/> ML <input type="checkbox"/> MDL
Oil and grease	-	-	-	-	-	-	<input type="checkbox"/> ML <input type="checkbox"/> MDL
Phosphorus	6.96	mg/L	2.45	mg/L	3 Days / Week	365.2	<input type="checkbox"/> ML <input type="checkbox"/> MDL
Total dissolved solids	-	-	-	-	-	-	<input type="checkbox"/> ML <input type="checkbox"/> MDL

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

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

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS							
Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Metals, Cyanide, and Total Phenols							
Hardness (as CaCO ₃)	144	mg/L	116	mg/L	3	SM2340 C	2.50 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Antimony, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Arsenic, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Beryllium, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0020 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Cadmium, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0020 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chromium, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Copper, total recoverable	0.0640	mg/L	0.0321	mg/L	3	EPA200.7	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Lead, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0050 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Mercury, total recoverable	ND	mg/L	ND	mg/L	3	EPA245.1	0.0002 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Nickel, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Selenium, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Silver, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0050 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Thallium, total recoverable	ND	mg/L	ND	mg/L	3	EPA200.7	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Zinc, total recoverable	0.0635	mg/L	0.0393	mg/L	3	EPA200.7	0.0500 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Cyanide	ND	mg/L	ND	mg/L	3	ASTM D7511-09	0.0050 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Total phenolic compounds	ND	mg/L	ND	mg/L	3	EPA420.4	0.0400 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Volatile Organic Compounds							
Acrolein	ND	mg/L	ND	mg/L	3	EPA624	0.0500 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Acrylonitrile	ND	mg/L	ND	mg/L	3	EPA624	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bromoform	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Carbon tetrachloride	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chlorobenzene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chlorodibromomethane	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chloroethane	ND	mg/L	ND	mg/L	3	EPA624	0.0050 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-chloroethylvinyl ether	ND	mg/L	ND	mg/L	3	EPA624	0.0500 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chloroform	0.0165	mg/L	ND	mg/L	3	EPA624	0.0050 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Dichlorobromomethane	0.00157	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1-dichloroethane	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2-dichloroethane	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
trans-1,2-dichloroethylene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1-dichloroethylene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2-dichloropropane	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,3-dichloropropylene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Ethylbenzene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Methyl bromide	ND	mg/L	ND	mg/L	3	EPA624	0.0050 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Methyl chloride	ND	mg/L	ND	mg/L	3	EPA624	0.0025 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Methylene chloride	ND	mg/L	ND	mg/L	3	EPA624	0.0050 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1,2,2-tetrachloroethane	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Tetrachloroethylene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Toluene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1,1-trichloroethane	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,1,2-trichloroethane	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Trichloroethylene	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Vinyl chloride	ND	mg/L	ND	mg/L	3	EPA624	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Acid-Extractable Compounds							
p-chloro-m-cresol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-chlorophenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dichlorophenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dimethylphenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4,6-dinitro-o-cresol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dinitrophenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-nitrophenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4-nitrophenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Pentachlorophenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Phenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4,6-trichlorophenol	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Base-Neutral Compounds							
Acenaphthene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Acenaphthylene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Anthracene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzidine	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzo(a)anthracene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzo(a)pyrene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
3,4-benzofluoranthene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Benzo(ghi)perylene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Benzo(k)fluoranthene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-chloroethoxy) methane	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-chloroethyl) ether	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-chloroisopropyl) ether	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Bis (2-ethylhexyl) phthalate	ND	mg/L	ND	mg/L	3	EPA625	0.0030 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4-bromophenyl phenyl ether	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Butyl benzyl phthalate	ND	mg/L	ND	mg/L	3	EPA625	0.0030 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2-chloronaphthalene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
4-chlorophenyl phenyl ether	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Chrysene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
di-n-butyl phthalate	ND	mg/L	ND	mg/L	3	EPA625	0.0030 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
di-n-octyl phthalate	ND	mg/L	ND	mg/L	3	EPA625	0.0030 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Dibenzo(a,h)anthracene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2-dichlorobenzene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,3-dichlorobenzene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,4-dichlorobenzene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
3,3-dichlorobenzidine	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Diethyl phthalate	ND	mg/L	ND	mg/L	3	EPA625	0.0030 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Dimethyl phthalate	ND	mg/L	ND	mg/L	3	EPA625	0.0030 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,4-dinitrotoluene	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
2,6-dinitrotoluene	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
1,2-diphenylhydrazine	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Fluoranthene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Fluorene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachlorobenzene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachlorobutadiene	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachlorocyclo-pentadiene	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Hexachloroethane	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Indeno(1,2,3-cd)pyrene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Isophorone	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Naphthalene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Nitrobenzene	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
N-nitrosodi-n-propylamine	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
N-nitrosodimethylamine	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
N-nitrosodiphenylamine	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Phenanthrene	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
Pyrene	ND	mg/L	ND	mg/L	3	EPA625	0.0010 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL
1,2,4-trichlorobenzene	ND	mg/L	ND	mg/L	3	EPA625	0.0100 <input type="checkbox"/> ML <input checked="" type="checkbox"/> MDL

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

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EPA Identification Number
ALR000029421

NPDES Permit Number
AL 0056855

Facility Name
ALDRIDGE CREEK

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

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

	SIU <u>1</u>	SIU ____	SIU ____
Name of SIU	NORRIS CYLINDER COMPANY, INC		
Mailing address (street or P.O. box)	521 GREEN COVE ROAD		
City, state, and ZIP code	HUNTSVILLE, AL. 35803		
Description of all industrial processes that affect or contribute to the discharge.	METAL PLATING		
List the principal products and raw materials that affect or contribute to the SIU's discharge.	PLATING CYLINDERS		
Indicate the average daily volume of wastewater discharged by the SIU.	185,500 gpd	gpd	gpd
How much of the average daily volume is attributable to process flow?	185,000 gpd	gpd	gpd
How much of the average daily volume is attributable to non-process flow?	500 gpd	gpd	gpd
Is the SIU subject to local limits?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is the SIU subject to categorical standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

EPA Identification Number
ALR000029421

NPDES Permit Number
AL 0056855

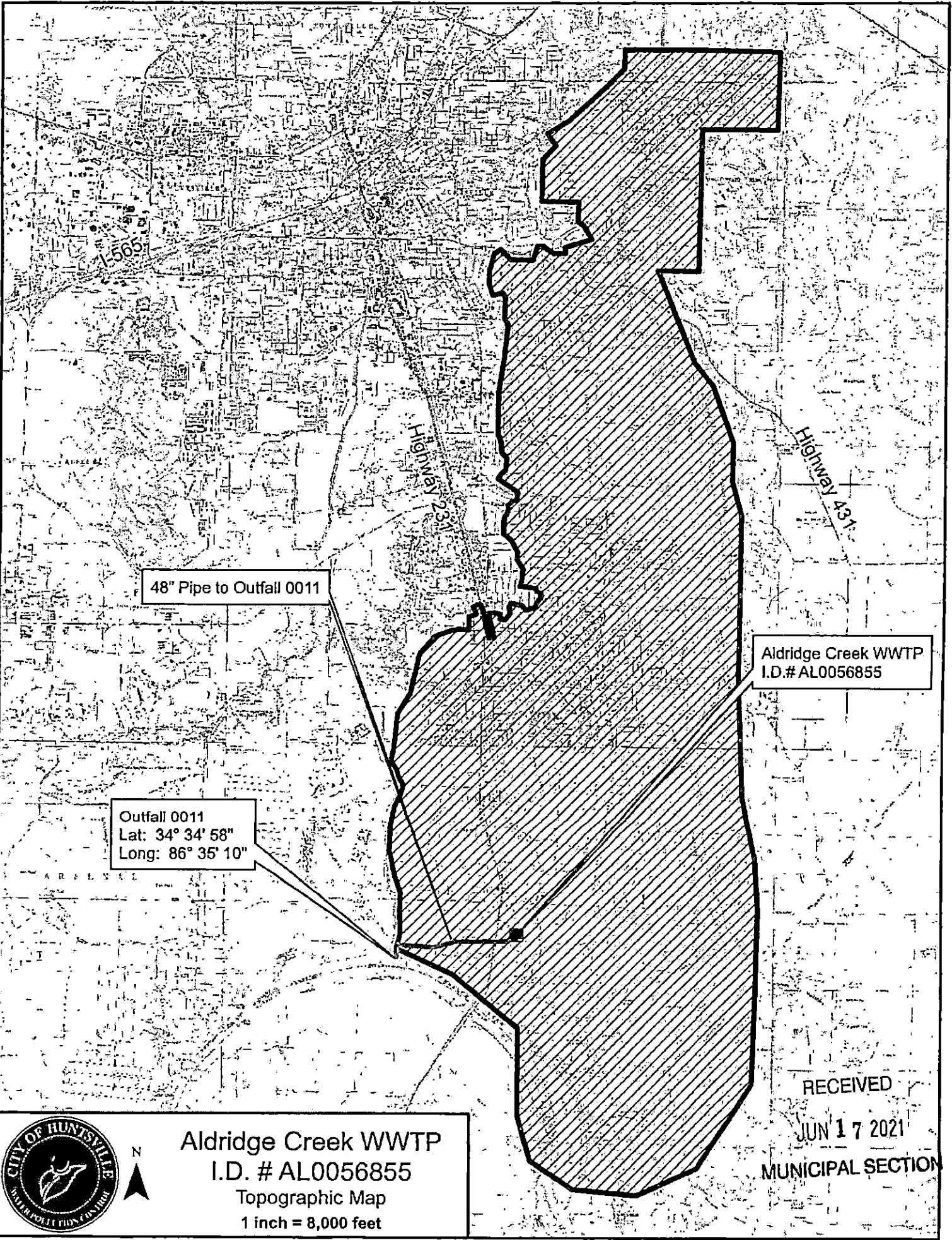
Facility Name
ALDRIDGE CREEK

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

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

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

	SIU <u>1</u>	SIU _____	SIU _____
Under what categories and subcategories is the SIU subject?	40 CFR 433 METAL FINISHING		
Has the POTW experienced problems (e.g., upsets, pass-through interferences) in the past 4.5 years that are attributable to the SIU?	<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
If yes, describe:			



48" Pipe to Outfall 0011

Aldridge Creek WWTP
I.D.# AL0056855

Outfall 0011
Lat: 34° 34' 58"
Long: 86° 35' 10"

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MUNICIPAL SECTION

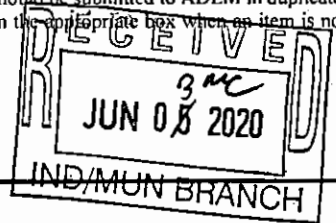


Aldridge Creek WWTP
I.D. # AL0056855
Topographic Map
1 inch = 8,000 feet

**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"/> Initial Permit Application for Existing Facility* |
| <input type="checkbox"/> Modification of Existing Permit | <input checked="" type="checkbox"/> Reissuance of Existing Permit |
| <input type="checkbox"/> Revocation & Reissuance of Existing Permit | * An application for participation in the ADEM's Electronic Environmental (E2) Reporting must be submitted to allow permittee to electronically submit reports as required. |

SECTION A – GENERAL INFORMATION

1. Facility Name: ALDRIDGE CREEK WWTP Facility County: MADISON

a. Operator Name: CITY OF HUNTSVILLE - WATER POLLUTION CONTROL

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

If No, provide the following information:

Operator Name: MARK RITTMAN

Operator Address (Street or PO Box): 13331 MEMORIAL PARKWAY SE

City: HUNTSVILLE AL Zip: 35803

Phone Number: 256-883-3719 Email Address: MARK.RITTMAN@HUNTSVILLEAL.GOV

Operator Status:

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

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

MAINTAIN & COMPLY WITH ALL STATE AND FEDERAL REGULATIONS OF THE CLEAN WATER ACT & ASSOCIATED-NPDES PERMIT.

c. Name of Permittee* if different than Operator: CITY OF HUNTSVILLE - WATER POLLUTION CONTROL

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

2. NPDES Permit Number: AL 0056855 (Not applicable if initial permit application)

3. Facility Location (Front Gate): Latitude: 34°35'19.08" Longitude: -86°33'43.8"

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

Name and Title: SHANE COOK, PE

Address: 1800 VERMONT ROAD

City: HUNTSVILLE State: ALABAMA Zip: 35802

Phone Number: 256-883-3719 Email Address: SHANE.COOK@HUNTSVILLEAL.GOV

5. Designated Facility/DMR Contact:

Name: MATTHEW B. REYNOLDS Title: OPERATIONS SUPERINTENDENT
 Phone Number: 256-883-3719 Email Address: MATTHEW.REYNOLDS@HUNTSVILLEAL.GOV

6. Designated Emergency Contact:

Name: MATTHEW B. REYNOLDS Title: OPERATIONS SUPERINTENDENT
 Phone Number: 256-883-3719 Email Address: MATTHEW.REYNOLDS@HUNTSVILLEAL.GOV

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

Name: _____ Title: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone Number: _____ Email Address: _____

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

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

SECTION B – WASTEWATER DISCHARGE INFORMATION

- Attach a process flow schematic of the treatment process, including the size of each unit operation and sample collection locations.
- Do you share an outfall with another facility? Yes No (If no, continue to B.3)

For each shared outfall, provide the following:

<u>Applicant's Outfall No.</u>	<u>Name of Other Permittee/Facility</u>	<u>NPDES Permit No.</u>	<u>Where is sample collected by Applicant?</u>
<u>0011</u>	<u>SPRING BRANCH WWTP</u>	<u>AL0058394</u>	<u>FACILITY EFFLUENT DISCHARGE LOCATION</u>
_____	_____	_____	_____
_____	_____	_____	_____

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

- Current:** Flow Metering Yes No N/A
 Sampling Equipment Yes No N/A
Planned: Flow Metering Yes No N/A
 Sampling Equipment Yes No N/A

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

ISCO IN-LINE EFFLUENT FLOW METER
 ISCO INFLUENT AND EFFLUENT AUTOMATIC SAMPLER

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

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

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

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

Description of Waste	Description of Storage Location
DOMESTIC SANITARY SEWER SLUDGE	ON-SITE DRYING BEDS TO INCINERATOR

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

SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS

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

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit?
NORRIS CYLINDER COMPANY, INC	METAL PLATING	EXISTING	0.185	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No

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

If yes, please attach a copy of the ordinance.

SECTION E – COASTAL ZONE INFORMATION

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

If yes, complete items E.1 – E.12 below:

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

SECTION F – ANTI-DEGRADATION EVALUATION

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

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

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

If yes, do not complete this section.

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

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

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

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

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

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

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

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

SECTION G – EPA Application Forms

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

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

SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS

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

SECTION I- RECEIVING WATERS

Outfall No.	Receiving Water(s)	303(d) Segment?		Included in TMDL?*	
0011	TENNESSEE RIVER	<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

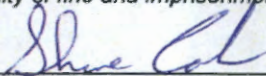
*If a TMDL Compliance Schedule is requested, the following should be attached as supporting documentation:

- (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:  Date Signed: 05/27/2020

Name: SHANE COOK, PE Title: DIRECTOR - WATER POLLUTION CONTROL

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

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Email Address: _____

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.

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

EPA Identification Number ALR000029421	NPDES Permit Number AL0056855	Facility Name ALDRIDGE CREEK WWTP
Form 2F NPDES		U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))

Outfall Location	1.1	Provide information on each of the facility's outfalls in the table below				
		Outfall Number	Receiving Water Name	Latitude		Longitude
		DSN002	ALDRIDGE CREEK	34°	35' 17" N	-86° 33' 27" W
				°	' "	° ' "
				°	' "	° ' "
				°	' "	° ' "
				°	' "	° ' "
				°	' "	° ' "

SECTION 2. IMPROVEMENTS (40 CFR 122.21(g)(6))

Improvements	2.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?				
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 3.				
	2.2	Briefly identify each applicable project in the table below.				
		Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge		Final Compliance Dates
						Required Projected
2.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (Optional Item)					
	<input type="checkbox"/> Yes <input type="checkbox"/> No					

SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(c)(1)(i)(A))

Site Drainage Map	3.1	Have you attached a site drainage map containing all required information to this application? (See instructions for specific guidance.)
	<input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No

SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(c)(1)(i)(B))

Pollutant Sources	4.1	Provide information on the facility's pollutant sources in the table below.			
		Outfall Number	Impervious Surface Area (within a mile radius of the facility)	Total Surface Area Drained (within a mile radius of the facility)	
		DSN002	6.5	<i>specify units</i> ACRES	<i>specify units</i> ACRES
				<i>specify units</i>	<i>specify units</i>
				<i>specify units</i>	<i>specify units</i> ACRES
				<i>specify units</i>	<i>specify units</i>
				<i>specify units</i>	<i>specify units</i>
				<i>specify units</i>	<i>specify units</i>
				<i>specify units</i>	<i>specify units</i>
				<i>specify units</i>	<i>specify units</i>
	4.2	Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.) WWTP PRIMARILY OF PERVIOUS SURFACE OF OPEN GRASSY AREA. SECONDARY AREA CONSISTS OF STRUCTURES AND DRIVEWAYS.			
	4.3	Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)			
		Stormwater Treatment			
		Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F-1 (list)	

EPA Identification Number ALR000029421	NPDES Permit Number AL0056855	Facility Name ALDRIDGE CREEK WWTP
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Form Approved 03/05/19
OMB No. 2040-0004

SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(c)(1)(i)(C))

Non-Stormwater Discharges	5.1	<i>I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.</i>			
		Name (print or type first and last name)	Official title		
		SHANE COOK, PE	DIRECTOR, HUNTSVILLE WPC		
		Signature	Date signed		
			05/27/2020		
	5.2	Provide the testing information requested in the table below.			
		Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test
		001	GRAB SAMPLE / CONTRACT LAB ANALYSIS	10/30/2019	1

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

Significant Leaks or Spills	6.1	Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years. N/A

SECTION 7. DISCHARGE INFORMATION (40 CFR 122.26(c)(1)(i)(E))

Discharge Information	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.	
	7.1	Is this a new source or new discharge? <input type="checkbox"/> Yes → See instructions regarding submission of <i>estimated</i> data. <input checked="" type="checkbox"/> No → See instructions regarding submission of <i>actual</i> data.
	Tables A, B, C, and D	
7.2	Have you completed Table A for each outfall? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

EPA Identification Number ALR000029421	NPDES Permit Number AL0056855	Facility Name ALDRIDGE CREEK WWTP	Form Approved 03/05/19 OMB No. 2040-0004
Discharge Information Continued	7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.5.	
	7.4	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	7.5	Do you know or have reason to believe any pollutants in Exhibit 2F-2 are present in the discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.7.	
	7.6	Have you listed all pollutants in Exhibit 2F-2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? <input type="checkbox"/> Yes → SKIP to Item 7.18. <input checked="" type="checkbox"/> No	
	7.8	Do you know or have reason to believe any pollutants in Exhibit 2F-3 are present in the discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.10.	
	7.9	Have you listed all pollutants in Exhibit 2F-3 that you know or have reason to believe are present in the discharge in Table C? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	7.10	Do you expect any of the pollutants in Exhibit 2F-3 to be discharged in concentrations of 10 ppb or greater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.12.	
	7.11	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F-3 that you expect to be discharged in concentrations of 10 ppb or greater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.14.	
	7.13	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	7.14	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	7.15	Do you know or have reason to believe any pollutants in Exhibit 2F-4 are present in the discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.17.	
	7.16	Have you listed pollutants in Exhibit 2F-4 that you know or believe to be present in the discharge and provided an explanation in Table C? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	7.17	Have you provided information for the storm event(s) sampled in Table D? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

EPA Identification Number ALR000029421	NPDES Permit Number AL0056855	Facility Name ALDRIDGE CREEK WWTP
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Discharge Information Continued	Used or Manufactured Toxics			
	7.18	Is any pollutant listed on Exhibits 2F-2 through 2F-4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 8.		
	7.19	List the pollutants below, including TCDD if applicable.		
		1.	4.	7.
		2.	5.	8.
		3.	6.	9.

SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(g)(11))

Biological Toxicity Testing Data	8.1	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 9. 05/27/2020		
	8.2	Identify the tests and their purposes below.		
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority? <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	

SECTION 9. CONTRACT ANALYSIS INFORMATION (40 CFR 122.21(g)(12))

Contract Analysis Information	9.1	Were any of the analyses reported in Section 7 (on Tables A through C) performed by a contract laboratory or consulting firm? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 10.			
	9.2	Provide information for each contract laboratory or consulting firm below.			
			Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
		Name of laboratory/firm	Pace Analytical National		
		Laboratory address	12065 Lebanon Rd Mount Juliet, TN 37122		
		Phone number	(615) 773-9746		
	Pollutant(s) analyzed				

EPA Identification Number
ALR000029421

NPDES Permit Number
AL0056855

Facility Name
ALDRIDGE CREEK WWTP

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

SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))


Checklist and Certification Statement

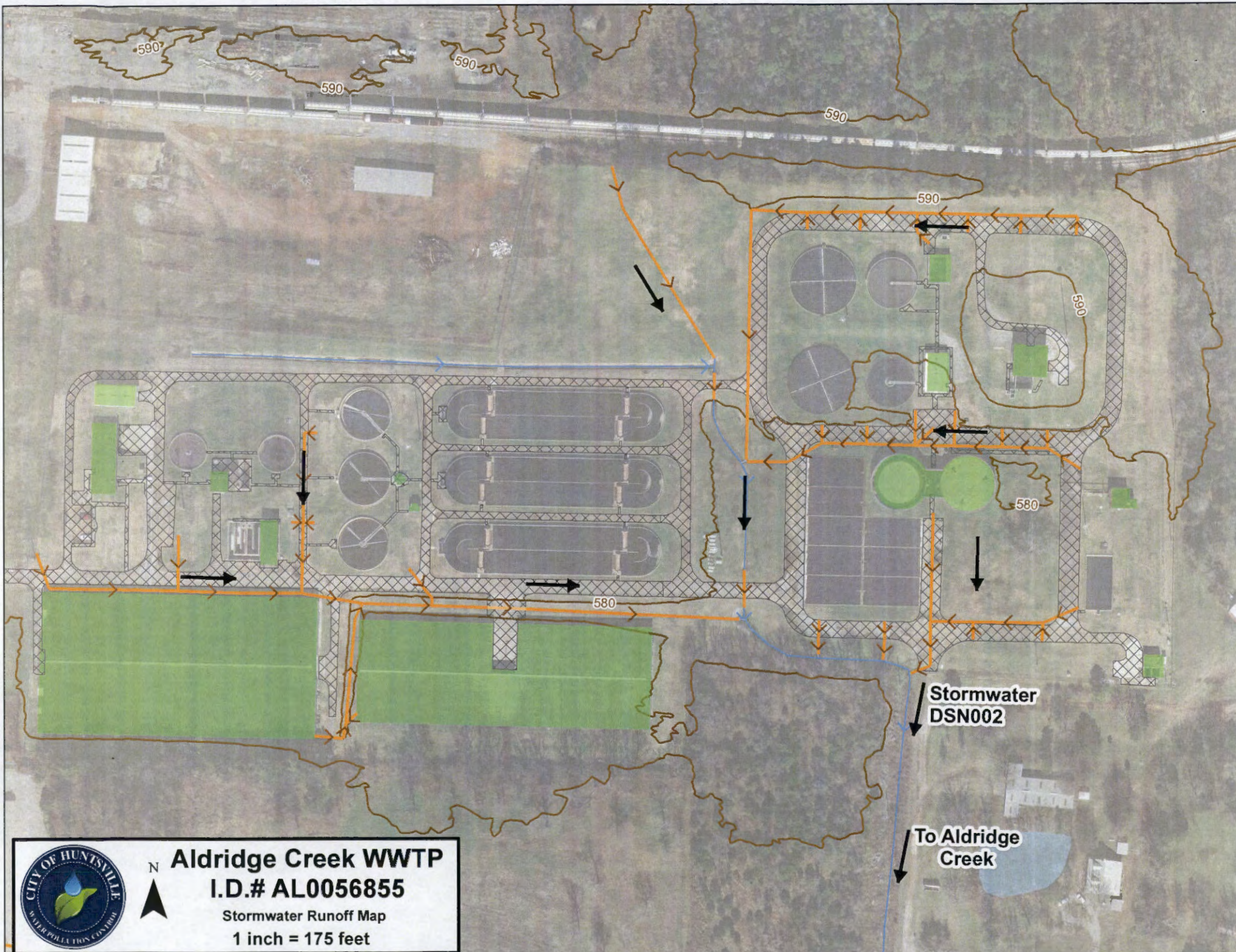
10.1 In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or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

Column 1	Column 2
<input checked="" type="checkbox"/> Section 1	<input type="checkbox"/> w/ attachments (e.g., responses for additional outfalls)
<input checked="" type="checkbox"/> Section 2	<input type="checkbox"/> w/ attachments
<input checked="" type="checkbox"/> Section 3	<input checked="" type="checkbox"/> w/ site drainage map
<input checked="" type="checkbox"/> Section 4	<input type="checkbox"/> w/ attachments
<input checked="" type="checkbox"/> Section 5	<input type="checkbox"/> w/ attachments
<input checked="" type="checkbox"/> Section 6	<input type="checkbox"/> w/ attachments
<input checked="" type="checkbox"/> Section 7	<input checked="" type="checkbox"/> Table A <input type="checkbox"/> w/ small business exemption request <input type="checkbox"/> Table B <input type="checkbox"/> w/ analytical results as an attachment <input type="checkbox"/> Table C <input checked="" type="checkbox"/> Table D
<input checked="" type="checkbox"/> Section 8	<input type="checkbox"/> w/attachments
<input checked="" type="checkbox"/> Section 9	<input checked="" type="checkbox"/> w/attachments (e.g., responses for additional contact laboratories or firms)
<input checked="" type="checkbox"/> Section 10	<input type="checkbox"/>

10.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
SHANE COOK, PE	DIRECTOR - HUNTSVILLE WATER POLLUTION CONTROL
Signature 	Date signed
	05/27/2020



Aldridge Creek WWTP
I.D.# AL0056855
Stormwater Runoff Map
1 inch = 175 feet

Stormwater
DSN002

To Aldridge
Creek

EPA Identification Number ALR000029421	NPDES Permit Number AL 00S6855	Facility Name ALDRIDGE CREEK	Outfall Number 00251
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TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))¹
 You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information <i>(new source/new dischargers only; use codes in instructions)</i>
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1. Oil and grease	ND		ND		1	
2. Biochemical oxygen demand (BOD ₅)	6 mg/L	NA	6 mg/L	NA	1	
3. Chemical oxygen demand (COD)	NA	NA	NA	NA	1	
4. Total suspended solids (TSS)	10 mg/L	NA	10 mg/L	NA	1	
5. Total phosphorus	ND	NA	ND	NA	1	
6. Total Kjeldahl nitrogen (TKN)	ND	NA	ND	NA	1	
7. Total nitrogen (as N)	0.257	NA	0.257	NA	1	
8. pH (minimum)	7.19 s.u.		7.19 s.u.		1	
	7.19 s.u.		7.19 s.u.		1	

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

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EPA Identification Number ALR000029421	NPDES Permit Number AL 0056855	Facility name ALDRIDGE CREEK	Outfall Number 002S1
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Form Approved 03/05/19
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TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

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

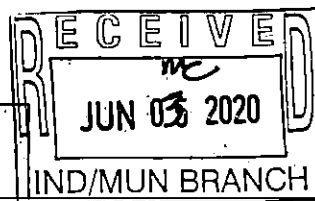
Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
10/30/2019	2.5	0.3	96	850 gpm	1.239

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

The Rational Method Equation

The Rational Method equation actually used to calculate peak storm water runoff rate is: $Q = CiA$ (U.S. units), or $Q = 0.0028 CiA$ (S.I. units) where:

- A = the area of the watershed (drainage area) that drains to the point for which the peak runoff rate is needed (acres for U.S. units) (ha for S.I. units)
- C = runoff coefficient for drainage area A. A physical interpretation is the fraction of rainfall landing on the drainage area that becomes storm water runoff. (dimensionless for both U.S. and S.I. units)
- i = the intensity of the design storm for peak runoff calculation. (in/hr for U.S. units) (mm/hr for S.I. units)
- Q = the peak storm water runoff rate from the drainage area, A, due to the design storm of intensity, i. (cfs for U.S. units) (m³/s for S.I. units).



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

FACILITY NAME AND PERMIT NUMBER:
ALDRIDGE CREEK WWTP - AL0056855

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:
ALDRIDGE CREEK WWTP - AL0056855

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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 ALDRIDGE CREEK WWTP
- b. Mailing Address 1800 VERMONT ROAD HUNTSVILLE, AL 35802
- c. Contact person MATTHEW B REYNOLDS, PE
Title OPERATIONS SUPERINDENDENT
Telephone number (256) 883-3719
- d. Facility Address (not P.O. Box) 13331 MEMORIAL PARKWAY SE HUNTSVILLE, AL 35803
- e. Indicate the type of facility
- | | |
|---|--|
| <input checked="" type="checkbox"/> Publicly owned treatment works (POTW) | <input type="checkbox"/> Privately owned treatment works |
| <input type="checkbox"/> Federally owned treatment works | <input type="checkbox"/> Blending or treatment operation |
| <input type="checkbox"/> Surface disposal site | <input type="checkbox"/> Sewage sludge incinerator |
| <input type="checkbox"/> Other (describe) _____ | |

2. Applicant Information.

- a. Applicant name CITY OF HUNTSVILLE - WATER POLLUTION CONTROL
- b. Mailing Address 1800 VERMONT ROAD HUNTSVILLE, AL 35802
- c. Contact person SHANE COOK, PE
Title DIRECTOR
Telephone number 256-883-3719
- 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:
ALDRIDGE CREEK WWTP - AL0056855

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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 | 516.26 | dry metric tons |
| b. Amount received from off site | 0 | dry metric tons |
| c. Amount treated or blended on site | 0 | dry metric tons |
| d. Amount sold or given away in a bag or other container for application to the land | 0 | dry metric tons |
| e. Amount of bulk sewage sludge shipped off site for treatment or blending | 0 | dry metric tons |
| f. Amount applied to the land in bulk form | 0 | dry metric tons |
| g. Amount placed on a surface disposal site | 0 | dry metric tons |
| h. Amount fired in a sewage sludge incinerator | 516.26 | dry metric tons |
| i. Amount sent to a municipal solid waste landfill | 0 | dry metric tons |
| j. Amount used or disposed by another practice | 0 | 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:

PROCESSED AT INCINERATOR

FACILITY NAME AND PERMIT NUMBER:
ALDRIDGE CREEK WWTP - AL0056855

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

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:

GRAVITY SLUDGE HOLDING / DECANT TANKS

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 HUNTSVILLE SOLID WASTE DISPOSAL AUTHORITY
b. Mailing address 5251 Triana Blvd SW, Huntsville, AL 35805
c. Contact person JOHN "DOC" HOLLADAY
Title DIRECTOR
Telephone number (256) 880-6054

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:
ALDRIDGE CREEK WWTP - AL0056855

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

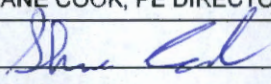
7. Use and Disposal Sites. Provide the following information for each site on which sewage sludge from this facility is used or disposed:

- a. Site name or number SOLID WASTE DISPOSAL AUTHORITY
- b. Contact person JOHN "DOC" HOLLADAY
Title DIRECTOR
Telephone (256) 880-6054
- c. Site location (Complete 1 or 2)
1. Street or Route # 5251 Triana Blvd SW
County MADISON
City or Town Huntsville State AL Zip 35805
2. Latitude 34°40'10.92" Longitude -86°36'43.73"
- d. Site type (Check all that apply)
- | | | |
|---|---|--|
| <input type="checkbox"/> Agricultural | <input type="checkbox"/> Lawn or home garden | <input type="checkbox"/> Forest |
| <input type="checkbox"/> Surface disposal | <input type="checkbox"/> Public Contact | <input checked="" type="checkbox"/> Incineration |
| <input type="checkbox"/> Reclamation | <input type="checkbox"/> Municipal Solid Waste Landfill | <input type="checkbox"/> 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 SHANE COOK, PE DIRECTOR, HUNTSVILLE WPC

Signature 

Telephone number (256) 883-3719

Date signed 05/27/2020

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:
ALDRIDGE CREEK WWTP - AL0056855

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:
ALDRIDGE CREEK WWTP - AL0056855

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 ALDRIDGE CREEK WWTP
- b. Mailing Address 1800 VERMONT ROAD HUNTSVILLE, AL 35802
- c. Contact person MATTHEW B REYNOLDS, PE
Title OPERATIONS SUPERINTENDENT
Telephone number 256-883-3719
- d. Facility Address (not P.O. Box) 13331 MEMORIAL PARKWAY SE HUNTSVILLE, AL 35803
- e. Is this facility a Class I sludge management facility? Yes No
- f. Facility design flow rate: 8.4 mgd
- g. Total population served: 200,000
- 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 HUNTSVILLE - WATER POLLUTION CONTROL
- b. Mailing Address 1800 VERMONT ROAD HUNTSVILLE, AL 35802
- c. Contact person SHANE COOK, PE
Title DIRECTOR
Telephone number (256) 883-3719
- 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:

ALDRIDGE CREEK WWTP - AL0056855

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

A.3. Permit Information.

- a. Facility's NPDES permit number (if applicable): AL0056855
- 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 _____

FACILITY NAME AND PERMIT NUMBER:
ALDRIDGE CREEK WWTP - AL0056855

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			
CADMIUM			
CHROMIUM			
COPPER			
LEAD			
MERCURY			
MOLYBDENUM			
NICKEL			
SELENIUM			
ZINC			

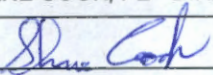
A.9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of Form 2S you have completed and are submitting:

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 SHANE COOK, PE - DIRECTOR, HUNTSVILLE WATER POLLUTION CONTROL
 Signature  Date signed 05/27/2020
 Telephone number (256) 883-3719

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:



AC Expanded Metals
Jan 2016

January 28, 2016

Scott Vassar
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

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

<u>LabNumber</u>	<u>Sample Description</u>	<u>Date/Time Collected</u>	<u>Date Submitted</u>
1600607-01	Aldridge Permit Renewal Comp	1/14/16 05:15	1/14/16
1600607-02	Adridge Permit Renewal Grab	1/14/16 05:25	1/14/16

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

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

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

Karen Sutton

Karen Sutton
Vice President Client Services



SAMPLE RESULTS REPORT

Report Date/Time: 1/28/16 14:05

REPORT TO
 Scott Vassar
 City of Huntsville WPC
 1800 Vermont Road
 Huntsville, AL 35802-2064



NELAP
 Accredited
 Florida DOH
 #E871078

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



Cert# L2239 Testing

ENERSOLV also maintains ISO/IEC 17025 accreditation through Laboratory Accreditation Bureau for the specific tests listed in L-A-B Certificate #L2239 scope of accreditation.

ADEM
 Drinking Water
 Certification
 No. 40160

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

This report may contain information that is confidential and/or proprietary. This information is intended for the addressee only and may not be copied or disseminated except in full without the written consent of ENERSOLV Corporation.

Analyte Name	Result	Units	Qual	Regulatory Limit
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Sample Point: Aldridge Permit Renewal Comp

Sample ID: 1600607-01

Collected: 01/14/2016

Submitted: 01/14/2016

Anions by IC

Nitrate plus Nitrite-Nitrogen	6.77			
* Nitrate-Nitrogen CAS: 14797-55-8	4.82	mg/l		
* Nitrite-Nitrogen CAS: 14797-65-0	1.96	mg/l		

Inorganics

* Total Kjeldahl Nitrogen	3.56	mg/l		
* Total Phosphorus	<1.00	mg/l		

Metals by ICP-MS

* Total Recoverable Antimony CAS: 7440-36-0	<0.00100	mg/l		
* Total Recoverable Arsenic CAS: 7440-38-2	<0.000500	mg/l		
* Total Recoverable Beryllium CAS: 7440-41-7	<0.00100	mg/l		
* Total Recoverable Cadmium CAS: 7440-43-9	<0.00100	mg/l		
* Total Recoverable Chromium CAS: 7440-47-3	0.00104	mg/l		
* Total Recoverable Copper CAS: 7440-50-8	0.00529	mg/l		
* Total Recoverable Lead CAS: 7439-92-1	<0.00100	mg/l		
* Total Recoverable Nickel CAS: 7440-02-0	0.00384	mg/l		
* Total Recoverable Selenium CAS: 7782-49-2	<0.00100	mg/l		
* Total Recoverable Silver CAS: 7440-22-4	<0.00100	mg/l		
* Total Recoverable Thallium CAS: 7440-28-0	<0.00100	mg/l		
* Total Recoverable Zinc CAS: 7440-66-6	0.0296	mg/l		



SAMPLE RESULTS REPORT

Report Date/Time: 1/28/16 14:05

REPORT TO
 Scott Vassar
 City of Huntsville WPC
 1800 Vermont Road
 Huntsville, AL 35802-2064



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ADEM
 Drinking Water
 Certification
 No. 40160

Analyte Name	Result	Units	Qual	Regulatory Limit
--------------	--------	-------	------	------------------

Sample Point: Aldridge Permit Renewal Comp (Cont)

Sample ID: 1600607-01

Collected: 01/14/2016

Submitted: 01/14/2016

Metals by ICP-OES

* Total Calcium CAS: 7440-70-2	49.8	mg/l		
Total Hardness	144			
* Total Magnesium CAS: 7439-95-4	4.15	mg/l		

Sample Point: Adridge Permit Renewal Grab

Sample ID: 1600607-02

Collected: 01/14/2016

Submitted: 01/14/2016

Inorganics

* HEM (Oil and Grease)	<5.00	mg/l		
Phenolics (4AAP)	<0.0100	mg/l		
Total Cyanide	0.00509	mg/l		

Semivolatiles by EPA 625

1,2,4-Trichlorobenzene CAS: 120-82-1	<1.10	ug/l		
2,4,6-Trichlorophenol CAS: 88-06-2	<1.55	ug/l		
2,4-Dichlorophenol CAS: 120-83-2	<1.20	ug/l		
2,4-Dimethylphenol CAS: 105-67-9	<2.35	ug/l		
2,4-Dinitrophenol CAS: 51-28-5	<5.00	ug/l		
2,4-Dinitrotoluene CAS: 121-14-2	<1.10	ug/l		
2,6-Dinitrotoluene CAS: 606-20-2	<1.25	ug/l		
2-Chloronaphthalene CAS: 91-58-7	<1.60	ug/l		
2-Chlorophenol CAS: 95-57-8	<1.30	ug/l		
2-Nitrophenol CAS: 88-75-5	<1.25	ug/l		



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Analyte Name	Result	Units	Qual	Regulatory Limit
--------------	--------	-------	------	------------------

Sample Point: Adridge Permit Renewal Grab (Cont'd)	Sample ID: 1600607-02	Collected: 01/14/2016	Submitted: 01/14/2016
3,3'-Dichlorobenzidine CAS: 91-94-1	<3.10	ug/l	
4,6-Dinitro-2-methylphenol CAS: 534-52-1	<5.00	ug/l	
4-Bromophenyl phenyl ether CAS: 101-55-3	<1.75	ug/l	
4-Chloro-3-methylphenol CAS: 59-50-7	<1.65	ug/l	
4-Chlorophenyl phenyl ether CAS: 7005-72-3	<1.40	ug/l	
4-Nitrophenol CAS: 100-02-7	<5.00	ug/l	
Acenaphthene CAS: 83-32-9	<1.15	ug/l	
Acenaphthylene CAS: 208-96-8	<1.65	ug/l	
Anthracene CAS: 120-12-7	<1.90	ug/l	
a-Terpineol CAS: 98-55-5	<1.00	ug/l	
Benzo[a]anthracene CAS: 56-55-3	<1.15	ug/l	
Benzo[a]pyrene CAS: 50-32-8	<1.55	ug/l	
Benzo[b]fluoranthene CAS: 205-99-2	<1.10	ug/l	
Benzo[g,h,i]perylene CAS: 191-24-2	<1.25	ug/l	
Benzo[k]fluoranthene CAS: 207-08-9	<0.800	ug/l	
Bis(2-chloroethoxy)methane CAS: 111-91-1	<1.25	ug/l	
Bis(2-chloroethyl)ether CAS: 111-44-4	<1.10	ug/l	
Bis(2-chloroisopropyl)ether CAS: 39638-32-9	<1.20	ug/l	
Bis(2-ethylhexyl)phthalate CAS: 117-81-7	<2.90	ug/l	



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ADEM
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 Certification
 No. 40160

Analyte Name	Result	Units	Qual	Regulatory Limit
--------------	--------	-------	------	------------------

Sample Point: Adridge Permit Renewal Grab (Cont'd)	Sample ID: 1600607-02	Collected: 01/14/2016	Submitted: 01/14/2016
Butylbenzylphthalate CAS: 85-68-7	<2.45	ug/l	
Carbazole CAS: 86-74-8	<2.55	ug/l	
Chrysene CAS: 218-01-9	<0.850	ug/l	
Dibenzo[a,h]anthracene CAS: 53-70-3	<1.50	ug/l	
Diethyl phthalate CAS: 84-66-2	<1.45	ug/l	
Dimethylphthalate CAS: 131-11-3	<1.40	ug/l	
Di-n-butylphthalate CAS: 84-74-2	<1.55	ug/l	
Di-n-octylphthalate CAS: 117-84-0	<2.45	ug/l	
Fluoranthene CAS: 206-44-0	<1.25	ug/l	
Fluorene CAS: 86-73-7	<1.50	ug/l	
Hexachlorobenzene CAS: 118-74-1	<1.30	ug/l	
Hexachlorobutadiene CAS: 87-68-3	<0.900	ug/l	
Hexachloroethane CAS: 67-72-1	<1.00	ug/l	
Indeno(1,2,3-cd)pyrene CAS: 193-39-5	<2.25	ug/l	
Isophorone CAS: 78-59-1	<1.25	ug/l	
Naphthalene CAS: 91-20-3	<1.30	ug/l	
n-Decane CAS: 124-18-5	<1.05	ug/l	
N-Nitrosodi-n-propylamine CAS: 621-64-7	<1.30	ug/l	
n-Octadecane CAS: 593-45-3	<1.80	ug/l	



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Cert# L2239 Testing

ADEM
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Certification
No. 40160

Analyte Name	Result	Units	Qual	Regulatory Limit
--------------	--------	-------	------	------------------

Sample Point: Atridge Permit Renewal Grab (Cont'd)

Sample ID: 1600607-02

Collected: 01/14/2016

Submitted: 01/14/2016

Pentachlorophenol CAS: 87-86-5	<5.00	ug/l		
Phenanthrene CAS: 85-01-8	<1.20	ug/l		
Phenol CAS: 108-95-2	<0.800	ug/l		
Pyrene CAS: 129-00-0	<1.00	ug/l		
Volatiles by EPA 624				
* 1,1,1-Trichloroethane CAS: 71-55-6	<3.0	ug/l		
* 1,1,2,2-Tetrachloroethane CAS: 79-34-5	<3.0	ug/l		
* 1,1,2-Trichloroethane CAS: 79-00-5	<3.0	ug/l		
* 1,1-Dichloroethane CAS: 75-34-3	<3.0	ug/l		
* 1,1-Dichloroethylene CAS: 75-35-4	<3.0	ug/l		
* 1,2-Dichlorobenzene CAS: 95-50-1	<3.0	ug/l		
* 1,2-Dichloroethane CAS: 107-06-2	<3.0	ug/l		
* 1,2-Dichloropropane CAS: 78-87-5	<3.0	ug/l		
* 1,3-Dichlorobenzene CAS: 541-73-1	<3.0	ug/l		
* 1,4-Dichlorobenzene CAS: 106-46-7	<3.0	ug/l		
* 2-Chloroethylvinyl ether CAS: 110-75-8	<3.0	ug/l		
* Acrolein CAS: 107-02-8	<20	ug/l		
* Acrylonitrile CAS: 107-13-1	<20	ug/l		
* Benzene CAS: 71-43-2	<3.0	ug/l		



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ADEM
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Analyte Name	Result	Units	Qual	Regulatory Limit
--------------	--------	-------	------	------------------

Sample Point: Adridge Permit Renewal Grab (Cont'd)	Sample ID: 1600607-02	Collected: 01/14/2016	Submitted: 01/14/2016
* Bromodichloromethane CAS: 75-27-4	<3.0	ug/l	
* Bromoform CAS: 75-25-2	<3.0	ug/l	
* Bromomethane CAS: 74-83-9	<5.0	ug/l	
* Carbon tetrachloride CAS: 56-23-5	<3.0	ug/l	
* Chlorobenzene CAS: 108-90-7	<3.0	ug/l	
* Chloroethane CAS: 75-00-3	<5.0	ug/l	
* Chloroform CAS: 67-66-3	003.7 [1] ^{mg/L} ND	ug/l	Q
* Chloromethane CAS: 74-87-3	<1.5	ug/l	
* cis-1,3-Dichloropropylene CAS: 10061-01-5	<3.0	ug/l	
* Dibromochloromethane CAS: 124-48-1	<3.0	ug/l	
* Ethyl benzene CAS: 100-41-4	<3.0	ug/l	
* m & p-Xylene CAS: 108-38-3/106-42-3	<3.0	ug/l	
* Methylene chloride CAS: 75-09-2	<5.0	ug/l	
* o-Xylene CAS: 95-47-6	<3.0	ug/l	
* Tetrachloroethylene CAS: 127-18-4	<3.0	ug/l	
* Toluene CAS: 108-88-3	<3.0	ug/l	
* trans-1,2-Dichloroethylene CAS: 156-60-5	<3.0	ug/l	
* trans-1,3-Dichloropropylene CAS: 10061-02-6	<3.0	ug/l	
* Trichloroethylene CAS: 79-01-6	<3.0	ug/l	



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Cert# L2239 Testing

ADEM
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 Certification
 No. 40160

Analyte Name	Result	Units	Qual	Regulatory Limit
--------------	--------	-------	------	------------------

Sample Point: Adridge Permit Renewal Grab (Cont'd)

Sample ID: 1600607-02

Collected: 01/14/2016

Submitted: 01/14/2016

- * Trichlorofluoromethane
CAS: 75-69-4
- * Vinyl chloride
CAS: 75-01-4

<5.0

ug/l

<1.5

ug/l



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ADEM Drinking Water Certification No. 40160

Data Qualifiers: Q: One or more quality control criteria (LCS, surrogate spike recovery, continuing calibration, etc) failed. Data may be estimated or biased.
<: Less than reporting limit



SAMPLE RESULTS REPORT

Report Date/Time: 1/28/16 14:05

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Analysis Information

LabNumber	Analysis	SpecificMethod	Analyst	Analysis Start Date/Time	Analysis End Date/Time
1600607-01	Total Recoverable Silver	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Recoverable Arsenic	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Recoverable Beryllium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Calcium	EPA 200.7/6010C	DJN	01/18/2016 08:30	
1600607-01	Total Recoverable Cadmium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Recoverable Chromium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Recoverable Copper	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Hardness	EPA 200.7	/DJN	01/18/2016 08:30	
1600607-01	Total Magnesium	EPA 200.7/6010C	DJN	01/18/2016 08:30	
1600607-01	Total Recoverable Nickel	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Nitrite-Nitrogen	EPA 300.0	DJN	01/14/2016 20:57	
1600607-01	Nitrate-Nitrogen	EPA 300.0	DJN	01/14/2016 20:57	
1600607-01	Nitrate plus Nitrite-Nitrogen	EPA 300.0	/DJN	01/14/2016 20:57	
1600607-01	Total Phosphorus	EPA 365.3	MD	01/18/2016 08:45	
1600607-01	Total Recoverable Lead	EPA 200.8	KW	01/21/2016 10:37	
1600607-01	Total Recoverable Antimony	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Recoverable Selenium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Kjeldahl Nitrogen	SM 4500-Norg C	RAC	01/15/2016 06:00	
1600607-01	Total Recoverable Thallium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-01	Total Recoveable Zinc	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600607-02	Total Cyanide	ASTM D7511-09	JW	01/20/2016 14:40	
1600607-02	HEM (Oil and Grease)	EPA 1664A	JG	01/19/2016 06:50	
1600607-02	Phenolics (4AAP)	EPA 420.1	SH	01/15/2016 12:40	
1600607-02	BN/AE Semivolatiles	EPA 625	RH/AJW	01/15/2016 09:00	
1600607-02	Volatile Organic Analytes	EPA 624	ET	01/19/2016 11:37	

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



ANALYTICAL REPORT

September 23, 2019

- 1
- 2 Tc
- 3 Ss
- 4 Cr
- 5 Sr
- 6 Gl
- 7 Al
- 8 Sc

City of Huntsville WPC

Sample Delivery Group: L1139737
Samples Received: 09/16/2019
Project Number:
Description: Aldridge Permit Renewal

Report To: Pat Morgan
1800 Vermont Road
Huntsville, AL 35802-2064









Entire Report Reviewed By: 
Kelly Mercer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

ALDRIDGE P. RENEWAL COMP L1139737-01 WW						
			Collected by	Collected date/time	Received date/time	
			Client	09/16/19 04:20	09/16/19 10:59	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1348004	1	09/19/19 02:08	09/19/19 02:08	EL	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1347773	1	09/17/19 09:00	09/18/19 09:49	JDR	Decatur, AL
Wet Chemistry by Method 300.0	WG1346451	1	09/16/19 13:10	09/16/19 13:10	LLW	Decatur, AL
Wet Chemistry by Method 4500-Norg C	WG1347123	1	09/17/19 08:00	09/17/19 12:55	JW	Decatur, AL
Wet Chemistry by Method EPA 365.3	WG1348873	1	09/19/19 10:30	09/19/19 12:30	JTM	Decatur, AL
Mercury by Method 245.1	WG1347481	1	09/18/19 09:26	09/18/19 19:46	TCT	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG1348004	1	09/18/19 14:48	09/19/19 02:08	EL	Mt. Juliet, TN

ALDRIDGE P. RENEWAL GRAB L1139737-02 WW						
			Collected by	Collected date/time	Received date/time	
			Client	09/16/19 04:30	09/16/19 10:59	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 1664A	WG1347970	1	09/18/19 17:13	09/18/19 23:22	AMG	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1346740	1	09/17/19 12:37	09/19/19 16:31	SDL	Mt. Juliet, TN
Wet Chemistry by Method ASTM D7511-09	WG1348054	1	09/23/19 09:10	09/23/19 09:10	SDH	Decatur, AL
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1348910	1	09/20/19 05:43	09/20/19 05:43	JCP	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1348076	1	09/19/19 06:31	09/20/19 19:06	AO	Mt. Juliet, TN

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



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

Kelly Mercer
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc

Collected date/time: 09/16/19 04:20

L1139737

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Hardness (calculated) as CaCO3	113		2.50	1	09/19/2019 02:08	WG1348004

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	316		1.00	1	09/18/2019 09:49	WG1347773

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	7.51		0.0600	1	09/16/2019 13:10	WG1346451

Wet Chemistry by Method 4500-Norg C

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	15.1		1.50	1	09/17/2019 12:55	WG1347123

Wet Chemistry by Method EPA 365.3

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Phosphorus	3.59		1.00	1	09/19/2019 12:30	WG1348873

Mercury by Method 245.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.000200	1	09/18/2019 19:46	WG1347481

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Antimony	ND		0.0100	1	09/19/2019 02:08	WG1348004
Arsenic	ND		0.0100	1	09/19/2019 02:08	WG1348004
Beryllium	ND		0.00200	1	09/19/2019 02:08	WG1348004
Cadmium	ND		0.00200	1	09/19/2019 02:08	WG1348004
Calcium	35.0		1.00	1	09/19/2019 02:08	WG1348004
Chromium	ND		0.0100	1	09/19/2019 02:08	WG1348004
Copper	0.0271		0.0100	1	09/19/2019 02:08	WG1348004
Lead	ND		0.00500	1	09/19/2019 02:08	WG1348004
Magnesium	6.25		1.00	1	09/19/2019 02:08	WG1348004
Nickel	ND		0.0100	1	09/19/2019 02:08	WG1348004
Selenium	ND		0.0100	1	09/19/2019 02:08	WG1348004
Silver	ND		0.00500	1	09/19/2019 02:08	WG1348004
Thallium	ND		0.0100	1	09/19/2019 02:08	WG1348004
Zinc	0.0635		0.0500	1	09/19/2019 02:08	WG1348004

Collected date/time: 09/16/19 04:30

L1139737

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Oil & Grease (Hexane Extr)	ND		5.62	1	09/18/2019 23:22	WG1347970

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Total Phenol by 4AAP	ND		0.0400	1	09/19/2019 16:31	WG1346740

Wet Chemistry by Method ASTM D7511-09

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Cyanide	ND		0.00500	1	09/23/2019 09:10	WG1348054

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Acrolein	ND		0.0500	1	09/20/2019 05:43	WG1348910
Acrylonitrile	ND		0.0100	1	09/20/2019 05:43	WG1348910
Benzene	ND		0.00100	1	09/20/2019 05:43	WG1348910
Bromoform	ND		0.00100	1	09/20/2019 05:43	WG1348910
Carbon tetrachloride	ND		0.00100	1	09/20/2019 05:43	WG1348910
Chlorobenzene	ND		0.00100	1	09/20/2019 05:43	WG1348910
Chlorodibromomethane	ND		0.00100	1	09/20/2019 05:43	WG1348910
Chloroethane	ND		0.00500	1	09/20/2019 05:43	WG1348910
2-Chloroethyl vinyl ether	ND		0.0500	1	09/20/2019 05:43	WG1348910
Chloroform	0.0165		0.00500	1	09/20/2019 05:43	WG1348910
Bromodichloromethane	0.00157		0.00100	1	09/20/2019 05:43	WG1348910
1,1-Dichloroethane	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,2-Dichloroethane	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,1-Dichloroethene	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,2-Dichloropropane	ND		0.00100	1	09/20/2019 05:43	WG1348910
cis-1,3-Dichloropropene	ND		0.00100	1	09/20/2019 05:43	WG1348910
trans-1,3-Dichloropropene	ND		0.00100	1	09/20/2019 05:43	WG1348910
Ethylbenzene	ND		0.00100	1	09/20/2019 05:43	WG1348910
Bromomethane	ND		0.00500	1	09/20/2019 05:43	WG1348910
Chloromethane	ND		0.00250	1	09/20/2019 05:43	WG1348910
Methylene Chloride	ND		0.00500	1	09/20/2019 05:43	WG1348910
1,1,2,2-Tetrachloroethane	ND		0.00100	1	09/20/2019 05:43	WG1348910
Tetrachloroethene	ND		0.00100	1	09/20/2019 05:43	WG1348910
Toluene	ND		0.00100	1	09/20/2019 05:43	WG1348910
trans-1,2-Dichloroethene	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,1,1-Trichloroethane	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,1,2-Trichloroethane	ND		0.00100	1	09/20/2019 05:43	WG1348910
Trichloroethene	ND		0.00100	1	09/20/2019 05:43	WG1348910
Vinyl chloride	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,2-Dichlorobenzene	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,3-Dichlorobenzene	ND		0.00100	1	09/20/2019 05:43	WG1348910
1,4-Dichlorobenzene	ND		0.00100	1	09/20/2019 05:43	WG1348910
(S) Toluene-d8	103		80.0-120		09/20/2019 05:43	WG1348910
(S) 4-Bromofluorobenzene	101		80.0-120		09/20/2019 05:43	WG1348910
(S) 1,2-Dichloroethane-d4	96.7		70.0-130		09/20/2019 05:43	WG1348910

ALDRIDGE P. RENEWAL GRAB

SAMPLE RESULTS - 02

ONE LAB. NATIONWIDE.

Collected date/time: 09/16/19 04:30

L1139737

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Acenaphthylene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Anthracene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Benzidine	ND	J4	0.0100	1	09/20/2019 19:06	WG1348076
Benzo(a)anthracene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Benzo(a)pyrene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Benzo(b)fluoranthene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Benzo(g,h,i)perylene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Benzo(k)fluoranthene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Bis(2-chloroethoxy)methane	ND		0.0100	1	09/20/2019 19:06	WG1348076
Bis(2-chloroethyl)ether	ND		0.0100	1	09/20/2019 19:06	WG1348076
Bis(2-chloroisopropyl)ether	ND		0.0100	1	09/20/2019 19:06	WG1348076
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	09/20/2019 19:06	WG1348076
4-Bromophenyl-phenylether	ND		0.0100	1	09/20/2019 19:06	WG1348076
Benzylbutyl phthalate	ND		0.00300	1	09/20/2019 19:06	WG1348076
2-Chloronaphthalene	ND	J4	0.00100	1	09/20/2019 19:06	WG1348076
4-Chlorophenyl-phenylether	ND		0.0100	1	09/20/2019 19:06	WG1348076
Chrysene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Dibenz(a,h)anthracene	ND		0.00100	1	09/20/2019 19:06	WG1348076
3,3-Dichlorobenzidine	ND		0.0100	1	09/20/2019 19:06	WG1348076
Diethyl phthalate	ND		0.00300	1	09/20/2019 19:06	WG1348076
Dimethyl phthalate	ND		0.00300	1	09/20/2019 19:06	WG1348076
Di-n-butyl phthalate	ND		0.00300	1	09/20/2019 19:06	WG1348076
2,4-Dinitrotoluene	ND		0.0100	1	09/20/2019 19:06	WG1348076
2,6-Dinitrotoluene	ND		0.0100	1	09/20/2019 19:06	WG1348076
Di-n-octyl phthalate	ND		0.00300	1	09/20/2019 19:06	WG1348076
1,2-Diphenylhydrazine	ND		0.0100	1	09/20/2019 19:06	WG1348076
Fluoranthene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Fluorene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Hexachlorobenzene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Hexachloro-1,3-butadiene	ND		0.0100	1	09/20/2019 19:06	WG1348076
Hexachloroethane	ND	J4	0.0100	1	09/20/2019 19:06	WG1348076
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Isophorone	ND		0.0100	1	09/20/2019 19:06	WG1348076
Naphthalene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Nitrobenzene	ND		0.0100	1	09/20/2019 19:06	WG1348076
n-Nitrosodimethylamine	ND		0.0100	1	09/20/2019 19:06	WG1348076
n-Nitrosodi-n-propylamine	ND		0.0100	1	09/20/2019 19:06	WG1348076
n-Nitrosodiphenylamine	ND		0.0100	1	09/20/2019 19:06	WG1348076
Phenanthrene	ND		0.00100	1	09/20/2019 19:06	WG1348076
Pyrene	ND		0.00100	1	09/20/2019 19:06	WG1348076
1,2,4-Trichlorobenzene	ND	J4	0.0100	1	09/20/2019 19:06	WG1348076
2-Chlorophenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
2,4-Dichlorophenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
2,4-Dimethylphenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
4,6-Dinitro-2-methylphenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
2,4-Dinitrophenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
2-Nitrophenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
4-Nitrophenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
4-Chloro-3-methylphenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
Pentachlorophenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
Phenol	ND		0.0100	1	09/20/2019 19:06	WG1348076
2,4,6-Trichlorophenol	NO		0.0100	1	09/20/2019 19:06	WG1348076
(S) 2-Fluorophenol	23.8		10.0-120		09/20/2019 19:06	WG1348076
(S) Phenol-d5	19.7		8.00-424		09/20/2019 19:06	WG1348076
(S) Nitrobenzene-d5	21.2		15.0-314		09/20/2019 19:06	WG1348076

ACCOUNT:

City of Huntsville WPC

PROJECT:

SDG:

L1139737

DATE/TIME:

09/23/19 16:09

PAGE:

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1 C
2 Tc
3 Ss
4 Cn
5 ST
6 GI
7 AI
8 Sc

(p-Chloro)
m-cresol



Collected date/time: 09/16/19 04:30

L1139737

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
(S) 2-Fluorobiphenyl	30.9		22.0-127		09/20/2019 19:06	WG1348076
(S) 2,4,6-Tribromophenol	48.5		10.0-153		09/20/2019 19:06	WG1348076
(S) p-Terphenyl-d14	64.6		29.0-141		09/20/2019 19:06	WG1348076

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc

09/23/19 16:09



Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J4	The associated batch QC was outside the established quality control range for accuracy.

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Cl
7	AI
8	Sc



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

T155248	
PAGE	1 of 1
Aldridge Permit Renewal	
HUNTWPCHAL	

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COMPANY/CLIENT NAME Huntsville WPC		CLIENT P.O. NUMBER		ENERSOLV PROJECT NUMBER		<table border="1"> <tr> <th colspan="10">REQUESTED ANALYSES</th> </tr> <tr> <td>ASICP, ASICP, BEICP</td> <td>CDICP, CRICP, CUICP</td> <td>NIICP, PBICP, SBICP</td> <td>SEICP, TLICP, ZNICP</td> <td>HG, CAICP, MGICP</td> <td>HARDMETALS</td> <td>DECNO3NO2, DECTDS</td> <td>DECTP, DECTKN</td> <td>DECCN</td> <td>OGHEX</td> <td>PHT</td> <td>625.1F2C</td> <td>624.1F2C</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										REQUESTED ANALYSES										ASICP, ASICP, BEICP	CDICP, CRICP, CUICP	NIICP, PBICP, SBICP	SEICP, TLICP, ZNICP	HG, CAICP, MGICP	HARDMETALS	DECNO3NO2, DECTDS	DECTP, DECTKN	DECCN	OGHEX	PHT	625.1F2C	624.1F2C																										
REQUESTED ANALYSES																																																																
ASICP, ASICP, BEICP	CDICP, CRICP, CUICP	NIICP, PBICP, SBICP	SEICP, TLICP, ZNICP	HG, CAICP, MGICP	HARDMETALS											DECNO3NO2, DECTDS	DECTP, DECTKN	DECCN	OGHEX	PHT	625.1F2C	624.1F2C																																										
CLIENT POINT OF CONTACT Pat Morgan		CLIENT PHYSICAL ADDRESS 1800 Vermont Road		CITY/STATE/ZIP Huntsville, AL 35802																																																												
CLIENT EMAIL pat.morgan@huntsvilleal.gov		PHONE NUMBER 256-883-3756		OTHER INFORMATION																																																												
SAMPLE COLLECTED BY <i>Pat Morgan</i>		EXPEDITED REPORT DELIVERY (SURCHARGE)				DATE DUE (REQUIRED)																																																										

Comments: Field parameters performed by client

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 1.7

COMPOSITE SAMPLER INFO	FIELD INFORMATION							Qty	TYPE	Parameter
	SM 4500H+B	SR 4500-CI D		SM 4500-O G		SM 2550B				
Start Date: 9/15/19	pH: 7.07	TRC: 0.30	DO: mg/l	Temp: 25.9°			1	Poly Pint HNO3	Metals	
Start Time: 0500	Date: 9/16/19	Date: 9/16/19	Date:	Date: 9/16/19			1	Poly Qrt Cool 6c	N/N, TDS	
Stop Date: 9/16/19	Time: 0445	Time: 0430	Time:	Time: 0444			1	Poly Pint H2SO4 Cool 6c	P, TKN	
Stop Time: 0400	Analyst: LG	Analyst: LG	Analyst:	Analyst: LG			2	GL WM 1000ml HCL Cool 6c	CN	
							1	Amber 1000ml H2SO4 Cool 6c	Phenolics	
							2	Amber 100ml Cool 6c	625	
							3	VOA 40ml Vials Cool 6c	624	

RELINQUISHED BY (SIGNATURE) <i>Pat Morgan</i>	DATE 9/16/19	TIME 927A	RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE 9/16/19	TIME 1059A	RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE 9/16/19	TIME 1700
RECEIVED BY (SIGNATURE) <i>[Signature]</i>	DATE 9/16/19	TIME 927A	RECEIVED BY (SIGNATURE) <i>[Signature]</i>	DATE 9/16/19	TIME 1059	RECEIVED BY (SIGNATURE) <i>[Signature]</i>	DATE	TIME
RECEIVED FOR LABORATORY USE BY (SIGNATURE) <i>[Signature]</i>			DATE 9/16/19			TIME 1059		

Accepted Rejected Accepted with Exception



Login #: L1199757 Client: City of Huntsville Date: 9.17.19 Evaluated by: KED

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	
Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc	Sample was frozen
Sample is biphasic	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments:

Out of temp due to login error

Client informed by:	Call	Email	Voice Mail	Date:	Time:
TSR (initials) <u>KED</u>	Client Contact:				

If this is Red this is the Original.

ANALYTICAL REPORT

March 05, 2020

City of Huntsville WPC

Sample Delivery Group: L1193507
Samples Received: 02/27/2020
Project Number:
Description: Aldridge Permit Renewal

Report To: Pat Morgan
1800 Vermont Road
Huntsville, AL 35802-2064

²Tc
³Ss
⁴Cn
⁵Sr
⁶Gl
⁷Al
⁸Sc

Entire Report Reviewed By:



Kelly Mercer
Project Manager

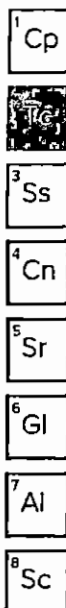
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

ALDRIDGE P. RENEWAL COMP L1193507-01 WW

Collected by: Client
Collected date/time: 02/27/20 04:50
Received date/time: 02/27/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1434556	1	02/29/20 12:00	02/29/20 12:00	TRB	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1434908	1	02/27/20 11:32	02/28/20 08:30	JDR	Decatur, AL
Wet Chemistry by Method 300.0	WG1434725	1	02/27/20 12:30	02/27/20 12:30	LLW	Decatur, AL
Wet Chemistry by Method 4500-Norg C	WG1435646	1	02/28/20 06:00	02/28/20 12:26	AFN	Decatur, AL
Wet Chemistry by Method EPA 365.3	WG1435131	1	02/28/20 10:40	02/28/20 16:15	JTM	Decatur, AL
Mercury by Method 245.1	WG1436738	1	03/02/20 13:15	03/02/20 19:58	TCT	Mt. Juliet, TN
Metals (ICP) by Method 200.7	WG1434556	1	02/28/20 13:02	02/29/20 12:00	TRB	Mt. Juliet, TN

ALDRIDGE P. RENEWAL GRAB L1193507-02 WW

Collected by: Client
Collected date/time: 02/27/20 04:50
Received date/time: 02/27/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 1664A	WG1435387	1	02/28/20 06:23	02/28/20 13:34	DLH	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1437119	1	03/03/20 11:58	03/03/20 17:30	BAM	Mt. Juliet, TN
Wet Chemistry by Method ASTM D7511-12	WG1437100	1	03/03/20 10:31	03/03/20 10:31	JDR	Decatur, AL
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1436050	1	02/29/20 15:51	02/29/20 15:51	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1436801	1	03/02/20 17:36	03/04/20 15:30	AO	Mt. Juliet, TN

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



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

Kelly Mercer
Project Manager

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

Collected date/time: 02/27/20 04:50

L1193507

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Hardness (calculated) as CaCO ₃	92.4		2.50	1	02/29/2020 12:00	WG1434556

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Dissolved Solids	115		1.00	1	02/28/2020 08:30	WG1434908

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Nitrate-Nitrite	0.631		0.0600	1	02/27/2020 12:30	WG1434725

Wet Chemistry by Method 4500-Norg C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Kjeldahl Nitrogen, TKN	6.02		1.50	1	02/28/2020 12:26	WG1435646

Wet Chemistry by Method EPA 365.3

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Phosphorus	ND		1.00	1	02/28/2020 16:15	WG1435131

Mercury by Method 245.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Mercury	ND		0.000200	1	03/02/2020 19:58	WG1436738

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Antimony	ND		0.0100	1	02/29/2020 12:00	WG1434556
Arsenic	ND		0.0100	1	02/29/2020 12:00	WG1434556
Beryllium	ND		0.00200	1	02/29/2020 12:00	WG1434556
Cadmium	ND		0.00200	1	02/29/2020 12:00	WG1434556
Calcium	30.2		1.00	1	02/29/2020 12:00	WG1434556
Chromium	ND		0.0100	1	02/29/2020 12:00	WG1434556
Copper	0.0640		0.0100	1	02/29/2020 12:00	WG1434556
Lead	ND		0.00500	1	02/29/2020 12:00	WG1434556
Magnesium	4.10		1.00	1	02/29/2020 12:00	WG1434556
Nickel	ND		0.0100	1	02/29/2020 12:00	WG1434556
Selenium	ND		0.0100	1	02/29/2020 12:00	WG1434556
Silver	ND		0.00500	1	02/29/2020 12:00	WG1434556
Thallium	ND		0.0100	1	02/29/2020 12:00	WG1434556
Zinc	ND		0.0500	1	02/29/2020 12:00	WG1434556

→ use 1/2 RDL
for org calculation.

ALDRIDGE P. RENEWAL GRAB

Collected date/time: 02/27/20 04:50

SAMPLE RESULTS - 02

L1193507

ONE LAB. NATIONWIDE

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Extr)	ND		5.56	1	02/28/2020 13:34	WG1435387

Wet Chemistry by Method 420.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Total Phenol by 4AAP	ND	J6	0.0400	1	03/03/2020 17:30	WG1437119

Wet Chemistry by Method ASTM D7511-12

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Cyanide	ND		0.00500	1	03/03/2020 10:31	WG1437100

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acrolein	ND		0.0500	1	02/29/2020 15:51	WG1436050
Acrylonitrile	ND		0.0100	1	02/29/2020 15:51	WG1436050
Benzene	ND		0.00100	1	02/29/2020 15:51	WG1436050
Bromoform	ND		0.00100	1	02/29/2020 15:51	WG1436050
Carbon tetrachloride	ND		0.00100	1	02/29/2020 15:51	WG1436050
Chlorobenzene	ND		0.00100	1	02/29/2020 15:51	WG1436050
Chlorodibromomethane	ND		0.00100	1	02/29/2020 15:51	WG1436050
Chloroethane	ND		0.00500	1	02/29/2020 15:51	WG1436050
2-Chloroethyl vinyl ether	ND		0.0500	1	02/29/2020 15:51	WG1436050
Chloroform	ND		0.00500	1	02/29/2020 15:51	WG1436050
Bromodichloromethane	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,1-Dichloroethane	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,2-Dichloroethane	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,1-Dichloroethene	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,2-Dichloropropane	ND		0.00100	1	02/29/2020 15:51	WG1436050
cis-1,3-Dichloropropene	ND		0.00100	1	02/29/2020 15:51	WG1436050
trans-1,3-Dichloropropene	ND		0.00100	1	02/29/2020 15:51	WG1436050
Ethylbenzene	ND		0.00100	1	02/29/2020 15:51	WG1436050
Bromomethane	ND		0.00500	1	02/29/2020 15:51	WG1436050
Chloromethane	ND		0.00250	1	02/29/2020 15:51	WG1436050
Methylene Chloride	ND		0.00500	1	02/29/2020 15:51	WG1436050
1,1,2,2-Tetrachloroethane	ND		0.00100	1	02/29/2020 15:51	WG1436050
Tetrachloroethene	ND		0.00100	1	02/29/2020 15:51	WG1436050
Toluene	ND		0.00100	1	02/29/2020 15:51	WG1436050
trans-1,2-Dichloroethene	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,1,1-Trichloroethane	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,1,2-Trichloroethane	ND		0.00100	1	02/29/2020 15:51	WG1436050
Trichloroethene	ND		0.00100	1	02/29/2020 15:51	WG1436050
Vinyl chloride	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,2-Dichlorobenzene	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,3-Dichlorobenzene	ND		0.00100	1	02/29/2020 15:51	WG1436050
1,4-Dichlorobenzene	ND		0.00100	1	02/29/2020 15:51	WG1436050
(S) Toluene-d8	103		80.0-120		02/29/2020 15:51	WG1436050
(S) 4-Bromofluorobenzene	96.1		80.0-120		02/29/2020 15:51	WG1436050
(S) 1,2-Dichloroethane-d4	103		70.0-130		02/29/2020 15:51	WG1436050

ALDRIDGE P. RENEWAL GRAB

SAMPLE RESULTS - 02

ONE LAB. NATIONWIDE.

Collected date/time: 02/27/20 04:50

L1193507

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Acenaphthylene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Anthracene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Benzidine	ND		0.0100	1	03/04/2020 15:30	WG1436801
Benzo(a)anthracene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Benzo(a)pyrene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Benzo(b)fluoranthene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Benzo(g,h,i)perylene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Benzo(k)fluoranthene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Bis(2-chloroethoxy)methane	ND		0.0100	1	03/04/2020 15:30	WG1436801
Bis(2-chloroethyl)ether	ND		0.0100	1	03/04/2020 15:30	WG1436801
2,2-Oxybis(1-Chloropropane)	ND		0.0100	1	03/04/2020 15:30	WG1436801
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	03/04/2020 15:30	WG1436801
4-Bromophenyl-phenylether	ND		0.0100	1	03/04/2020 15:30	WG1436801
Benzylbutyl phthalate	ND		0.00300	1	03/04/2020 15:30	WG1436801
2-Chloronaphthalene	ND		0.00100	1	03/04/2020 15:30	WG1436801
4-Chlorophenyl-phenylether	ND		0.0100	1	03/04/2020 15:30	WG1436801
Chrysene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Dibenz(a,h)anthracene	ND		0.00100	1	03/04/2020 15:30	WG1436801
3,3-Dichlorobenzidine	ND		0.0100	1	03/04/2020 15:30	WG1436801
Diethyl phthalate	ND		0.00300	1	03/04/2020 15:30	WG1436801
Dimethyl phthalate	ND		0.00300	1	03/04/2020 15:30	WG1436801
Di-n-butyl phthalate	ND		0.00300	1	03/04/2020 15:30	WG1436801
2,4-Dinitrotoluene	ND		0.0100	1	03/04/2020 15:30	WG1436801
2,6-Dinitrotoluene	ND		0.0100	1	03/04/2020 15:30	WG1436801
Di-n-octyl phthalate	ND		0.00300	1	03/04/2020 15:30	WG1436801
1,2-Diphenylhydrazine	ND		0.0100	1	03/04/2020 15:30	WG1436801
Fluoranthene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Fluorene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Hexachlorobenzene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Hexachloro-1,3-butadiene	ND		0.0100	1	03/04/2020 15:30	WG1436801
Hexachloroethane	ND		0.0100	1	03/04/2020 15:30	WG1436801
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Isophorone	ND		0.0100	1	03/04/2020 15:30	WG1436801
Naphthalene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Nitrobenzene	ND		0.0100	1	03/04/2020 15:30	WG1436801
n-Nitrosodimethylamine	ND		0.0100	1	03/04/2020 15:30	WG1436801
n-Nitrosodi-n-propylamine	ND		0.0100	1	03/04/2020 15:30	WG1436801
n-Nitrosodiphenylamine	ND		0.0100	1	03/04/2020 15:30	WG1436801
Phenanthrene	ND		0.00100	1	03/04/2020 15:30	WG1436801
Pyrene	ND		0.00100	1	03/04/2020 15:30	WG1436801
1,2,4-Trichlorobenzene	ND		0.0100	1	03/04/2020 15:30	WG1436801
2-Chlorophenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
2,4-Dichlorophenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
2,4-Dimethylphenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
4,6-Dinitro-2-methylphenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
2,4-Dinitrophenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
2-Nitrophenol	ND		D.D100	1	03/04/2020 15:30	WG1436801
4-Nitrophenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
4-Chloro-3-methylphenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
Pentachlorophenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
Phenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
2,4,6-Trichlorophenol	ND		0.0100	1	03/04/2020 15:30	WG1436801
(S) 2-Fluorophenol	31.1		10.0-120		03/04/2020 15:30	WG1436801
(S) Phenol-d5	20.5		8.00-424		03/04/2020 15:30	WG1436801
(S) Nitrobenzene-d5	48.3		15.0-314		03/04/2020 15:30	WG1436801

1 Cr
2 Tc
3 Ss
4 Cn
5 Sr
6 Gl
7 Al
8 Sc

Collected date/time: 02/27/20 04:50

L1193507

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
(S) 2-Fluorobiphenyl	53.7		22.0-127		03/04/2020 15:30	WG1436801
(S) 2,4,6-Tribromophenol	65.3		10.0-153		03/04/2020 15:30	WG1436801
(S) p-Terphenyl-d14	70.3		29.0-141		03/04/2020 15:30	WG1436801

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate, used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 GI
- 7 AI
- 8 Sc

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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

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

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

State Accreditations

Alabama	40660	Nebraska	NE-05-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	EB7487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CLO069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	TN04704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

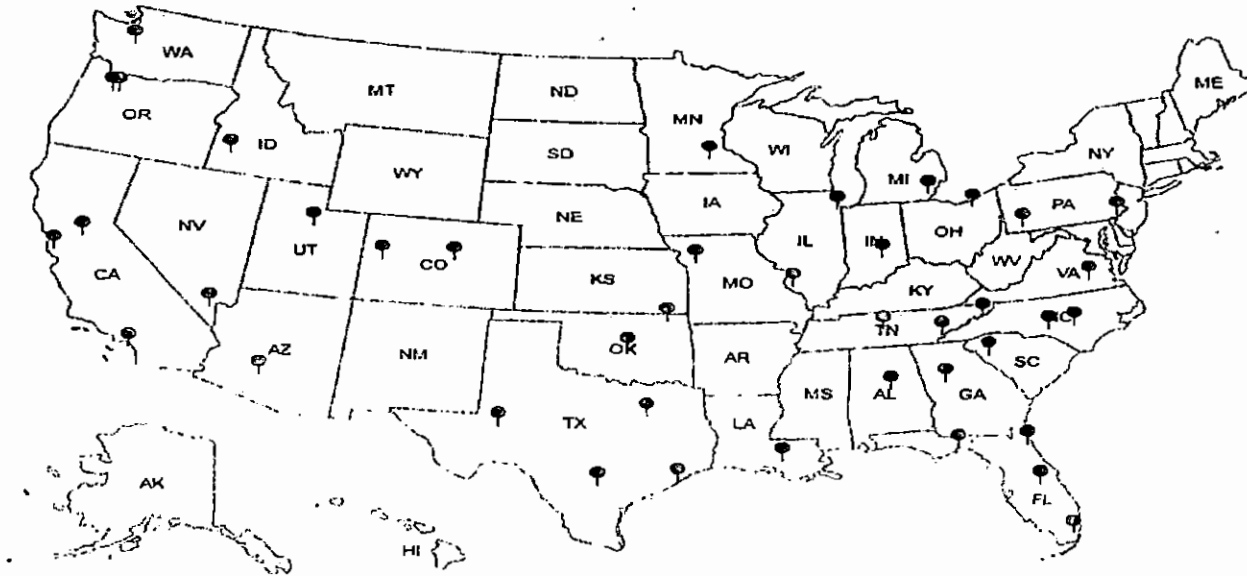
Third Party Federal Accreditations

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

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

Our Locations

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



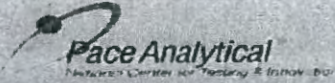
ACCOUNT:
City of Huntsville WPC

PROJECT:

SDG:
L1193507

DATE/TIME:
03/05/20 09:52

PAGE:
10 of 11



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

T155248
 PAGE 1 of 1
 Aldridge Permit Renewal
 HUNTWPCAL

www.pacenational.com

COMPANY/CLIENT NAME Huntsville WPC	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER	REQUESTED ANALYSES												
CLIENT POINT OF CONTACT Pat Morgan	CLIENT PHYSICAL ADDRESS 1800 Vermont Road	CITY/STATE/ZIP Huntsville, AL 35802	AGICP, ASICP, BEICP	CDICP, CRICP, CUICP	NIICP, PBICP, SBICP	SEICP, TLICP, ZNICP	HG, CAICP, MGICP	HARDMETALS	DECO3NO2, DECTDS	DEOPT, DECTKN	DECON	OGHEX	PHT	825-1F2C	V824-1F2C
CLIENT EMAIL pat.morgan@huntsvilleal.gov	PHONE NUMBER 256-883-3766	OTHER INFORMATION													
SAMPLE COLLECTED BY		EXPEDITED REPORT DELIVERY (SURCHARGE)													
		DATE DUE (REQUIRED)													

PACE ANALYTICAL LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	AGICP, ASICP, BEICP	CDICP, CRICP, CUICP	NIICP, PBICP, SBICP	SEICP, TLICP, ZNICP	HG, CAICP, MGICP	HARDMETALS	DECO3NO2, DECTDS	DEOPT, DECTKN	DECON	OGHEX	PHT	825-1F2C	V824-1F2C	
11193507-1	Aldridge Permit Renewal Comp	2-27-20	0450		X	X	X	X	X	X	X	X	X						
-2	Aldridge Permit Renewal Grab	2-27-20	0450	X										X	X	X	X	X	

Comments: Field parameters performed by client

Collector to complete shaded areas, as applicable

UPL 19.5-13, Lot# 19.06664
 IR Code 0313

UPL 19.5-13, Lot# 19.06664
 IR Code 0313

SAMPLE TEMPERATURE RECEIVED @ 1.3

COMPOSITE SAMPLER INFO	FIELD INFORMATION				Qty	TYPE	Parameter
	SM 4500H+B	SM 4500-CI-D	SM 4500-O-G	SM 2550B			
Start Date	pH	TRC	DO	Temp	1	Poly Pint HNO3	Metals
Stop Date	au	mg/l	mg/l	deg C			
Start Time	Date	Date	Date	Date	1	Poly Pint H2SO4 Cool 6c	P, TKN
Stop Time	Time	Time	Time	Time			
Start Date	Analyst	Analyst	Analyst	Analyst	2	GL WM 1000ml HCL Cool 6c	OG
Stop Date							
Start Date					1	Amber 1000ml H2SO4 Cool 6c	Phenolics
Stop Date							
Start Date					2	Amber 100ml Cool 6c	625
Stop Date							
Start Date					3	VOA 40ml Visis Cool 6c	624
Stop Date							

RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE 2/27/20	TIME 10:00A	RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE 2/27/20	TIME 10:30A	RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE 2/27/20	TIME 1:00P
RECEIVED BY (SIGNATURE) <i>[Signature]</i>	DATE 2/27/20	TIME 06:00A	RECEIVED BY (SIGNATURE) <i>[Signature]</i>	DATE 2/27/20	TIME 10:30	RECEIVED BY (SIGNATURE) <i>[Signature]</i>	DATE 2-28-20	TIME 08:33
RECEIVED FOR LABORATORY USE BY (SIGNATURE) <i>[Signature]</i>	DATE 2/27/20	TIME 10:30	SAMPLE STATUS					

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