LANCE R. LEFLEUR
DIRECTOR

ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

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

MAY 10 2016

Shane Cook, Director
City of Huntsville
Post Office Box 308
Huntsville, AL 35804

RE: Draft Permit
NPDES Permit No. AL0057428
Chase Area 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, if you are not already participating in the Department's web-based electronic environmental (E2) Reporting System Program for submittal of discharge monitoring reports (DMRs), Part I.C.1.c of your permit will require you to apply for participation in the E2 Program within 180 days of the effective date of the permit unless valid justification as to why you cannot participate is submitted in writing. 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.

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 at (334) 271-7811.

Sincerely,

Nicholas Lowe

Nicholas Lowe
Municipal Section
Water Division

/mfc
Enclosure

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

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

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

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

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

Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE:	CITY OF HUNTSVILLE POST OFFICE BOX 308 HUNTSVILLE, ALABAMA 35804	
FACILITY LOCATION:	HUNTSVILLE CHASE AREA WWTP 907 WESS TAYLOR ROAD HUNTSVILLE, ALABAMA MADISON COUNTY	(4.0 MGD)
PERMIT NUMBER:	AL0057428	
RECEIVING WATERS:	FLINT RIVER	

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (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-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

Draft

Alabama Department of Environmental Management

MUNICIPAL SECTION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

TABLE OF CONTENTS

PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS 4

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS 4

1. Outfall 0011 Discharge Limits - Effluent 4
2. Outfall 0011 Discharge Limits (continued) - Effluent 5
3. Outfall 001T Discharge Limits – Chronic Toxicity 6
4. Outfall 002S Discharge Limits - Stormwater 7

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS 8

1. Representative Sampling 8
2. Measurement Frequency 8
3. Test Procedures 8
4. Recording of Results 9
5. Records Retention and Production 9
6. Reduction, Suspension or Termination of Monitoring and/or Reporting 9
7. Monitoring Equipment and Instrumentation 9

C. DISCHARGE REPORTING REQUIREMENTS 9

1. Reporting of Monitoring Requirements 9
2. Noncompliance Notification 11

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS 13

1. Anticipated Noncompliance 13
2. Termination of Discharge 13
3. Updating Information 13
4. Duty to Provide Information 13

E. SCHEDULE OF COMPLIANCE 13

1. Compliance with discharge limits 13
2. Schedule 13

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES 14

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS 14

1. Facilities Operation and Maintenance 14
2. Best Management Practices (BMP) 14
3. Certified Operator 14

B. OTHER RESPONSIBILITIES 14

1. Duty to Mitigate Adverse Impacts 14
2. Right of Entry and Inspection 14

C. BYPASS AND UPSET 14

1. Bypass 14
2. Upset 15

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES 15

1. Duty to Comply 15
2. Removed Substances 16
3. Loss or Failure of Treatment Facilities 16
4. Compliance With Statutes and Rules 16

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE 16

1. Duty to Reapply or Notify of Intent to Cease Discharge 16
2. Change in Discharge 16
3. Transfer of Permit 17
4. Permit Modification and Revocation 17
5. Termination 18

6. Suspension 18
7. Stay 18
F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION 18
G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS 18
H. PROHIBITIONS 18
PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS 20
A. CIVIL AND CRIMINAL LIABILITY 20
1. Tampering 20
2. False Statements 20
3. Permit Enforcement 20
4. Relief from Liability 20
B. OIL AND HAZARDOUS SUBSTANCE LIABILITY 20
C. PROPERTY AND OTHER RIGHTS 20
D. AVAILABILITY OF REPORTS 21
E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES 21
F. COMPLIANCE WITH WATER QUALITY STANDARDS 21
G. GROUNDWATER 21
H. DEFINITIONS 22
I. SEVERABILITY 24
PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS 25
A. SLUDGE MANAGEMENT PRACTICES 25
1. Applicability 25
2. Submitting Information 25
3. Reopener or Modification 25
B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR CHRONIC TOXICITY 25
1. Chronic Toxicity Test 25
2. General Test Requirements 26
3. Reporting Requirements 26
4. Additional Testing Requirements 26
5. Test Methods 26
6. Effluent Toxicity Testing Reports 27
C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS 28
D. PLANT CLASSIFICATION 28
E. POLLUTANT SCANS 29
F. STORM WATER REQUIREMENTS 29
1. Prohibitions 29
2. Operational and Management Practices 29
3. Monitoring Requirements 30

ATTACHMENT:

FORM 421 NON-COMPLIANCE NOTIFICATION FORM

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
Oxygen, Dissolved (DO) 00300 1 0 0	*****	*****	*****	*****	6.0 mg/l	*****	*****	E	GRAB	C	*****
pH 00400 1 0 0	*****	*****	*****	*****	6.0 S.U.	9.0 S.U.	*****	E	GRAB	C	*****
Solids, Total Suspended 00530 1 0 0	1000 lbs/day	1501 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 1 0 0	333 lbs/day	500 lbs/day	10.0 mg/l	15.0 mg/l	*****	*****	*****	E	COMP24	C	S
Nitrogen, Ammonia Total (As N) 00610 1 0 0	667 lbs/day	1000 lbs/day	20.0 mg/l	30.0 mg/l	*****	*****	*****	E	COMP24	C	W
Nitrogen, Kjeldahl Total (As N) 00625 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Nitrite Plus Nitrate Total 1 Det. (As N) 00630 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Phosphorus, Total (As P) 00665 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Zinc Total Recoverable 01094 1 0 0	*****	*****	2.4 mg/l	*****	*****	2.4 mg/l	*****	E	COMP24	G	*****

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

(1) Sample Location
I – Influent
E – Effluent
X – End Chlorine Contact Chamber
K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.
RS - Receiving Stream

(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 (June – September)
ECW = E. coli Winter (October – May)

2. Outfall 0011 Discharge Limits (continued) - 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
Flow, In Conduit or Thru Treatment Plant 50050 1 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	CONTIN	A	*****
Chlorine, Total Residual See note (5) 50060 1 0 0	*****	*****	0.133 mg/l	*****	*****	0.229 mg/l	*****	E	GRAB	C	*****
E. Coli 51040 1 0 0	*****	*****	126 col/100mL	*****	*****	487 col/100mL	*****	E	GRAB	C	ECS
E. Coli 51040 1 0 0	*****	*****	548 col/100mL	*****	*****	2507 col/100mL	*****	E	GRAB	C	ECW
BOD, Carbonaceous 05 Day, 20C 80082 1 0 0	667 lbs/day	1000 lbs/day	20.0 mg/l	30.0 mg/l	*****	*****	*****	E	COMP24	C	S
BOD, Carbonaceous 05 Day, 20C 80082 1 0 0	834 lbs/day	1251 lbs/day	25 mg/l	37.5 mg/l	*****	*****	*****	E	COMP24	C	W
BOD, Carbonaceous 05 Day, 20C 80082 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP24	C	*****
BOD, Carb-5 Day, 20 Deg C, Percent Remvl 80091 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****
Solids, Suspended Percent Removal 81011 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****

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

(1) Sample Location
I – Influent
E – Effluent
X – End Chlorine Contact Chamber
K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.
RS - Receiving Stream

(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 (June – September)
ECW = E. coli Winter (October – May)

(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 "NODI=9" on the monthly DMR.

3. Outfall 001T Discharge Limits – Chronic 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

(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 (June – September)
ECW = E. coli Winter (October – May)

(5) See Part IV.B. for Effluent Toxicity Limitations and Biomonitoring Requirements For Chronic Toxicity.

4. 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) Measurement Frequency	(4) Seasonal
pH 00400 1 0 0	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	E	GRAB	J	*****
Solids, Total Suspended 00530 1 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
Oil and Grease 00556 1 0 0	*****	*****	*****	*****	*****	15 mg/l	*****	E	GRAB	J	*****
Nitrogen, Ammonia Total (As N) 00610 1 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
Nitrogen, Kjeldahl Total (As N) 00625 1 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
Nitrite Plus Nitrate Total 1 Det. (As N) 00630 1 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
Phosphorus, Total (As P) 00665 1 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
Flow, In Conduit or Thru Treatment Plant 50050 1 0 0	*****	*****	*****	*****	*****	REPORT MGD	*****	E	CALCTD	J	*****
E. Coli 51040 1 0 0	*****	*****	*****	*****	*****	REPORT col/100mL	*****	E	GRAB	J	*****
BOD, Carbonaceous 05 Day, 20C 80082 1 0 0	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	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

(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 (June – September)
ECW = E. coli Winter (October – May)

(5) See Part IV.F. for Stormwater 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;

c. The dates and times the analyses were performed;

d. The name(s) of the person(s) who performed the analyses;

e. The analytical techniques or methods used, including source of method and method number; and

f. The results of all required analyses.

5. Records Retention and Production

a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.

b. All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

6. Reduction, Suspension or Termination of Monitoring and/or Reporting

a. The Director may, with respect to any point source identified in Provision I.A. of this permit, authorize the Permittee to reduce, suspend or terminate the monitoring and/or reporting required by this permit upon the submission of a written request for such reduction, suspension or termination by the Permittee, supported by sufficient data which demonstrates to the satisfaction of the Director that the discharge from such point source will continuously meet the discharge limitations specified in Provision I.A. of this permit.

b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this permit until written authorization to reduce, suspend or terminate such monitoring and/or reporting is received by the Permittee from the Director.

7. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements

a. The Permittee shall conduct the required monitoring in accordance with the following schedule:

(1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.

(2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).

(3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).

(4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.

b. The Permittee shall submit discharge monitoring reports (DMRs) on the forms approved by the Department and in accordance with the following schedule:

(1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

(2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

(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.

(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.

c. The Department is utilizing a web-based electronic environmental (E2) DMR reporting system for submittal of DMRs. **If the permittee is not already participating in the E2 DMR system, the permittee must apply for participation in the system within 180 days of coverage under this permit unless the facility submits in writing valid justification as to why they cannot participate and the Department approves in writing utilization of hard copy DMR submittals.** Once the permittee is enrolled in the E2 DMR system, the permittee must utilize the system for the submittal of DMRs unless otherwise allowed by this permit. To participate in the E2 DMR system, the Permittee Participation Package may be downloaded online at **https://e2.adem.alabama.gov/npdes**. If the E2 DMR system is down (i.e., electronic submittal of DMR data is unable to be completed due to technical problems originating with the Department's 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 required submittal date. However, if the E2 DMR system is down on the 28th day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility 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 DMR system resuming operation, the permittee shall enter the data into the E2 DMR 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 a permittee is allowed to submit via the US Postal Service, 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. 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 form and the increased frequency shall be indicated on the DMR form. 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 form.

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. The Permittee may certify in writing that a discharge will not occur for an extended period of time and after such certification shall not be required to submit monitoring reports. Written notification of a planned resumption of discharge shall be submitted at least 30 days prior to resumption of the discharge. If an unplanned resumption of discharge occurs, written notification shall be submitted within 7 days of the resumption. In any case, all discharges shall comply with all provisions of this permit.

f. All reports and forms 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 36110-2059

DMRs required to be submitted by this permit shall be addressed to:

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

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 Notification

a. The Permittee must 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 report any of the above occurrences, describing the circumstances and potential effects, to the Department within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c,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 must 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. Form 421 must be submitted to the Director or Designee in accordance with Provisions I.C.2a. or b. 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 not corrected by the due date of the written report, then the Permittee is to state the anticipated timeframe that is expected to transpire before the noncompliance is resolved; 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, including all steps taken to prevent 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. The Permittee shall also report notification of the noncompliance event to any other affected entity such as the public.

e. The Permittee shall keep an updated record of all known wastewater discharge points that are not authorized as permitted outfalls, including but not limited to SSOs. The Permittee shall submit annual Municipal Water Pollution Prevention Plan (MWPP) reports to the Department each year by May 31st for the prior calendar year period beginning January 1st and ending December 31st. The Annual MWPP 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 MWPP shall also provide a list of any discharges reported in accordance with Provision I.C.2.a. The Permittee shall submit with its Annual MWPP Report the following information for each known unpermitted discharge that occurs:

(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 street address or any other appropriate method;

(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 or plans to eliminate future discharges.

f. The Permittee shall report SSO and other illicit or anomalous discharge events on Form 415 in accordance with Part I.C.2.a. This form is available on the ADEM web page or upon request from the Permittee.

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 30l(c), 30l(g), 30l(h), 30l(k), or 3l6(a) of the FWPCA or for fundamentally different factors;

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

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

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

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

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

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

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 **9 percent** effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 7-day, 10-year low flow period.

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

2. General Test Requirements

   a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.

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

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

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

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

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

   d. Toxicity tests shall be conducted for the duration of this permit in the month of **October**. 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 JANUARY, APRIL, JULY, and OCTOBER.

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, "NODI = 9" (conditional monitoring) 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 "NODI = B" or "0". The Permittee shall then be considered to be in compliance with the daily maximum concentration limit for TRC.

3. This permit contains a maximum allowable TRC level in the effluent. The Permittee is responsible for determining the minimum TRC level needed in the chlorine contact chamber to comply with E.coli limits. The effluent shall be dechlorinated if necessary to meet the maximum allowable effluent TRC level.

4. The sample collection point for effluent TRC shall be at a point downstream of the chlorine contact chamber (downstream of dechlorination if applicable). The exact location is to be approved by the Director.

D. PLANT CLASSIFICATION

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

E. 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.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – INDUSTRIAL AND MUNICIPAL SECTIONS
NONCOMPLIANCE NOTIFICATION FORM

PERMITTEE NAME: _____ PERMIT NO: _____

FACILITY LOCATION: _____

DMR REPORTING PERIOD: _____

1. DESCRIPTION OF DISCHARGE: (Include outfall number (s))

2. DESCRIPTION OF NON-COMPLIANCE: (Attach additional pages if necessary):

LIST EFFLUENT VIOLATIONS (If applicable)			
Outfall Number (s)	NONCOMPLIANCE PARAMETER(S)	Result Reported (Include units)	Permit Limit (Include units)

LIST MONITORING / REPORTING VIOLATIONS (If applicable)		
Outfall Number (s)	NONCOMPLIANCE PARAMETER(S)	Monitoring / Reporting Violation (Provide description)

3. CAUSE OF NON-COMPLIANCE (Attach additional pages if necessary):

4. PERIOD OF NONCOMPLIANCE: (Include exact date(s) and time(s) or, if not corrected, the anticipated time the noncompliance is expected to continue):

5. DESCRIPTION OF STEPS TAKEN AND/OR BEING TAKEN TO REDUCE OR ELIMINATE THE NONCOMPLYING DISCHARGE AND TO PREVENT ITS RECURRENCE (attach additional pages if necessary):

"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 AND TITLE OF RESPONSIBLE OFFICIAL (type or print)

_____/_____
SIGNATURE OF RESPONSIBLE OFFICIAL / DATE SIGNED

ADEM Form 421 09/05

LANCE R. LEFLEUR
DIRECTOR

ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

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

FACT SHEET

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

Date: May 5, 2016 **Prepared By: Nicholas Lowe**

NPDES Permit No. AL0057428

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant and Location if Different From Mailing Address

Applicant Name and Address:	Facility Location:
City of Huntsville	Chase Area WWTP
Post Office Box 308	907 Wess Taylor Road
Huntsville, Alabama 35804	Huntsville, Alabama 35811

b. Description of Applicant's Facility or Activity Generating the Discharge

Municipal Wastewater Treatment Plant

For the Outfall latitudes and longitudes see the permit application

c. Applicant's Receiving Waters

Receiving Waters	Classification
Flint River	Fish &Wildlife

d. Quantitative Description of Proposed Discharges

See attached draft permit and permit application

2. PROPOSED DISCHARGE LIMITATIONS

See attached draft permit

3. STATEMENT OF BASIS FOR PERMIT LIMITATIONS

See attached permit rationale

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

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

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

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

4. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Alabama Department of Environmental Management proposes to issue an NPDES permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Interested persons are invited to submit written comments on the permit application or on proposed determinations to the following address:

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

All comments received prior to the closure of the public notice period (see attached public notice) will be considered in the formulation of final determinations with regard to this application.

b. Public Hearing

A written request for a public hearing may also be filed with the public notice period and must state the nature of the issues proposed to be raised in the hearing. 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 the permit application or draft permit or group of permits. A request for a hearing should be filed with the Department at the following address:

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

The Director may hold a public hearing if he determines that useful information and data may be obtained thereby. Public notice of such a hearing will be published at least 30 days prior to the hearing in a newspaper having general circulation in the geographical area of the discharge and will be sent to those on the ADEM mailing list at least thirty days prior to the hearing.

c. Issuance of the Permit

Upon the expiration of the comment period and, if applicable, completion of the public hearing process a response to all significant comments will be prepared. After consideration of all comments received during the notice period or as the result of a public hearing, the response to comments, and of the requirements of the Alabama Water Pollution Control Act and appropriate regulations, the Director will make a final decision regarding permit issuance. **The permit record, including the response to comments, will be available to the public and 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, the proposed permit contained in the Director's determination shall be issued and effective; and will be the final action of the Alabama Department of Environmental Management.

d. Appeal Procedures

Any person adversely affected by the Director's final decision may submit an appeal or a request for a stay of the permit or one or more provisions of the permit. Such requests should be received by the

Environmental Management Commission within thirty days of issuance of the permit. Requests should be submitted to the Chairperson 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:

(i) State the name, mailing address and telephone number of the person making such request;

(ii) Identify the interest of the appellant which is affected by the proposed issuance, denial or modification of the permit contained in the determination of the Director, and explain how and to what extent that interest would be directly and adversely affected by such determination;

(iii) Identify any persons whom the request represents;

(iv) State with particularity the issues proposed to be considered at the hearing;

(v) Include any terms and conditions with which the appellant proposes to revise or replace the determinations of the Director;

(vi) State the name, mailing address and telephone number of the attorney for the person making the request, if represented by an attorney; and

(vii) An original signature of the person making the request or such person's attorney.

The Commission may rule on the appeal or may hold an appeals hearing prior to making a ruling.

NPDES PERMIT RATIONALE

NPDES Permit No:	**AL0057428**	Date: 5/5/2016
Permit Applicant:	City of Huntsville Post Office Box 308 Huntsville, Alabama 35804	
Location:	Huntsville Chase Area WWTP 907 Wess Taylor Road Huntsville, Alabama 35811	
Draft Permit is:	Initial Issuance: Reissuance due to expiration: Modification of existing permit: Revocation and Reissuance:	 X
Basis for Limitations:	Water Quality Model: Reissuance with no modification: Instream calculation at 7Q10: Toxicity based: Secondary Treatment Levels: Other (described below):	DO, NH3-N, CBOD DO, pH, TSS, NH3-N, TRC, E. coli, CBOD, TSS % Removal, CBOD % Removal 9% TRC TSS, TSS % Removal, CBOD % Removal, CBOD (winter) Zinc, pH, E. coli
Design Flow in Million Gallons per Day:	4 MGD	
Major:	Yes	
Description of Discharge:	Outfall Number 001; Effluent discharge to Flint River, which is classified as Fish &Wildlife. Outfall Number 002; Storm water discharge to Flint River, which is classified as Fish &Wildlife.	

Discussion: This is a reissuance due to expiration.

The limits for Five Day Carbonaceous Biochemical Oxygen Demand (CBOD), Total Ammonia as Nitrogen (NH3-N), and Dissolved Oxygen (DO) are based on a Waste Load Allocation (WLA) model prepared by ADEM's Water Quality Branch on June 1, 2010. The monthly average limits for CBOD are 20.0 mg/L (summer) and 25.0 mg/L (winter). The monthly average limits for NH3-N are 10.0 mg/L (summer) and 20.0 mg/L (winter). The daily minimum limit for DO is 6.0 mg/L.

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 in the Permit.

The Total Residual Chlorine (TRC) limits of 0.133 mg/L (Monthly Average) and 0.229 mg/L (maximum daily) are based on the current Toxicity Rationale, which considers the available dilution and should be protective of chronic and acute criteria in the receiving stream. Monitoring for TRC is only applicable if chlorine is utilized for disinfection purposes. That is, if chlorine disinfection is discontinued, monitoring would not be applicable during the monitoring period, and "*9" should be entered on the monthly DMR.

The monthly average limit for Total Suspended Solids (TSS) is 30.0 mg/L. The limits for TSS % Removal and CBOD % Removal are 85%. These limits are based on requirements of 40 CFR part 133.102 regarding Secondary Treatment.

The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since the Flint River is classified as Fish & Wildlife, the limits for June through September are 126 col/100mL (monthly average) and 487 col/100mL (daily maximum), while the limits for October through May are 548 col/100mL (monthly average) and 2507 col/100mL (daily maximum).

Since this facility is classified as a Major Municipal Wastewater plant and receives industrial wastewater, the Department completed a reasonable potential analysis (RPA) of the discharge based on background data for the Flint River from station FLIM-1, DMR data, and 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. Based on the analysis, a reasonable potential exists to cause an in-stream water quality exceedances for Zinc. The previous permit included a limit for Zinc, which was calculated using an assumed hardness value for the Flint River. The reissuance of this permit will include a limit of 2.4 mg/L (monthly average and daily maximum), calculated using the background hardness data for the Flint River from station FLIM-1.

This permit imposes monitoring for the following nutrient-related parameters: Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN) and Nitrite plus Nitrate as Nitrogen (NO_2+NO_3-N). Monitoring for these nutrient-related parameters is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose nutrient limits on this discharge.

Chronic toxicity testing with two species (Ceriodaphnia and Pimephales) is being imposed in this permit. Toxicity testing is imposed for both survival and life-cycle impairment (i.e. growth and reproduction). Chronic testing at the IWC of 9 percent is required quarterly during the month of October.

The frequency of monitoring for most parameters is three days per week. The frequency of monitoring for Total Recoverable Zinc and nutrient-related parameters is once per month. Percent removals for TSS and CBOD are to be calculated monthly. Flow is to be monitored continuously, seven days per week.

In the permit application, the Permittee reported one storm water outfall at the treatment plant. Storm water monitoring at Outfall 002S will be required on an annual basis.

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

The segment of the Flint River, containing the discharge is a Tier 1 stream and is on the most recent 303(d) list for Turbidity. Total suspended solids associated with Wastewater Treatment Plants are typically organic in nature. Therefore, the Department does not expect this discharge to contribute to the

turbidity impairment in the Flint River. The Flint River does have an approved TMDL for pathogens. The TMDL does not require any pathogen reduction for this source.

Prepared by: Nicholas Lowe

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	**Huntsville Chase Area WWTP**	
NPDES Permit Number:	**AL0057428**	
Receiving Stream:	**Flint River**	
Facility Design Flow (Q_w):	**4.000 MGD**	
Receiving Stream $7Q_{10}$:	**68.500 cfs**	
Receiving Stream $1Q_{10}$:	**51.400 cfs**	
Winter Headwater Flow (WHF):	**86.20 cfs**	
Summer Temperature for CCC:	**28 deg. Celsius**	
Winter Temperature for CCC:	**18 deg. Celsius**	
Headwater Background NH_3-N Level:	**0.26 mg/l**	**(Summer)**
Headwater Background NH_3-N Level:	**0.98 mg/l**	**(Winter)**
Receiving Stream pH:	**7.0 s.u.**	
Headwater Background FC Level (summer):	**N./A.**	**(Only applicable for facilities with diffusers.)**
(winter)	**N./A.**	

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

$$\text{Stream Dilution Ration (SDR)} = \frac{Qw}{7Q10 + Qw} = \textbf{8.29\%}$$

AMMONIA TOXICITY LIMITATIONS

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

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

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

$$= \textbf{8.29\%} \qquad \textbf{Effluent-Dominated, CCC Applies}$$

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

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

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

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

= 27.1 mg/l NH3-N at 7Q10

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

= 56.9 mg/l NH3-N at Winter Flow

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

	DO-based NH3-N limit	Toxicity-based NH3-N limit
Summer	**20.00 mg/l NH3-N**	**27.10 mg/l NH3-N**
Winter	**10.00 mg/l NH3-N**	**56.90 mg/l NH3-N**

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

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

The following factors trigger toxicity testing requirements:

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

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

Chronic toxicity testing is required

Instream Waste Concentration (IWC) = $\frac{Qw}{7Q10 + Qw}$ = **8.29%**

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

DISINFECTION REQUIREMENTS

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

See the attached Disinfection Guidance for applicable stream standards.

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

	Stream Standard (colonies/100ml)	Effluent Limit (colonies/100ml)
E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)		
Monthly limit as monthly average (October through May):	548	**548**
Monthly limit as monthly aveage (June through September):	126	**126**
Daily Max (October through May):	2507	**2507**
Daily Max (June through September):	487	**487**
Enterococci (applies to Coastal)		
Monthly limit as geometric mean (October through May):	Not applicable	**Not applicable**
Monthly limit as geometric mean (June through September):	Not applicable	**Not applicable**
Daily Max (October through May):	Not applicable	**Not applicable**
Daily Max (June through September):	Not applicable	**Not applicable**

MAXIMUM ALLOWABLE CHLORINATION LIMITS

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

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

Maximum allowable TRC in effluent:	0.133 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	0.229 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: 5/5/2016

Facility Name: **Huntsville Chase Area WWTP**

NPDES No.: **AL0057428**

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

ID	Pollutant	Carcinogen "yes"	Type	Background from upstream source (C_{d2}) Daily Max µg/l	Background from upstream source (C_{d2}) Monthly Ave µg/l	Background Instream (C_s) Daily Max µg/l	Background Instream (C_s) Monthly Ave µg/l	Enter Max Daily Discharge as reported by Applicant (C_{dmax}) µg/l	Enter Avg Daily Discharge as reported by Applicant (C_{davg}) µg/l	Partition Coefficient (Stream / Lake)
1	Antimony		Metals	0	0	0	0	15.2	5.07	-
2	**Arsenic*,****	YES	Metals	0	0	0	0	0	0	0.574
3	Beryllium		Metals	0	0	0	0	0	0	-
4	Cadmium**		Metals	0	0	0	0	0	0	0.236
5	Chromium / Chromium III**		Metals	0	0	0	0	85	40.7	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	
7	Copper**		Metals	0	0	0	0	37.4	22.02	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.467
9	Mercury**		Metals	0	0	0	0	0.0181	0.007	0.000
10	Nickel**		Metals	0	0	0	0	150	99	0.505
11	Selenium		Metals	0	0	0	0	0	0	-
12	Silver		Metals	0	0	0	0	0	0	-
13	Thallium		Metals	0	0	0	0	0	0	-
14	Zinc**		Metals	0	0	0	0	608	158	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	80400	70200	195000	185000	-
18	Acrolein		VOC	0	0	0	0	0	0	-
19	**Acrylonitrile***	YES	VOC	0	0	0	0	0	0	-
20	**Aldrin**	YES	VOC	0	0	0	0	0	0	-
21	**Benzene***	YES	VOC	0	0	0	0	0	0	-
22	**Bromoform***	YES	VOC	0	0	0	0	0	0	-
23	**Carbon Tetrachloride***	YES	VOC	0	0	0	0	0	0	-
24	**Chlordane**	YES	VOC	0	0	0	0	0	0	-
25	Clorobenzene		VOC	0	0	0	0	0	0	-
26	**Chlorodibromo-Methane***	YES	VOC	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	-
29	**ChloroForm***	YES	VOC	0	0	0	0	0	0	-
30	**4,4'-DDD**	YES	VOC	0	0	0	0	0	0	-
31	**4,4'-DDE**	YES	VOC	0	0	0	0	0	0	-
32	**4.4'-DDT**	YES	VOC	0	0	0	0	0	0	-
33	**Dichlorobromo-Methane***	YES	VOC	0	0	0	0	0	0	-
34	1, 1-Dichloroethane		VOC	0	0	0	0	0	0	-
35	**1, 2-Dichloroethane***	YES	VOC	0	0	0	0	0	0	-
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	-
37	**1, 1-Dichloroethylene***	YES	VOC	0	0	0	0	0	0	-
38	1, 2-Dichloropropane		VOC	0	0	0	0	0	0	-
39	1, 3-Dichloro-Propylene		VOC	0	0	0	0	0	0	-
40	**Dieldrin**	YES	VOC	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	0	-
44	**Methylene Chloride***	YES	VOC	0	0	0	0	0	0	-
45	**1, 1, 2, 2-Tetrachloro-Ethane***	YES	VOC	0	0	0	0	0	0	-
46	**Tetrachloro-Ethylene***	YES	VOC	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	-
48	**Toxaphene**	YES	VOC	0	0	0	0	0	0	-
49	**Tributyltine (TBT)**	YES	VOC	0	0	0	0	0	0	-
50	1, 1, 1-Trichloroethane		VOC	0	0	0	0	0	0	-
51	**1, 1, 2-Trichloroethane***	YES	VOC	0	0	0	0	0	0	-
52	**Trichlorethylene***	YES	VOC	0	0	0	0	0	0	-
53	**Vinyl Chloride***	YES	VOC	0	0	0	0	0	0	-
54	P-Chloro-M-Cresol		Acids	0	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	0	-
56	2, 4-Dichlorophenol		Acids	0	0	0	0	0	0	-
57	2, 4-Dimethylphenol		Acids	0	0	0	0	0	0	-
58	4, 6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0	-
59	2, 4-Dinitrophenol		Acids	0	0	0	0	0	0	-
60	**4,6-Dintro-2-methylophenol**	YES	Acids	0	0	0	0	0	0	-
61	**Dioxin (2,3,7,8-TCDD)**	YES	Acids	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-
64	**Pentachlorophenol***	YES	Acids	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	-
66	**2, 4, 6-Trichlorophenol***	YES	Acids	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	-
70	Benzidine		Bases	0	0	0	0	0	0	-
71	**Benzo(A)Anthracene***	YES	Bases	0	0	0	0	0	0	-
72	**Benzo(A)Pyrene***	YES	Bases	0	0	0	0	0	0	-
73	3, 4 Benzo-Fluoranthene		Bases	0	0	0	0	0	0	-
74	Benzo(GHI)Perylene		Bases	0	0	0	0	0	0	-
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	-
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	-
77	**Bis (2-Chloroethyl)-Ether***	YES	Bases	0	0	0	0	0	0	-
78	Bis (2-Chloroiso-Propyl) Ether		Bases	0	0	0	0	0	0	-
79	**Bis (2-Ethylhexyl) Phthalate***	YES	Bases	0	0	0	0	32	10.67	-
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-Dichlorobenzene***	YES	Bases	0	0	0	0	0	0	-
92	Diethyl Phthalate		Bases	0	0	0	0	0	0	-
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0	-

4	Enter Q_d = wastewater discharge flow from facility (MGD)
6.188916	Q_d = wastewater discharge flow (cfs) (this value is caluclated from the MGD)
0	**Enter or estimated,** Qd2 = background stream flow from upstream source (cfs)
68.5	**Enter 7Q10,** Q_s = background stream flow in cfs above point of discharge
51.4	**Enter or estimated, 1Q10,** Q_s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
0	**Enter flow from upstream discharge** Qd2 = background stream flow in MGD above point of discharge
588	**Enter Mean Annual Flow,** Q_s = background stream flow in cfs above point of discharge
86.2	**Enter 7Q2,** Q_s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C_s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q_d +Qd2+Q_s	Q_r = resultant in-stream flow, after discharge
Calculated on other	C_r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
70.2	**Enter,** Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of
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

April 15, 2016

94	**2, 4-Dinitrotoluene***	YES	Bases	0	0	0	0	0	0	-
95	2, 6-Dinitrotoluene		Bases	0	0	0	0	0	0	-
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0	-
97	**Endosulfan (alpha)**	YES	Bases	0	0	0	0	0	0	-
98	**Endosulfan (beta)**	YES	Bases	0	0	0	0	0	0	-
99	**Endosulfan sulfate**	YES	Bases	0	0	0	0	0	0	-
100	**Endrin**	YES	Bases	0	0	0	0	0	0	-
101	**Endrin Aldeyhide**	YES	Bases	0	0	0	0	0	0	-
102	Fluoranthene		Bases	0	0	0	0	0	0	-
103	Fluorene		Bases	0	0	0	0	0	0	-
104	Heptochlor	YES	Bases	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-
106	**Hexachlorobenzene***	YES	Bases	0	0	0	0	0	0	-
107	**Hexachlorobutadiene***	YES	Bases	0	0	0	0	0	0	-
108	**Hexachlorocyclohexan (alpa)**	YES	Bases	0	0	0	0	0	0	-
109	**Hexachlorocyclohexan (beta)**	YES	Bases	0	0	0	0	0	0	-
110	**Hexachlorocyclohexan (gamma)**	YES	Bases	0	0	0	0	0	0	-
111	HexachlorocycloPentadiene		Bases	0	0	0	0	0	0	-
112	Hexachloroethane		Bases	0	0	0	0	0	0	-
113	**Indeno(1, 2, 3-CK)Pyrene***	YES	Bases	0	0	0	0	0	0	-
114	Isophorone		Bases	0	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	0	-
117	**N-Nitrosodi-N-Propylamine***	YES	Bases	0	0	0	0	0	0	-
118	**N-Nitrosodi-N-Methylamine***	YES	Bases	0	0	0	0	0	0	-
119	**N-Nitrosodi-N-Phenylamine***	YES	Bases	0	0	0	0	0	0	-
120	**PCB-1016**	YES	Bases	0	0	0	0	0	0	-
121	**PCB-1221**	YES	Bases	0	0	0	0	0	0	-
122	**PCB-1232**	YES	Bases	0	0	0	0	0	0	-
123	**PCB-1242**	YES	Bases	0	0	0	0	0	0	-
124	**PCB-1248**	YES	Bases	0	0	0	0	0	0	-
125	**PCB-1254**	YES	Bases	0	0	0	0	0	0	-
126	**PCB-1260**	YES	Bases	0	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	0	-
129	1, 2, 4-Trichlorobenzene		Bases	0	0	0	0	0	0	-

Facility Name: Huntsville Chase Area WWTP

NPDES No.: AL0057428

Freshwater F&W classification.						Freshwater Acute (µg/l) Q_s =1Q10						Freshwater Chronic (µg/l) Q_s = 7Q10				Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (Cd2) Daily Max	Max Daily Discharge as reported by Applicant (C_{dmax})	Water Quality Criteria (C_T)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background from upstream source (Cd2) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})	Water Quality Criteria (C_T)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_T)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony			0	15.2	-	-	-	-	0	5.07	-	-	-	-	3.73E+02	4.51E+03	9.01E+02	No
2	Arsenic		YES	0	0	592.334	5511.773	1102.355	No	0	0	261.324	3153.704	630.741	No	3.03E-01	2.91E+01	5.82E+00	No
3	Berylium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	8.048	56.280	11.256	No	0	0	0.815	9.838	1.967	No	-	-	-	-
5	Chromium/ Chromium III			0	85	2030.605	18895.123	3779.025	No	0	40.7	264.140	3187.687	637.537	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	148.883	29.777	No	0	0	11.000	132.750	26.550	No	-	-	-	-
7	Copper			0	37.4	24.817	230.931	46.186	No	0	22.02	17.059	205.877	41.175	No	1.30E+03	1.57E+04	3.14E+03	No
8	Lead			0	0	93.886	873.623	174.725	No	0	0	3.659	44.153	8.831	No	-	-	-	-
9	Mercury			0	0.0181	2.400	22.332	4.466	No	0	0.007	0.012	0.145	0.029	No	4.24E-02	5.12E-01	1.02E-01	No
10	Nickel			0	150	887.344	6395.857	1279.171	No	0	99	76.343	921.318	184.264	No	9.93E+02	1.20E+04	2.40E+03	No
11	Selenium			0	0	20.000	186.103	37.221	No	0	0	5.000	60.341	12.068	No	2.43E+03	2.93E+04	5.87E+03	No
12	Silver			0	0	1.750	16.287	3.257	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	3.30E+00	6.60E-01	No
14	Zinc	YES		0	608	263.113	2448.313	489.663	Yes	0	158	265.265	3201.270	640.254	No	1.49E+04	1.80E+05	3.59E+04	No
15	Cyanide			0	0	22.000	204.714	40.943	No	0	0	5.200	62.755	12.551	No	9.33E+03	1.13E+05	2.25E+04	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	195000	-	-	-	-	0	185000	-	-	-	-	-	-	-	-
18	Acrolein			0	0	-	-	-	-	0	0	-	-	-	-	5.43E+00	6.55E+01	1.31E+01	No
19	Acrylonitrile		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.44E-01	1.38E+01	2.77E+00	No
20	Aldrin		YES	0	0	3.000	27.916	5.583	No	0	0	1.300	15.689	3.138	No	2.94E-05	2.82E-03	5.64E-04	No
21	Benzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.55E+01	1.49E+03	2.97E+02	No
22	Bromoform		YES	0	0	-	-	-	-	0	0	-	-	-	-	7.88E+01	7.56E+03	1.51E+03	No
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.57E-01	9.19E+01	1.84E+01	No
24	Chlordane		YES	0	0	2.400	22.332	4.466	No	0	0	0.004	0.052	0.010	No	4.73E-04	4.54E-02	9.08E-03	No
25	Clorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	9.06E+02	1.09E+04	2.19E+03	No
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	7.41E+00	7.11E+02	1.42E+02	No
27	Chloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
29	ChloroForm		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.02E+02	9.79E+03	1.96E+03	No
30	4,4' - DDD		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.81E-04	1.74E-02	3.48E-03	No
31	4,4' - DDE		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.28E-04	1.23E-02	2.46E-03	No
32	4,4' - DDT		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.28E-04	1.23E-02	2.46E-03	No
33	Dichlorobromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.00E+01	9.64E+02	1.93E+02	No
34	1, 1-Dichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
35	1, 2-Dichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.14E+01	2.05E+03	4.10E+02	No
36	Trans-1, 2-Dichloro-Ethylene			0	0	-	-	-	-	0	0	-	-	-	-	5.91E+03	7.13E+04	1.43E+04	No
37	1, 1-Dichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	4.17E+03	4.00E+05	8.00E+04	No
38	1, 2-Dichloropropane			0	0	-	-	-	-	0	0	-	-	-	-	8.49E+00	1.03E+02	2.05E+01	No
39	1, 3-Dichloro-Propylene			0	0	-	-	-	-	0	0	-	-	-	-	1.23E+01	1.48E+02	2.96E+01	No
40	Dieldrin		YES	0	0	0.240	2.233	0.447	No	0	0	0.056	0.676	0.135	No	3.12E-05	3.00E-03	6.00E-04	No
41	Ethylbenzene			0	0	-	-	-	-	0	0	-	-	-	-	1.24E+03	1.50E+04	3.00E+03	No
42	Methyl Bromide			0	0	-	-	-	-	0	0	-	-	-	-	8.71E+02	1.05E+04	2.10E+03	No
43	Methyl Chloride			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.46E+02	3.32E+04	6.64E+03	No
45	1, 1, 2, 2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.33E+00	2.24E+02	4.48E+01	No
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.92E+00	1.84E+02	3.68E+01	No
47	Toluene			0	0	-	-	-	-	0	0	-	-	-	-	8.72E+03	1.05E+05	2.11E+04	No
48	Toxaphene		YES	0	0	0.730	6.793	1.359	No	0	0	0.0002	0.002	0.000	No	1.62E-04	1.55E-02	3.11E-03	No
49	Tributyltin (TBT)		YES	0	0	0.460	4.280	0.856	No	0	0	0.072	0.869	0.174	No	-	-	-	-
50	1, 1, 1-Trichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
51	1, 1, 2-Trichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.10E+00	8.73E+02	1.75E+02	No
52	Trichlorethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.75E+01	1.68E+03	3.35E+02	No
53	Vinyl Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.42E+00	1.37E+02	2.74E+01	No
54	P-Chloro-M-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
55	2-Chlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	8.71E+01	1.05E+03	2.10E+02	No
56	2, 4-Dichlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	1.72E+02	2.08E+03	4.15E+02	No
57	2, 4-Dimethylphenol			0	0	-	-	-	-	0	0	-	-	-	-	4.98E+02	6.00E+03	1.20E+03	No
58	4, 6-Dinitro-O-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
59	2, 4-Dinitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	3.11E+03	3.75E+04	7.51E+03	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.65E+02	1.59E+04	3.18E+03	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.67E-08	2.56E-06	5.12E-07	No
62	2-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
63	4-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
64	Pentachlorophenol		YES	0	0	8.723	81.172	16.234	No	0	0	6.693	80.767	16.153	No	1.77E+00	1.70E+02	3.39E+01	No
65	Phenol			0	0	-	-	-	-	0	0	-	-	-	-	5.00E+05	6.03E+06	1.21E+06	No
66	2, 4, 6-Trichlorophenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.41E+00	1.36E+02	2.72E+01	No
67	Acenaphthene			0	0	-	-	-	-	0	0	-	-	-	-	5.79E+02	6.98E+03	1.40E+03	No
68	Acenaphthylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
69	Anthracene			0	0	-	-	-	-	0	0	-	-	-	-	2.33E+04	2.82E+05	5.63E+04	No
70	Benzidine			0	0	-	-	-	-	0	0	-	-	-	-	1.16E-04	1.40E-03	2.80E-04	No
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.02E+00	2.05E-01	No
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.02E+00	2.05E-01	No
73	3, 4 Benzo-Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.29E-01	2.57E-02	No
74	Benzo(GHI)Perylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.29E-01	2.57E-02	No
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.07E-01	2.95E+01	5.90E+00	No
78	Bis (2-Chloroiso-Propyl) Ether			0	0	-	-	-	-	0	0	-	-	-	-	3.78E+04	4.56E+05	9.12E+04	No
79	Bis (2-Ethylhexyl) Phthalate		YES	0	32	-	-	-	-	0	10.67	-	-	-	-	1.28E+00	1.23E+02	2.46E+01	No
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
81	Butyl Benzyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	1.13E+03	1.36E+04	2.72E+03	No
82	2-Chloronaphthalene			0	0	-	-	-	-	0	0	-	-	-	-	9.24E+02	1.12E+04	2.23E+03	No
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
84	Chrysene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.02E+00	2.05E-01	No
85	Di-N-Butyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	2.62E+03	3.16E+04	6.33E+03	No
86	Di-N-Octyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
87	Dibenzo(A,H)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.02E+00	2.05E-01	No
88	1, 2-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	7.55E+02	9.12E+03	1.82E+03	No
89	1, 3-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	5.62E+02	6.79E+03	1.36E+03	No
90	1, 4-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	1.12E+02	1.36E+03	2.71E+02	No
91	3, 3-Dichlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.66E-02	1.60E+00	3.19E-01	No
92	Diethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	2.56E+04	3.09E+05	6.17E+04	No
93	Dimethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	6.48E+05	7.82E+06	1.56E+06	No
94	2, 4-Dinitrotoluene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.98E+00	1.90E+02	3.80E+01	No
95	2, 6-Dinitrotoluene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
96	1,2-Diphenylhydrazine			0	0	-	-	-	-	0	0	-	-	-	-	1.17E-01	1.41E+00	2.83E-01	No
97	Endosulfan (alpha)		YES	0	0	0.22	2.047	0.409	No	0	0	0.056	0.676	0.135	No	5.19E+01	4.98E+03	9.96E+02	No
98	Endosulfan (beta)		YES	0	0	0.22	2.047	0.409	No	0	0	0.056	0.676	0.135	No	5.19E+01	4.98E+03	9.96E+02	No
99	Endosulfan sulfate		YES	0	0	-	-	-	-	0	0	-	-	-	-	5.19E+01	4.98E+03	9.96E+02	No
100	Endrin		YES	0	0	0.086	0.800	0.160	No	0	0	0.036	0.434	0.087	No	3.53E-02	3.39E+00	6.77E-01	No
101	Endrin Aldeyhde		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.76E+00	1.69E+02	3.39E+01	No
102	Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	8.12E+01	9.79E+02	1.96E+02	No
103	Fluorene			0	0	-	-	-	-	0	0	-	-	-	-	3.11E+03	3.75E+04	7.51E+03	No
104	Heptochlor		YES	0	0	0.52	4.839	0.968	No	0	0	0.004	0.046	0.009	No	4.63E-05	4.44E-03	8.89E-04	No
105	Heptachlor Epoxide		YES	0	0	0.52	4.839	0.968	No	0	0	0.004	0.046	0.009	No	2.29E-05	2.20E-03	4.40E-04	No
106	Hexachlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.68E-04	1.61E-02	3.22E-03	No
107	Hexachlorobutadiene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.08E+01	1.03E+03	2.07E+02	No

108	Hexachlorocyclohexan (alpha)		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.85E-03	2.74E-01	5.47E-02	No
109	Hexachlorocyclohexan (beta)		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.97E-03	9.57E-01	1.91E-01	No
110	Hexachlorocyclohexan (gamma)		YES	0	0	0.95	8 840	1 768	No	0	0	-	-	-	-	1.08E+00	1.03E+02	2.07E+01	No
111	HexachlorocycloPentadiene			0	0	-	-	-	-	0	0	-	-	-	-	6.45E+02	7.79E+03	1.56E+03	No
112	Hexachloroethane			0	0	-	-	-	-	0	0	-	-	-	-	1.92E+00	2.31E+01	4.63E+00	No
113	Indeno(1, 2, 3-CK)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.02E+00	2.05E-01	No
114	Isophorone			0	0	-	-	-	-	0	0	-	-	-	-	5.61E+02	6.77E+03	1.35E+03	No
115	Naphthalene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
116	Nitrobenzene			0	0	-	-	-	-	0	0	-	-	-	-	4.04E+02	4.87E+03	9.74E+02	No
117	N-Nitrosodi-N-Propylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.95E-01	2.83E+01	5.66E+00	No
118	N-Nitrosodi-N-Methylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.76E+00	1.69E+02	3.38E+01	No
119	N-Nitrosodi-N-Phenylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.50E+00	3.36E+02	6.72E+01	No
120	PCB-1016		YES	0	0	-	-	-	-	0	0	0.014	0.169	0.034	No	3.74E-05	3.59E-03	7.18E-04	No
121	PCB-1221		YES	0	0	-	-	-	-	0	0	0.014	0.169	0.034	No	3.74E-05	3.59E-03	7.18E-04	No
122	PCB-1232		YES	0	0	-	-	-	-	0	0	0.014	0.169	0.034	No	3.74E-05	3.59E-03	7.18E-04	No
123	PCB-1242		YES	0	0	-	-	-	-	0	0	0.014	0.169	0.034	No	3.74E-05	3.59E-03	7.18E-04	No
124	PCB-1248		YES	0	0	-	-	-	-	0	0	0.014	0.169	0.034	No	3.74E-05	3.59E-03	7.18E-04	No
125	PCB-1254		YES	0	0	-	-	-	-	0	0	0.014	0.169	0.034	No	3.74E-05	3.59E-03	7.18E-04	No
126	PCB-1260		YES	0	0	-	-	-	-	0	0	0.014	0.169	0.034	No	3.74E-05	3.59E-03	7.18E-04	No
127	Phenanthrene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
128	Pyrene			0	0	-	-	-	-	0	0	-	-	-	-	2.33E+03	2.82E+04	5.63E+03	No
129	1, 2, 4-Trichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	4.09E+01	4.94E+02	9.88E+01	No

Chase Area WWTP DMR Data (Mercury)

Monitor Pd End Date	Parameter Name	Conc.	Unit		Conc.	Unit	
3/31/2011 0:00	Mercury Total Recoverable	0.0181	ug/l	Monthly Average	0.0181	ug/l	Maximum Daily
6/30/2011 0:00	Mercury Total Recoverable	0.00643	ug/l	Monthly Average	0.00643	ug/l	Maximum Daily
9/30/2011 0:00	Mercury Total Recoverable	0.00639	ug/l	Monthly Average	0.00639	ug/l	Maximum Daily
12/31/2011 0:00	Mercury Total Recoverable	0.0015	ug/l	Monthly Average	0.0015	ug/l	Maximum Daily
3/31/2012 0:00	Mercury Total Recoverable	0.0116	ug/l	Monthly Average	0.0116	ug/l	Maximum Daily
6/30/2012 0:00	Mercury Total Recoverable	0.00259	ug/l	Monthly Average	0.00259	ug/l	Maximum Daily
9/30/2012 0:00	Mercury Total Recoverable	0.00279	ug/l	Monthly Average	0.00279	ug/l	Maximum Daily
12/31/2012 0:00	Mercury Total Recoverable	0.0177	ug/l	Monthly Average	0.0177	ug/l	Maximum Daily
3/31/2013 0:00	Mercury Total Recoverable	0.00273	ug/l	Monthly Average	0.00273	ug/l	Maximum Daily
6/30/2013 0:00	Mercury Total Recoverable	0.000002	ug/l	Monthly Average	0.000002	ug/l	Maximum Daily
9/30/2013 0:00	Mercury Total Recoverable	0.00382	ug/l	Monthly Average	0.00382	ug/l	Maximum Daily
12/31/2013 0:00	Mercury Total Recoverable	0.00339	ug/l	Monthly Average	0.00339	ug/l	Maximum Daily
3/31/2014 0:00	Mercury Total Recoverable	0.0172	ug/l	Monthly Average	0.0172	ug/l	Maximum Daily
6/30/2014 0:00	Mercury Total Recoverable	0.00318	ug/l	Monthly Average	0.00318	ug/l	Maximum Daily
9/30/2014 0:00	Mercury Total Recoverable	0.0039	ug/l	Monthly Average	0.0039	ug/l	Maximum Daily
12/31/2014 0:00	Mercury Total Recoverable	0.0127	ug/l	Monthly Average	0.0127	ug/l	Maximum Daily
3/31/2015 0:00	Mercury Total Recoverable	0.000728	ug/l	Monthly Average	0.000728	ug/l	Maximum Daily
6/30/2015 0:00	Mercury Total Recoverable	0.008035	ug/l	Monthly Average	0.008035	ug/l	Maximum Daily
9/30/2015 0:00	Mercury Total Recoverable	0.01043	ug/l	Monthly Average	0.01043	ug/l	Maximum Daily
12/31/2015 0:00	Mercury Total Recoverable	0.002085	ug/l	Monthly Average	0.002085	ug/l	Maximum Daily

Maximum	**0.0181**	**ug/l**
Average	**0.006765**	**ug/l**

Chase Area WWTP DMR Data (Zinc)

Monitor Pd End Date	Parameter Name	Conc.	Unit		Conc.	Unit	
11/30/2010 0:00	Zinc Total Recoverable	0.17	mg/l	Monthly Average	0.17	mg/l	Maximum Daily
12/31/2010 0:00	Zinc Total Recoverable	0.0786	mg/l	Monthly Average	0.0786	mg/l	Maximum Daily
1/31/2011 0:00	Zinc Total Recoverable	0.09	mg/l	Monthly Average	0.09	mg/l	Maximum Daily
2/28/2011 0:00	Zinc Total Recoverable	0.15	mg/l	Monthly Average	0.15	mg/l	Maximum Daily
3/31/2011 0:00	Zinc Total Recoverable	0.12	mg/l	Monthly Average	0.12	mg/l	Maximum Daily
4/30/2011 0:00	Zinc Total Recoverable	0.06	mg/l	Monthly Average	0.06	mg/l	Maximum Daily
5/31/2011 0:00	Zinc Total Recoverable	0.19	mg/l	Monthly Average	0.19	mg/l	Maximum Daily
6/30/2011 0:00	Zinc Total Recoverable	0.08	mg/l	Monthly Average	0.08	mg/l	Maximum Daily
7/31/2011 0:00	Zinc Total Recoverable	0.06	mg/l	Monthly Average	0.06	mg/l	Maximum Daily
8/31/2011 0:00	Zinc Total Recoverable	0.09	mg/l	Monthly Average	0.09	mg/l	Maximum Daily
9/30/2011 0:00	Zinc Total Recoverable	0.0857	mg/l	Monthly Average	0.0857	mg/l	Maximum Daily
10/31/2011 0:00	Zinc Total Recoverable	0.09	mg/l	Monthly Average	0.09	mg/l	Maximum Daily
11/30/2011 0:00	Zinc Total Recoverable	0.08	mg/l	Monthly Average	0.08	mg/l	Maximum Daily
12/31/2011 0:00	Zinc Total Recoverable	0.11	mg/l	Monthly Average	0.11	mg/l	Maximum Daily
1/31/2012 0:00	Zinc Total Recoverable	0.19	mg/l	Monthly Average	0.19	mg/l	Maximum Daily
2/29/2012 0:00	Zinc Total Recoverable	0.17	mg/l	Monthly Average	0.17	mg/l	Maximum Daily
3/31/2012 0:00	Zinc Total Recoverable	0.12	mg/l	Monthly Average	0.12	mg/l	Maximum Daily
4/30/2012 0:00	Zinc Total Recoverable	0.08	mg/l	Monthly Average	0.08	mg/l	Maximum Daily
5/31/2012 0:00	Zinc Total Recoverable	0.11	mg/l	Monthly Average	0.11	mg/l	Maximum Daily
6/30/2012 0:00	Zinc Total Recoverable	0.13	mg/l	Monthly Average	0.13	mg/l	Maximum Daily
7/31/2012 0:00	Zinc Total Recoverable	0.18	mg/l	Monthly Average	0.18	mg/l	Maximum Daily
8/31/2012 0:00	Zinc Total Recoverable	0.17	mg/l	Monthly Average	0.17	mg/l	Maximum Daily
9/30/2012 0:00	Zinc Total Recoverable	0.18	mg/l	Monthly Average	0.18	mg/l	Maximum Daily
10/31/2012 0:00	Zinc Total Recoverable	0.17	mg/l	Monthly Average	0.17	mg/l	Maximum Daily
11/30/2012 0:00	Zinc Total Recoverable	0.18	mg/l	Monthly Average	0.18	mg/l	Maximum Daily
12/31/2012 0:00	Zinc Total Recoverable	0.15	mg/l	Monthly Average	0.15	mg/l	Maximum Daily
1/31/2013 0:00	Zinc Total Recoverable	0.11	mg/l	Monthly Average	0.11	mg/l	Maximum Daily
2/28/2013 0:00	Zinc Total Recoverable	0.14	mg/l	Monthly Average	0.14	mg/l	Maximum Daily
3/31/2013 0:00	Zinc Total Recoverable	0.1	mg/l	Monthly Average	0.1	mg/l	Maximum Daily
4/30/2013 0:00	Zinc Total Recoverable	0.06	mg/l	Monthly Average	0.06	mg/l	Maximum Daily
5/31/2013 0:00	Zinc Total Recoverable	0.09	mg/l	Monthly Average	0.09	mg/l	Maximum Daily
6/30/2013 0:00	Zinc Total Recoverable	0.03	mg/l	Monthly Average	0.03	mg/l	Maximum Daily
7/31/2013 0:00	Zinc Total Recoverable	0.01	mg/l	Monthly Average	0.01	mg/l	Maximum Daily
8/31/2013 0:00	Zinc Total Recoverable	0.15	mg/l	Monthly Average	0.15	mg/l	Maximum Daily
9/30/2013 0:00	Zinc Total Recoverable	0.14	mg/l	Monthly Average	0.14	mg/l	Maximum Daily
10/31/2013 0:00	Zinc Total Recoverable	0.18	mg/l	Monthly Average	0.18	mg/l	Maximum Daily
11/30/2013 0:00	Zinc Total Recoverable	0.32	mg/l	Monthly Average	0.32	mg/l	Maximum Daily
12/31/2013 0:00	Zinc Total Recoverable	0.03	mg/l	Monthly Average	0.03	mg/l	Maximum Daily
1/31/2014 0:00	Zinc Total Recoverable	0.36	mg/l	Monthly Average	0.36	mg/l	Maximum Daily
2/28/2014 0:00	Zinc Total Recoverable	0.26	mg/l	Monthly Average	0.26	mg/l	Maximum Daily
3/31/2014 0:00	Zinc Total Recoverable	0.19	mg/l	Monthly Average	0.19	mg/l	Maximum Daily
4/30/2014 0:00	Zinc Total Recoverable	0.13	mg/l	Monthly Average	0.13	mg/l	Maximum Daily
5/31/2014 0:00	Zinc Total Recoverable	0.25	mg/l	Monthly Average	0.25	mg/l	Maximum Daily
6/30/2014 0:00	Zinc Total Recoverable	0.246	mg/l	Monthly Average	0.246	mg/l	Maximum Daily
7/31/2014 0:00	Zinc Total Recoverable	0.21	mg/l	Monthly Average	0.21	mg/l	Maximum Daily
8/31/2014 0:00	Zinc Total Recoverable	0.19	mg/l	Monthly Average	0.19	mg/l	Maximum Daily
9/30/2014 0:00	Zinc Total Recoverable	0.18	mg/l	Monthly Average	0.18	mg/l	Maximum Daily
10/31/2014 0:00	Zinc Total Recoverable	0.24	mg/l	Monthly Average	0.24	mg/l	Maximum Daily
11/30/2014 0:00	Zinc Total Recoverable	0.21	mg/l	Monthly Average	0.21	mg/l	Maximum Daily
12/31/2014 0:00	Zinc Total Recoverable	0.37	mg/l	Monthly Average	0.37	mg/l	Maximum Daily
1/31/2015 0:00	Zinc Total Recoverable	0.31	mg/l	Monthly Average	0.31	mg/l	Maximum Daily
2/28/2015 0:00	Zinc Total Recoverable	0.29	mg/l	Monthly Average	0.29	mg/l	Maximum Daily
3/31/2015 0:00	Zinc Total Recoverable	0.31	mg/l	Monthly Average	0.31	mg/l	Maximum Daily
4/30/2015 0:00	Zinc Total Recoverable	0.13	mg/l	Monthly Average	0.13	mg/l	Maximum Daily
5/31/2015 0:00	Zinc Total Recoverable	0.14	mg/l	Monthly Average	0.14	mg/l	Maximum Daily

6/30/2015 0:00	Zinc Total Recoverable	0.1	mg/l	Monthly Average	0.1	mg/l	Maximum Daily
7/31/2015 0:00	Zinc Total Recoverable	0.11	mg/l	Monthly Average	0.11	mg/l	Maximum Daily
8/31/2015 0:00	Zinc Total Recoverable	0.09	mg/l	Monthly Average	0.09	mg/l	Maximum Daily
9/30/2015 0:00	Zinc Total Recoverable	0.13	mg/l	Monthly Average	0.13	mg/l	Maximum Daily
10/31/2015 0:00	Zinc Total Recoverable	0.11	mg/l	Monthly Average	0.11	mg/l	Maximum Daily
11/30/2015 0:00	Zinc Total Recoverable	0.08	mg/l	Monthly Average	0.08	mg/l	Maximum Daily
12/31/2015 0:00	Zinc Total Recoverable	0.06	mg/l	Monthly Average	0.06	mg/l	Maximum Daily
1/31/2016 0:00	Zinc Total Recoverable	0.06	mg/l	Monthly Average	0.06	mg/l	Maximum Daily

Application Maximum	0.608	mg/l	
Application Average	0.349	mg/l	3 samples

Maximum Concentration	**0.608**	**mg/l**
Average Concentration	**0.158**	**mg/l**

Waste Load Allocation Summary

REQUEST INFORMATION

request number: 2593

From:		In Branch/Section			
Date Submitted		Date Required		FUND Code	
Receiving Waterbody	Flint River	Date Permit application received by NPDES program			
Previous Stream Name					
Facility Name	Huntsville Chase WWTP	(Name of Discharger-WQ will use to file)			
		Previous Discharger Name			
River Basin	Tennessee	Outfall Latitude	34.78698	(decimal degrees)	
*County	Madison	Outfall Longitude	-86.48416	(decimal degrees)	
Permit Number	AL0057428	Permit Type	CONVERSION		
		Permit Status	Active		
		Type of Discharger	MUNICIPAL		

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

If yes, impacting dischargers names.	Tennessee Valley Sewer Authority WWTP, Hazel Green HS, Buckhorn HS (trib), Buckhorn WWTP, North County Sewer Co (trib), Union Springs WWTP (trib), Banyon Creek Subdivision (trib), Inspiration Pointe WWTP (trib), Central School Lagoon, Giles & Kendall (tri	Impacting dischargers permit numbers.	

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

Comments included ☑ Yes ☐ No		Information Verified By	JEH	Year File Was Created	1984
				Lat/Long Method	Arcview
12 Digit HUC Code	060300020403				
Use Classification	F&W				
Site Visit Completed?	☐ Yes ☑ No			Date of Site Visit	5/25/2010
Waterbody Impaired?	☐ Yes ☑ No			Date of WLA Response	6/1/2010
Antidegradation	☐ Yes ☑ No			Approved TMDL?	
Waterbody Tier Level	Tier1			☑ Yes ☐ No	
Use Support Category	5			Approval Date of TMDL	9/26/2008

Waste Load Allocation Information

Modeled Reach Length	53.31	Miles		Date of Allocation	6/1/2010
Name of Model Used	SWQM			Allocation Type	2 Seasons
Model Completed by	Johnathan Hall			Type of Model Used	Desk-top
Allocation Developed by	Water Quality Branch				

Waste Load Allocation Summary

Annual Effluent Limits	Conventional Parameters		Other Parameters	
	Qw 4 MGD	Qw 4 MGD	Qw MGD	Qw MGD
	Season Summer	Season Winter	Season	Season
Qw MGD	From May	From Dec	From	From
	Through Nov	Through Apr	Through	Through
CBOD5	CBOD5 20 mg/L	CBOD5 25 mg/L	TP	TP
NH3-N	NH3-N 10 mg/L	NH3-N 20 mg/L	TN	TN
TKN	TKN	TKN	TSS	TSS
D.O.	D.O. 6 mg/L	D.O. 6 mg/L		

"Monitor Only" Parameters for Effluent:

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

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	2.2602	mg/l	4.2324	mg/l
NH3-N	0.2567	mg/l	0.9778	mg/l
Temperature	28	°C	18	°C
pH	7	su	7	su

Drainage Area Qualifier: Exact

Hydrology at Discharge Location

			Method Used to Calculate
Drainage Area	361.8	sq mi	
Stream 7Q10	68.5	cfs	ADEM Estimate w/USGS Gage Data
Stream 1Q10	51.4	cfs	ADEM Estimate w/USGS Gage Data
Stream 7Q2	86.2	cfs	ADEM Estimate w/USGS Gage Data
Annual Average	588	cfs	ADEM Estimate w/USGS Gage Data

Comments and/or Notations

- SE 1/4 Sec 11, T3S, R1E
- 232 SW - MAYSVILLE
- EPA Approved Pathogen (fecal coliform) TMDL on 09/26/2008
- discharge is to a side channel of Flint River, side channel entered Flint River at 34.787361, -86.483689 during site visit on 05/25/2010

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

For Approved. OMB No. 2040-0086. Approval expires 5-31-92

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S		T/A	C
F	AL0057428		D
1	2 13	14	15

LABEL ITEMS

- I. EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING LIST
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been proved. Refer to the instructions for detailed item descriptions and for the legal authorization under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental from listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	MARK "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	MARK "X" 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)	☒ 16	☐ 17	☒ 18	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)	☐ 19	☒ 20	☐ 21
C. Is this facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	☐ 22	☒ 23	☐ 24	D. Is this proposal facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.?** (FORM 2D)	☐ 25	☒ 26	☐ 27
E. Does or will this facility treat, store, or dispose of **hazardous wastes?** (FORM 3)	☐ 28	☒ 29	☐ 30	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)	☐ 31	☒ 32	☐ 33
G. Do you or will you inject at this facility any produced water 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)	☐ 34	☒ 35	☐ 36	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfer by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	☐ 37	☒ 38	☐ 39
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)	☐ 40	☒ 41	☐ 42	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 are?** (FORM 5)	☐ 43	☒ 44	☐ 45

III. NAME OF FACILITY

C 1 | SKIP (16-29) | ***Chase Area Wastewater Treatment Plant*** (30–69)

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*		
C 2 — ***Stewart, Randall, Operations Superintendant*** (16–45)	***256*** (46–48)	***883*** (49–51)	***3719*** (52–55)

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

C 3 — ***P.O. Box 308*** (16–45)

B. CITY OR TOWN	C. STATE	D. ZIP CODE
C 4 — ***Huntsville*** (16–40)	***AL*** (41–42)	***35804*** (47–51)

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

C 5 — ***907 Wess Taylor Road*** (16–45)

B. COUNTY NAME

Madison (46–70)

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE
C 6 — ***Huntsville*** (16–40)	***AL*** (41–42)	***35811*** (47–51)	(52–54)

RECEIVED
APR 16 2015
IND / MUN BRANCH

CONTINUED ON REVERSE

CONTINUED FROM THE FRONT

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

A. FIRST	B. SECOND
4952 (specify) Sewage Treatment Plant	(specify)

C. THIRD	D. FOURTH
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME: City of Huntsville

B. Is the name listed in Item VIII-A also the owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other," specify.)
F = FEDERAL; S = STATE; P = PRIVATE; M = PUBLIC (other than federal or state); O = OTHER (specify)
M (specify)

D. PHONE (area code & no.): 256 883 3719

E. STREET OR PO BOX: P.O. Box 308

F. CITY OR TOWN: Huntsville

G. STATE: Al

H. ZIP CODE: 35804

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)	D. PSD (Air Emissions from Proposed Sources)	
N AL0057428	P	
B. UIC (Underground Injection of Fluids)	E. OTHER (specify)	(Specify)
U		
C. RCRA (Hazardous Wastes)	E. OTHER (specify)	(Specify)
R		

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)

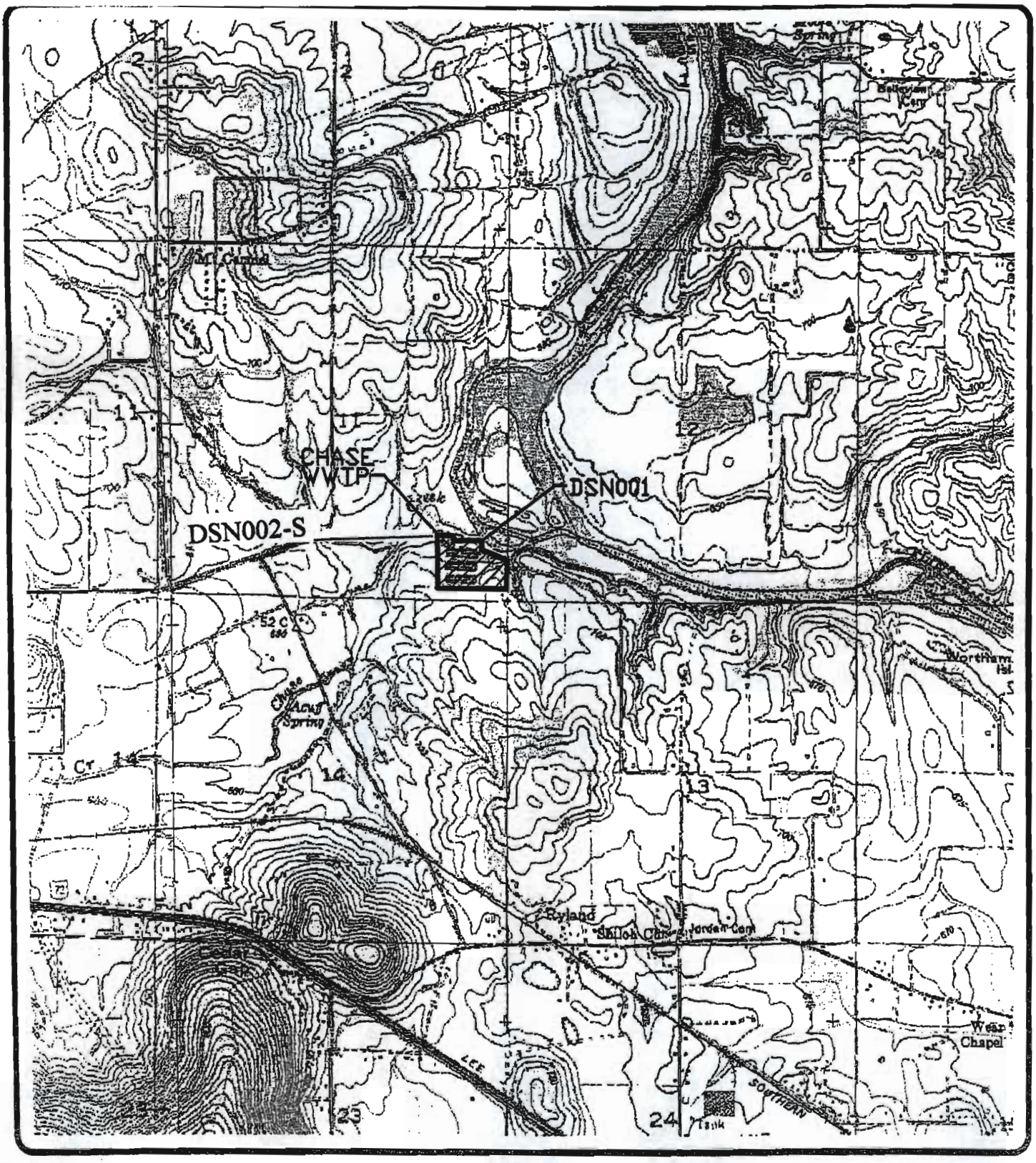
This is a municlpal wastewater treatment facility having a design capacity of 4.0 MGD. Hydraulic treatment processes include lift pumping, screening, activated sludge, secondary clarification, and chlorine disinfection. Sludge treatment consists of holding tanks, sludge drying beds and incineration at municiple solid waste incineration.. There are no underground injection of hazardous waste storage, treatment, or disposal activities 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
Tommy Battle, Mayor	T Battle	3/24/15

COMMENTS FOR OFFICIAL USE ONLY



SCALE:	N.T.S.
JOB No.:	03267
DESIGNED BY:	SGT
DRAFTED BY:	KDH
CHECKED BY:	SGT
DATE:	DEC. 2003

COPYRIGHT © 2002
TETRA TECH, INC.

SITE LOCATION MAP

CHASE WWTP
NPDES PERMIT

TETRA TECH, INC.

400 Meridian Street Huntsville, AL 35801 (256) 551-0222

FACILITY NAME AND PERMIT NUMBER:
Chase Area Wastewater Treatment Plant AL0057428

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

FORM 2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

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

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

RECEIVED
APR 16 2015
IND / MUN BRANCH

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

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: Chase Area Wastewater Treatment Plant

Mailing Address: P.O. Box 308
Huntsville, Alabama 35804

Contact person: Randall Stewart

Title: Operations Superintendant - City of Huntsville Water Pollution Control (WPC)

Telephone number: (256) 883-3719

Facility Address (not P.O. Box): 907 Wess Taylor Road
Huntsville, Alabama 35811

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

Applicant name:

Mailing Address:

Contact person:

Title:

Telephone number:

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

✓ owner ✓ operator

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

_____ facility ✓ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES	AL0057428	PSD	
UIC		Other	
RCRA		Other	

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

Name	Population Served	Type of Collection System	Ownership
Chase Area	11,105	Sepate Sanitary	City of Huntsville

Total population served 11,105

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

____ Yes ✓ No

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

____ Yes ✓ No

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

a. Design flow rate 4.00 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	1.04	1.01	1.10	mgd
c. Maximum daily flow rate	3.70	3.30	2.87	mgd

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

✓ Separate sanitary sewer	100.00 %
____ Combined storm and sanitary sewer	____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ✓ Yes ____ No

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

i. Discharges of treated effluent ____

ii. Discharges of untreated or partially treated effluent ____

iii. Combined sewer overflow points ____

iv. Constructed emergency overflows (prior to the headworks) ____

v. Other ____ ____

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ____ Yes ✓ No

If yes, provide the following for each surface impoundment:

Location: ____

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

Is discharge ____ continuous or ____ intermittent?

c. Does the treatment works land-apply treated wastewater? ____ Yes ✓ No

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

Location: ____

Number of acres: ____

Annual average daily volume applied to site: ____ Mgd

Is land application ____ continuous or ____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? ____ Yes ✓ No

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

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

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

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

Name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

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

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

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes ✓ No

If yes, provide the following for each disposal method:

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

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

WASTEWATER DISCHARGES:

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

A.9. Description of Outfall.

a. Outfall number 001-1

b. Location
Huntsville (City or town, if applicable) 35811 (Zip Code)
Madison (County) ALabama (State)
34 degrees 47' 13" (Latitude) 86 degrees 29' 04" (Longitude)

c. Distance from shore (if applicable) 0.00 ft.

d. Depth below surface (if applicable) _____ ft.

e. Average daily flow rate _____ mgd

f. Does this outfall have either an intermittent or a periodic discharge? _____ Yes ✓ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: _____

Average duration of each discharge: _____

Average flow per discharge: _____ mgd

Months in which discharge occurs: _____

g. Is outfall equipped with a diffuser? ✓ Yes _____ No

A.10. Description of Receiving Waters.

a. Name of receiving water Flint River

b. Name of watershed (if known) _____

United States Soil Conservation Service 14-digit watershed code (if known): 06030002190

c. Name of State Management/River Basin (if known): _____

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

d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of $CaCO_3$

A.11. Description of Treatment.

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

✓ Primary ✓ Secondary

____ Advanced ____ Other. Describe: _____

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

Design BOD_5 removal or Design $CBOD_5$ removal	90.00 %
Design SS removal	90.00 %
Design P removal	%
Design N removal	100.00 %
Other _____	%

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

ultraviolet

If disinfection is by chlorination, is dechlorination used for this outfall? ____ Yes ____ No

d. Does the treatment plant have post aeration? ✓ Yes ____ No

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

Outfall number: 001-1

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.98	s.u.			
pH (Maximum)	8.70	s.u.			
Flow Rate	3.70	mgd	1.01	mgd	1,408.00
Temperature (Winter)					
Temperature (Summer)					

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

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5							
	CBOD-5	42.00	mg/l	4.80	mg/l	624.00	5210	2.0 mg/l
FECAL COLIFORM	E. coli	2,100.00	colonies	20.00	colonies	624.00	9222A	1col/100 ml
TOTAL SUSPENDED SOLIDS (TSS)		32.00	mg/l	7.00	mg/l	624.00		

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

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

180,000.00 gpd

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

Comprehensive flow monitoring and testing

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

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____Yes ✓ No

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

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

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

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

001-1

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

____Yes ✓ No

FACILITY NAME AND PERMIT NUMBER:
Chase Area Wastewater Treatment Plant AL0057428

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

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

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

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

✓ Basic Application Information packet

Supplemental Application Information packet:

✓ Part D (Expanded Effluent Testing Data)

✓ Part E (Toxicity Testing: Biomonitoring Data)

✓ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

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

Name and official title: Shane Cook , Director WPC

Signature: Shane Cook

Telephone number: (256) 883-3719

Date signed: 3-24-2015

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

SEND COMPLETED FORMS TO:

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

_____

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

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

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ____Yes ____No

Describe briefly: _____

_____

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

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

Outfall Number: 001-1

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	11.40	mg/l	1.14	mg/l	624.00	4500-NH3 C	0.100 mg/l
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN	10.80	mg/l	7.77	mg/l	624.00	4500-0 G	0.5 mg/l
TOTAL KJELDAHL NITROGEN (TKN)	6.01	mg/l	2.00	mg/l	44.00	351.2	1.00 mg/l
NITRATE PLUS NITRITE NITROGEN	11.20	mg/l	4.21	mg/l	44.00	353.3	0.100 mg/l
OIL and GREASE							
PHOSPHORUS (Total)	2.96	mg/l	1.25	mg/l	48.00	365.3	0.124 mg/l
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER Zinc	0.36	mg/l	0.15	mg/l	44.00	200.7	0.0200 mg/l

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

FACILITY NAME AND PERMIT NUMBER:
CHASE AREA WWTP AL 0057428

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

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

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

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

Outfall number: 002 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	NODI=B				NODI=B				4	EPA200.7	0.0780 mg/L
ARSENIC	NODI=B				NODI=B				4	EPA200.7	0.0520 mg/L
BERYLLIUM	NODI=B				NODI=B				4	EPA200.7	0.00200 mg/L
CADMIUM	NODI=B				NODI=B				4	EPA200.7	0.00300 mg/L
CHROMIUM	0.09	mg/L	2.4	lb/day	NODI=B				4	EPA200.7	0.0500 mg/L
COPPER	0.04	mg/L	3.2	lb/day	NODI=B				4	EPA200.7	0.0350 mg/L
LEAD	NODI=B				NODI=B				4	EPA200.7	0.0750 mg/L
MERCURY	NODI=B				NODI=B				4	EPA200.7	0.000200 mg/L
NICKEL	0.15	mg/L	3.2	lb/day	1.2	mg/L	1.4	lb/day	4	EPA200.7	0.0300 mg/L
SELENIUM	NODI=B				NODI=B				4	EPA200.7	0.0500 mg/L
SILVER	NODI=B				NODI=B				4	EPA200.7	0.0100 mg/L
THALLIUM	NODI=B				NODI=B				4	EPA200.7	0.0710 mg/L
ZINC	0.61	mg/L	17.2	lb/day	0.40	mg/L	7.2	lb/day	4	EPA200.7	0.0200 mg/L
CYANIDE	NODI=B				NODI=B				4	EPA200.7	0.0100 mg/L
TOTAL PHENOLIC COMPOUNDS	NODI=B				NODI=B				4	EPA200.7	0.0100 mg/L
HARDNESS (AS $CaCO_3$)	195	mg/L	4764	lb/day	183	mg/L	2577	lb/day	4	EPA200.7	0.0100 mg/L
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer											

RECEIVED
JUN 08 2015
IND / MUN BRANCH

FACILITY NAME AND PERMIT NUMBER:
CHASE AREA WWTP AL 0057428

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

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

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	NODI = B				NODI = B				4	EPA 624	100.0 ug/L
ACRYLONITRILE	NODI = B				NODI = B				4	EPA 624	20.0 ug/L
BENZENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
BROMOFORM	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
CARBON TETRACHLORIDE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
CLOROBENZENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
CHLORODIBROMO-METHANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
CHLOROETHANE	NODI = B				NODI = B				4	EPA 624	10.0 ug/L
2-CHLORO-ETHYLVINYL ETHER	NODI = B				NODI = B				4	EPA 624	10.0 ug/L
CHLOROFORM	NODI=B				NODI=B				4	EPA 624	5.0 ug/L
DICHLOROBROMO-METHANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
1,1-DICHLOROETHANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
1,2-DICHLOROETHANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
TRANS-1,2-DICHLORO-ETHYLENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
1,1-DICHLOROETHYLENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
1,2-DICHLOROPROPANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
1,3-DICHLORO-PROPYLENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
ETHYLBENZENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
METHYL BROMIDE	NODI = B				NODI = B				4	EPA 624	10.0 ug/L
METHYL CHLORIDE	NODI = B				NODI = B				4	EPA 624	10.0 ug/L
METHYLENE CHLORIDE	NODI = B				NODI = B				4	EPA 624	20.0 ug/L
1,1,2,2-TETRACHLORO-ETHANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
TETRACHLORO-ETHYLENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
TOLUENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L

RECEIVED
JUN 08 2015
IND / MUN BRANCH

FACILITY NAME AND PERMIT NUMBER:
CHASE AREA WWTP AL 0057428

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

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

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
1,1,2-TRICHLOROETHANE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
TRICHLORETHYLENE	NODI = B				NODI = B				4	EPA 624	5.0 ug/L
VINYL CHLORIDE	NODI = B				NODI = B				4	EPA 624	10.0 ug/L
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL	NODI = B				NODI = B				4	EPA 625	20.0 ug/L
2-CHLOROPHENOL	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
2,4-DICHLOROPHENOL	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
2,4-DIMETHYLPHENOL	NODI = B				NODI = B				4	EPA 625	50.0 ug/L
4,6-DINITRO-O-CRESOL	NODI = B				NODI = B				4	EPA 625	50.0 ug/L
2,4-DINITROPHENOL	NODI = B				NODI = B				4	EPA 625	50.0 ug/L
2-NITROPHENOL	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
4-NITROPHENOL	NODI = B				NODI = B				4	EPA 625	50.0 ug/L
PENTACHLOROPHENOL	NODI = B				NODI = B				4	EPA 625	50.0 ug/L
PHENOL	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
2,4,6-TRICHLOROPHENOL	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
ACENAPHTHYLENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
ANTHRACENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BENZIDINE	NODI = B				NODI = B				4	EPA 625	20.0 ug/L
BENZO(A)ANTHRACENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BENZO(A)PYRENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L

RECEIVED
JUN 08 2015
IND / MUN BRANCH

FACILITY NAME AND PERMIT NUMBER:
CHASE AREA WWTP AL 0057428

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

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

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BENZO(GHI)PERYLENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BENZO(K)FLUORANTHENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BIS (2-CHLOROETHOXY) METHANE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BIS (2-CHLOROETHYL)-ETHER	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BIS (2-CHLOROISO-PROPYL) ETHER	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BIS (2-ETHYLHEXYL) PHTHALATE	32	ug/L	0.9	lb/day	10.7	ug/L	0.3	lb/day	4	EPA 625	10.0 ug/L
4-BROMOPHENYL PHENYL ETHER	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
BUTYL BENZYL PHTHALATE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
2-CHLORONAPHTHALENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
4-CHLORPHENYL PHENYL ETHER	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
CHRYSENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
DI-N-BUTYL PHTHALATE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
DI-N-OCTYL PHTHALATE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
DIBENZO(A,H) ANTHRACENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
1,2-DICHLOROBENZENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
1,3-DICHLOROBENZENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
1,4-DICHLOROBENZENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
3,3-DICHLOROBENZIDINE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
DIETHYL PHTHALATE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
DIMETHYL PHTHALATE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
2,4-DINITROTOLUENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
2,6-DINITROTOLUENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
1,2-DIPHENYLHYDRAZINE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L

RECEIVED
JUN 08 2015

FACILITY NAME AND PERMIT NUMBER:
CHASE AREA WWTP AL 0057428

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

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

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
FLUORENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
HEXACHLOROBENZENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
HEXACHLOROBUTADIENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
HEXACHLOROCYCLO-PENTADIENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
HEXACHLOROETHANE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
INDENO(1,2,3-CD)PYRENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
ISOPHORONE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
NAPHTHALENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
NITROBENZENE	NODI = B				NODI = B				4	625.00	10.0 ug/L
N-NITROSODI-N-PROPYLAMINE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
N-NITROSODI- METHYLAMINE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
N-NITROSODI-PHENYLAMINE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
PHENANTHRENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
PYRENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
1,2,4-TRICHLOROBENZENE	NODI = B				NODI = B				4	EPA 625	10.0 ug/L
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											

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

RECEIVED
JUN 08 2015
IND / MUN BRANCH

	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

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

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

___Yes ✓ No If yes, describe: _____

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

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

SEE CHRONIC TOXICITY TESTING REPORTS PREVIOUSLY SUBMITTED TO ADEM ON 10/5/10, 10/1011, 10/2/12, 10/8/13 and 10/28/13.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: Hart and Cooley

Mailing Address: 4910 Moores Mill Road
Huntsville, Al. 35811

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

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

Principal product(s): SIC-3471 Metal Surface Treatment

Raw material(s):

F.6. Flow Rate.

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

80,000.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: United Plating - Beechmont - C

Mailing Address: PO Box 2046
Huntsville, Al. 35804

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

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

Principal product(s): SIC-3471 Metal Surface Treatment

Raw material(s):

F.6. **Flow Rate.**

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

50,000.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: United Plating - Stanwood

Mailing Address: PO Box 2046
Huntsville, Al. 35804

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

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

Principal product(s): SIC-3471 Metal Surface Treatment

Raw material(s):

F.6. Flow Rate.

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

80,000.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: United Plating - Beechmont

Mailing Address: PO Box 2046
Huntsville, Al. 35804

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

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

Principal product(s): SIC-3471 Metal Surface Treatment

Raw material(s):

F.6. Flow Rate.

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

50,000.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

FACILITY NAME AND PERMIT NUMBER:
CHASE AREA WWTP AL 0057428

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: CINRAM Group, Inc.

Mailing Address: 4905 Moores Mill Rd. Huntsville, AL 35811

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

Wastewater is shipped to another treatment facility.

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

Principal product(s): SIC - 3652 Metal Surface Treatment

Raw material(s):

F.6. Flow Rate.

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

0.01 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

RECEIVED
JUN 08 2015
IND / MUN BRANCH

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: Mesker Door, Inc.

Mailing Address: 3440 Stanwood Blvd
Huntsville, Al. 35811

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

Metals are cleaned and applicable coatings are applied at controlled temperatures and pH.

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

Principal product(s): SIC-3442 Metal Surface Treatment and Steel Doors and Frames

Raw material(s): _____

F.6. Flow Rate.

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

2,200.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

_____

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: Vintage Pharmaceiticals, Inc.

Mailing Address: 120 Vintage Drive
Huntsville, Al. 35811

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

Metals are cleaned and applicable coatings are applied at controlled temperatures and pH.

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

Principal product(s): SIC-2834 Pharmaceiticals Manufacturer

Raw material(s): ___

F.6. Flow Rate.

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

1,000.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

___

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: Phoenix Metal Finishing

Mailing Address: 1011 Jordan Road
Huntsville, Al. 35811

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

Metals are cleaned and applicable coatings are applied at controlled temperatures and pH.

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

Principal product(s): SIC-3471 Metal Surface Treatment

Raw material(s): Steel and aluminum

F.6. Flow Rate.

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

55.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

4o CFR 433 Metal finishing

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

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

GENERAL INFORMATION:

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

✓ Yes ___ No

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

a. Number of non-categorical SIUs. 0.00

b. Number of CIUs. 9.00

SIGNIFICANT INDUSTRIAL USER INFORMATION:

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

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

Name: PPG Industries, Inc.

Mailing Address: PO Box 2200
Huntsville, Al. 35804

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

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

Principal product(s): SIC-3631 Metal Surface Treatment and Manufacture of Glass Products

Raw material(s):

F.6. Flow Rate.

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

60,000.00 gpd (___ continuous or ✓ intermittent)

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

200.00 gpd (✓ continuous or ___ intermittent)

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

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

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

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

____Yes ✓ No If yes, describe each episode.

See Attachment C for additional SIU's

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

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

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

_____Truck _____Rail _____Dedicated Pipe

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

EPA Hazardous Waste Number	Amount	Units

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

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

____Yes (complete F.13 through F.15.) ✓ No

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

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

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

F.15. Waste Treatment.

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

____Yes ____No

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

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

____Continuous ____Intermittent If intermittent, describe discharge schedule.

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

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

a. All CSO discharge points.

b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).

c. Waters that support threatened and endangered species potentially affected by CSOs.

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

a. Locations of major sewer trunk lines, both combined and separate sanitary.

b. Locations of points where separate sanitary sewers feed into the combined sewer system.

c. Locations of in-line and off-line storage structures.

d. Locations of flow-regulating devices.

e. Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

a. Outfall number N/A

b. Location

_____
(City or town, if applicable) (Zip Code)

_____
(County) (State)

_____
(Latitude) (Longitude)

c. Distance from shore (if applicable) _____ ft.

d. Depth below surface (if applicable) _____ ft.

e. Which of the following were monitored during the last year for this CSO?

____Rainfall ____CSO pollutant concentrations ____CSO frequency

____CSO flow volume ____Receiving water quality

f. How many storm events were monitored during the last year? _____

G.4. CSO Events.

a. Give the number of CSO events in the last year.

_____ events (___ actual or ___ approx.)

b. Give the average duration per CSO event.

_____ hours (____ actual or ____ approx.)

c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

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

_____ inches of rainfall

G.5. Description of Receiving Waters.

a. Name of receiving water: _____

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

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

c. Name of State Management/River Basin: _____

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

G.6. CSO Operations.

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

_____

_____

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

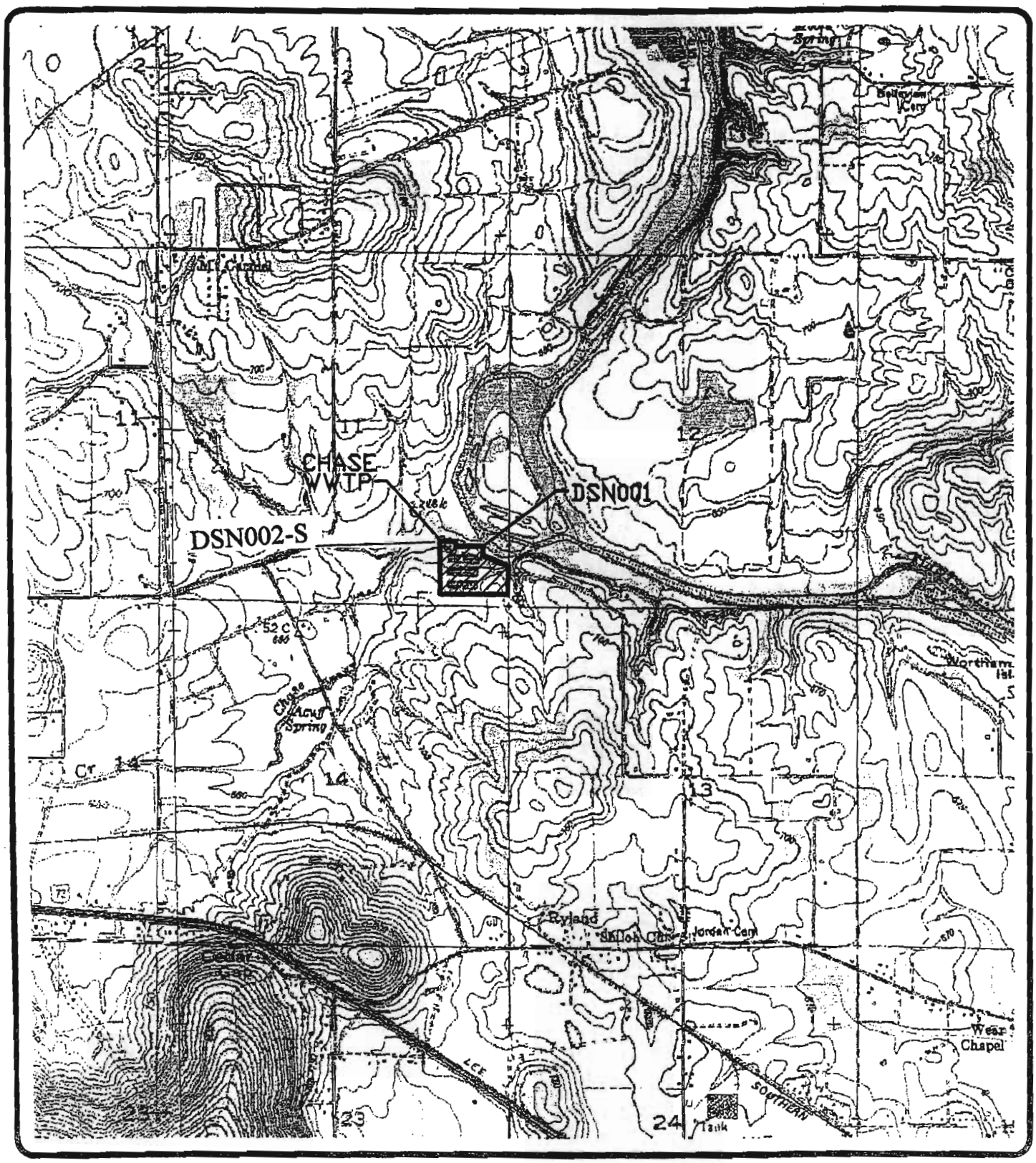
Additional information, if provided, will appear on the following pages.

Topographic Map

Process Flow Diagram

Expanded Effluent Testing Results

Attachment A



SCALE:	N.T.S.
JOB No.:	03267
DESIGNED BY:	SGT
DETAILED BY:	KDH
CHECKED BY:	SGT
DATE:	DEC. 2003

COPYRIGHT © 2002
TETRA TECH, INC.

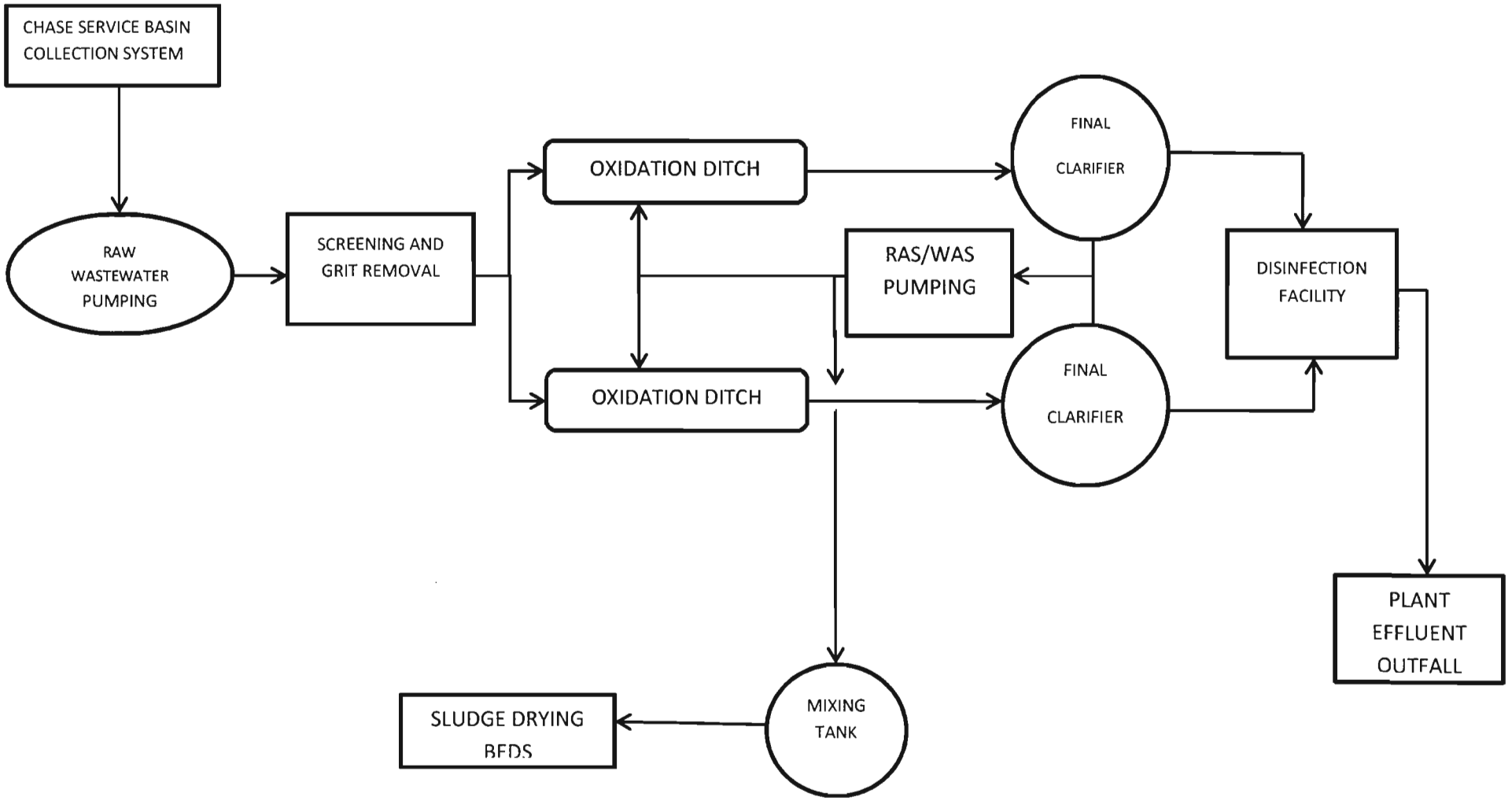
SITE LOCATION MAP

CHASE WWTP
NPDES PERMIT

TETRA TECH, INC.

400 Meridian Street Huntsville, AL 35801 (256) 551-0222

CHASE WASTEWATER TREATMENT PLANT



Please print or type in the unshaded areas only.

EPA ID Number (*copy from Item 1 of Form 1*)
AL0057428

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

FORM 2F NPDES

EPA

U.S. Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (*list*)	B. Latitude			C. Longitude			D. Receiving Water (*name*)
DSN002	34	47'	15"	86	29'	15"	Flint River

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
None					

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

Continue on Page 2

RECEIVED
APR 16 2015
IND / MUN BRANCH

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an astimate of the area (include units) of imperious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*	Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*
DSN0002	44,602 sq. ft.	179,876 sq. ft.			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

No significant materials are currently or in the past three years have been treated, stored or disposed of at this facility in a manner to allow exposure to stormwater.

Pesticides and soil conditioners are not in use at this facility.

Herbacides are diluted to the manufacturer's working strength and sprayed semi-annually along fence lines and certain structures for ease of mowing.

The use of fertilizers at this facility is infrequent and only for lawn re-establishment after repairs to yard piping.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
	There exists no treatment of stormwater runoff for any outfall at this facility.	

V. Nonstormwater Discharges

A. I certify under penalty of law hat the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall.

Name and Official Title *(type or print)*	Signature	Date Signed
Shane Cook, Director WPC	Shane Cook	3-24-2015

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

All stormwater outfalls for this facility were visually inspected on 9-9-14 during an extended dry weather period and showed no signs of non-stormwater discharge. In addition, a review of as built drawings showed no connection of process piping, cooling water, blow down, or other non-stormwater discharges.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

There have been no significant leaks or spills of toxic or hazardous pollutants at this facility in the last three years.

EPA ID Number *(copy from Item 1 of Form 1)*

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (*list all such pollutants below*) ☑ No (*go to Section IX*)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (*list all such pollutants below*) ☑ No (*go to Section IX*)

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☐ Yes (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☑ No (*go to Section X*)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

X. Certification

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

A. Name & Official Title (*Type Or Print*)	B. Area Code and Phone No.
Tommy Battle, Mayor	(256) 427-5000
C. Signature T J Battle	D. Date Signed 3/24/15

EPA ID Number (*copy from Item 1 of Form 1*)

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)*

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	5 mg/l	N/A	5.0 mg/l		3	3A, 5H
Biological Oxygen Demand (BOD5)					4	3A, 5H
Chemical Oxygen Demand (COD)						
Total Suspended Solids (TSS)	310mg/l		17mg/l/2.11		4	3A, 5H
Total Nitrogen	.65 mg/l		.65 mg/l		3	3A, 5H
Total Phosphorus	1.5 mg/l		1.26 mg/l		3	3A, 5H
pH	Minimum 7.33	Maximum 7.70	Minimum	Maximum	4	3A, 5H

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Chlorine, Total	.02mg/l		0.02 mg/l		4	3A, 5H
E. coli	900 colonies		460 colonie		4	3A, 5H
NitrogenAmmonia	15mg/l		4.5mg/l		4	3A, 5H
TKN	2.08 mg/l		1.69 mg/l		3	3A, 5H
CBOD	7 mg/l		5.5 mg/l		4	3A, 5H

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

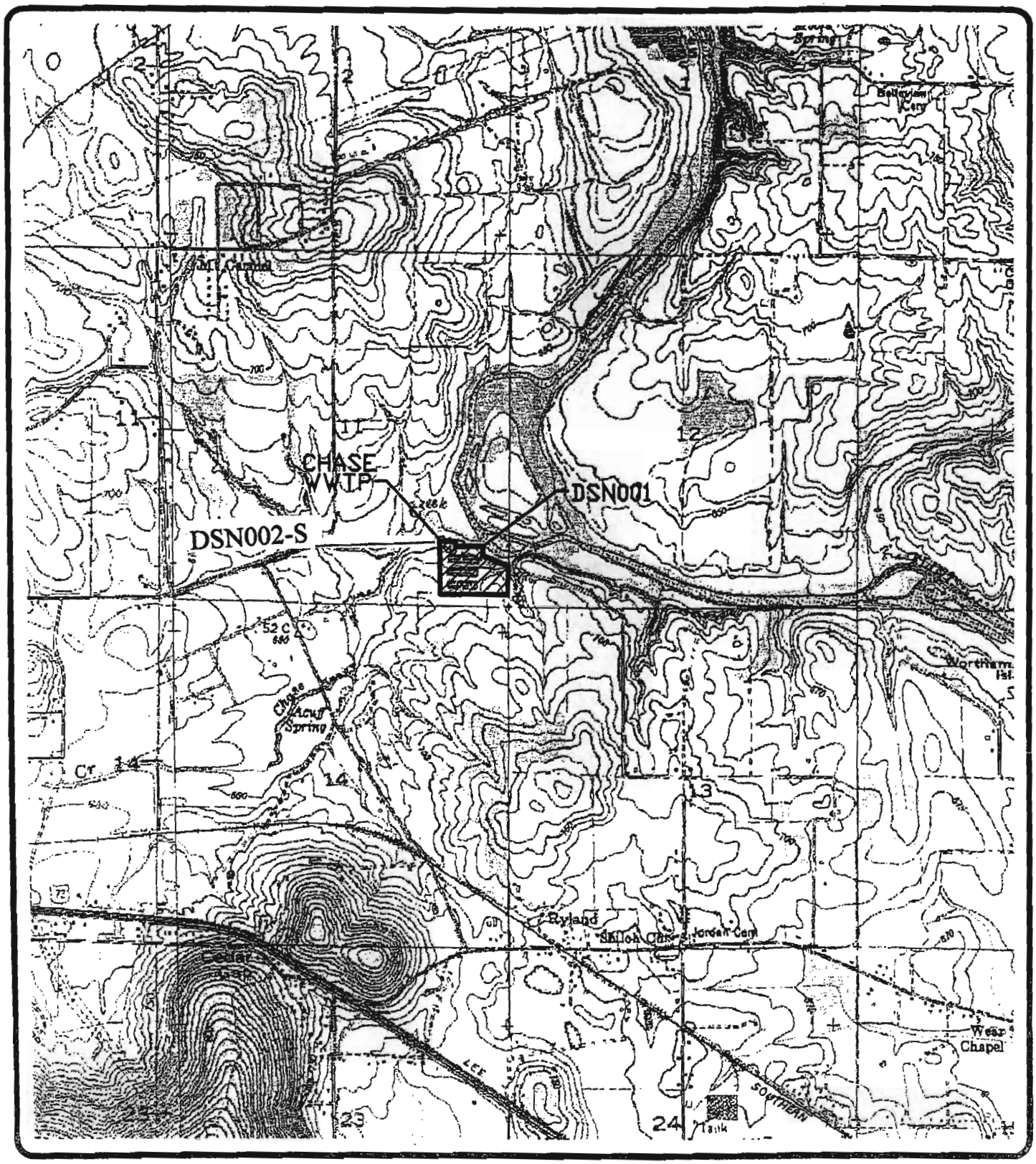
Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*

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

Attachment A



SCALE:	N.T.S.
JOB No.:	03267
DESIGNED BY:	SGT
DETAILED BY:	KDH
CHECKED BY:	SGT
DATE:	DEC. 2003

COPYRIGHT © 2002
TETRA TECH, INC.

SITE LOCATION MAP

CHASE WWTP
NPDES PERMIT

TETRA TECH, INC.

400 Meridian Street Huntsville, AL 35801 (256) 551-0222

SUPPLEMENTARY INFORMATION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT APPLICATION FORM 188- Municipal, Semi-Public & Private Facilities

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – MUNICIPAL SECTION
POST OFFICE BOX 301463
MONTGOMERY, ALABAMA 36130-1463

INSTRUCTIONS: APPLICATIONS SHOULD BE TYPED OR PRINTED IN INK AND SUBMITTED TO THE DEPARTMENT IN DUPLICATE. PLEASE CONTINUE ON AN ATTACHED SHEET OF PAPER IF INSUFFICIENT SPACE IS AVAILABLE TO ADDRESS ANY ITEM BELOW. PLEASE MARK N/A IN THE APPROPRIATE BOX WHEN AN ITEM IS NON-APPLICABLE TO THE APPLICANT.

PURPOSE OF THIS APPLICATION

___ INITIAL PERMIT APPLICATION FOR NEW FACILITY
___ INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
___ MODIFICATION OF EXISTING PERMIT
___ **REISSUANCE OF EXISTING PERMIT**
___ REVOCATION & REISSUANCE OF EXISTING PERMIT

1. Facility Name: Chase WWTP

   a. Operator Name: City of Huntsville

   b. Is the operator identified in 1.a, the owner of the facility? **Yes** _____ No _____
   If no, provide the name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.

2. NPDES Permit Number AL 0057428

3. Facility Location: (**Attach a map with location marked; street, route no. or other specific identifier**)

   Street: 907 Wess Taylor Road

   City: Huntsville County: Madison State: Alabama Zip: 35811

4. Facility Mailing Address (Street or Post Office Box): P.O. Box 308

   City: Huntsville County: Madison State: Alabama Zip: 35804

5. Responsible Official (as described on page 7 of this application):

   Name and Title: Shane Cook, Director – Water Pollution Control

   Address: P.O. Box 308

   City: Huntsville State: Alabama Zip: 35804

   Phone Number: (256) 883-3719

6. Designated Facility Contact:

   Name and Title: Randall Stewart, Operations Superintendant

   Phone Number: (256) 883-3719

RECEIVED
APR 16 2015
IND / MUN BRANCH

7. Please complete this section if the Applicant's business entity is a Proprietorship or limited liability Corporation with a responsible official not listed in Item 5.

a) Proprietor:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

8. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State Environmental Permits presently held by the Applicant within the State of Alabama:

Permit Name	Permit Number	Held by

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

Facility Name	Permit Number	Type of Action	Date of Action

SECTION A– WASTEWATER DISCHARGE INFORMATION

1. List the following historical monthly flow rates recorded for the past five years for each outfall:

Outfall Number	Highest in Last 12 Months MGD	Highest Daily Flow MGD	Average Flow MGD
001-1	1.45 mg	2.34 mgd	1.01 mgd

RECEIVED APR 16 2015 IND/MUN BRANCH

2. Attached a process flow schematic of the treatment process, including the size of each unit operation.

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:

4. Are any wastewater collection or treatment modifications or expansions planned during the next three years that could alter wastewater volumes or characteristics? Yes No

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

SECTION B – 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
Sewage sludge	

Describe the location of any sites used for the ultimate disposal of solid or liquid waste materials or residuals (e.g. sludges) generated by any wastewater treatment system located at the facility.

Description of Waste	Quantity (lbs/day)	Disposal Method*
Sewage Sludge	**500lbs/day**	**sludge disposed at City of Huntsville Incinerator**

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

SECTION C – 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? Y/N
Hart and Cooley	Metal Surface Treatment	Existing	0.08	Yes
United Plating – Beechmont - C	Metal Surface Treatment	Existing	0.05	Yes
United Plating - Stanwood	Metal Surface Treatment	Existing	0.08	Yes
United Plating - Beechmont	Metal Surface Treatment	Existing	0.05	Yes

Continued on separate sheet located at the end of this form.

2. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance [Y/N]? If so, please attach a copy of the ordinance.

SECTION D – 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 [X] If yes, then complete items A through M below:

	YES	NO
A. Does the project require new construction?	____	____
B. Will the project be a source of new air emissions?	____	____
C. Does the project involve dredging and/or filling of a wetland area or water way?	____	____
Has the Corps of Engineers (COE) permit been issued?	____	____
Corps Project Number _____		
D. Does the project involve wetlands and/or submersed grassbeds?	____	____
E. Are oyster reefs located near the project site? (Include a map showing project and discharge location with respect to oyster reefs)	____	____
F 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)?	____	____
G. Does the project involve mitigation of shoreline or costal area erosion?	____	____
H. Does the project involve construction on beaches or dunes areas?	____	____
I. Will the project interfere with public access to coastal waters?	____	____
J. Does the project lie within the 100-year floodplain?	____	____
K. Does the project involve the registration, sale, use, or application of pesticides?	____	____

L. 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)?

RECEIVED
JUN 08 2015
IND / MUN BRANCH

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit? Y/N
PPG Industries, Inc.	Metal Surface Treatment and Manufacture of Glass	Existing	0.06	Yes
CINRAM Group, Inc.	Metal Surface Treatment	Existing	0.06	Yes
Mesker Door, Inc.	Metal Surface Treatment and Steel Door Frame	Existing	0.0024	Yes
Vintage Pharmaceuticals	Pharmaceuticals Manufacturer	Existing	0.0012	Yes
Phoenix Metal Finishing	Metal Surface Treatment	Existing	0.00025	Yes

SECTION E– ANTI-DEGRADATION EVALUATION

It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity, if subject to antidegradation requirements. In accordance with 40 CFR 131.12 and Section 335-6-10-.04 of the Alabama Department of Environmental Management Administrative Code, the following information must be provided, if applicable. 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 [X].
   If "yes", complete question 2 below. If "no", do not complete this section.

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

   If "no", complete questions A through F below and also ADEM forms 311 and 312 or 313, whichever is applicable, (attached). Form 312 or 313, whichever is applicable, must be provided for each treatment discharge alternative considered technically viable. If "yes", do not complete this section.

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

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

   B. Explain if and to what degree the discharger will be increasing employment as a result of the proposed discharge, either at its existing facility or as the result of the start-up of a related new facility or industry.

   C. Explain if and to what degree the discharge will prevent employment reductions?

   D. Describe any additional state or local taxes that the prospective discharger will be paying.

   E. Describe any public service the discharger will be providing to the community.

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

SECTION F – EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a municipal facility depending on the number and types of discharges or outfalls. The EPA application forms are found on the Department's website at http://www.adem.state.al.us/ and are also listed in Attachment 4. The EPA application forms must be submitted to ADEM in duplicate.

SECTION G– ENGINEERING REPORT/BMP PLAN REQUIREMENTS

Any Engineering Report or Best Management Practice (BMP) Plans required to be submitted to ADEM by the applicant must be in accordance with ADEM 335-6-6-.08(i) & (j).

SECTION H– APPLICATION CERTIFICATION

THE INFORMATION CONTAINED IN THIS FORM MUST BE CERTIFIED BY A RESPONSIBLE OFFICIAL AS DEFINED IN ADEM ADMINISTRATIVE RULE 335-6-6-.09 "SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS" (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 RESONSIBLE 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 FURTHER CERTIFY UNDER PENALTY OF LAW THAT THE RESULTS OF ANY ANALYSES REPORTED AS LESS THAN DETECTABLE IN THIS APPLICATION OR IN ATTACHMENTS THERETO WERE PERFORMED USING THE EPA APPROVED TEST METHOD HAVING THE LOWEST DETECTION LIMIT READILY ACHIEVABLE FOR THE SUBSTANCE TESTED."

SIGNATURE OF RESPONSIBLE OFFICIAL: Shane Cook DATE SIGNED: 3-24-2015

(TYPE OR PRINT) Shane Cook Shane Cook

NAME OF RESPONSIBLE OFFICIAL: Shane Cook

OFFICIAL TITLE OF RESPONSIBLE OFFICIAL: Director, WPC

MAILING ADDRESS: P.O. Box 308, Huntsville, AL. 35804

AREA CODE & PHONE NUMBER: (256) 883-3719

SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS

Responsible official is defined as follows:

1. In the case of a municipal, state, federal, or other public facility, the responsible official is either a principal executive officer or a ranking elected official of the municipality or other public entity.

2. In the case of a private or semi-public facility, the responsible official is either a principal executive officer or the owner of the corporation or other entity.

Attachment 1 to Supplementary Form
ADEM Form 311

Alternatives Analysis

Applicant/Project: _____

All new or expanded discharges (except discharges eligible for coverage under general permits) covered by the NPDES permitting program are subject to the provisions of ADEM's antidegradation policy. Applicants for such discharges to Tier 2 waters are required to demonstrate " . . . that the proposed discharge is necessary for important economic or social development." As a part of this demonstration, the applicant must complete an evaluation of the discharge alternatives listed below, including a calculation of the total annualized project costs for each technically feasible alternative (using ADEM Form 312 for public-sector projects and ADEM Form 313 for private-sector projects). Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

Alternative	Viable	Non-Viable	Comment
1 Land Application			
2 Pretreatment/Discharge to POTW			
3 Relocation of Discharge			
4 Reuse/Recycle			
5 Process/Treatment Alternatives			
6 On-site/Sub-surface Disposal			
(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)			
7			
8			
9			

Pursuant to ADEM Administrative Code Rule 335-6-3-.04, I certify on behalf of the applicant that I have completed an evaluation of the discharge alternatives identified above, and reached the conclusions indicated.

Signature: _____
(Professional Engineer)

Date: _____

(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)

ADEM Form 311 3/02

Attachment 2 to Supplementary Form

Calculation of Total Annualized Project Costs for Public-Sector Projects

A. Capital Costs

Capital Cost of Project $ _____

Other One-Time Costs of Project (Please List, if any):

_____ $ _____

_____ $ _____

_____ $ _____

Total Capital Costs (Sum column) $ _____ (1)

Portion of Capital Costs to be Paid for with Grant Monies $ _____ (2)

Capital Costs to be Financed [Calculate: (1) – (2)] $ _____ (3)

Type of Financing (e.g., G.O. bond, revenue bond, bank loan) _____

Interest Rate for Financing (expressed as decimal) _____ (i)

Time Period of Financing (in years) _____ (n)

Annualization Factor = $\frac{i}{(1+i)^n - 1} + i$ _____ (4)

Annualized Capital Cost [Calculate: (3) x (4)] _____ (5)

B. Operating and Maintenance Costs

Annual Costs of Operation and Maintenance (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.) (Please list below.)

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

Total Annual O & M Costs (Sum column) $ _____ (6)

C. Total Annual Cost of Pollution Control Project

Total Annual Cost of Pollution Control Project [(5) + (6)] $ _____ (7)

ADEM Form 312 3/02

Attachment 3 to Supplementary Form
ADEM Form 313

Calculation of Total Annualized Project Costs
for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$	(1)
Interest rate for Financing (Expressed as a decimal)		(i)
Time Period of Financing (Assume 10 years*)	10 years	(n)
Annualization Factor $= \frac{i}{(1+i)^{10}-1} + i$		(2)
Annualized Capital Cost [Calculate: (1) x (2)]	$	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$	(4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$	(5)

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

ADEM Form 313 3/02

Attachment 4 to Supplementary Form

NPDES PROGRAM
PERMIT APPLICATION FORMS
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

TYPE DISCHARGE	ADEM FORMS	EPA FORMS
New or existing once through non-contact cooling water and/or cooling tower blowdown, and/or sanitary wastewater (non-process wastewater only). Note: POTWs must use Form 2A.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2E
Existing discharges of process wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2C
New discharges of process wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2D
New or existing discharges composed entirely of stormwater meeting the EPA definition of stormwater associated with industrial activity	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2F
New or existing discharges composed of stormwater meeting the EPA definition of stormwater associated with industrial activity, and any other non-stormwater discharges.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2F and, as appropriate, Forms 2E, 2C, and/or 2D
New or existing Publicly-Owned Treatment Works (POTWs) and Privately-Owned Treatment Works composed of sanitary wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2A
New or existing land application of process wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.	Supplemental Information Form 187	Forms 1, 2F, and 2C or 2D, as appropriate
New or existing land application of sanitary wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1, 2F, and 2A or 2E, as appropriate

Testing requirements: Test procedures for all analyses shall conform to 40 CFR Part 136. If more than one method of analysis is approved, then the method having the lowest detection level shall be used. Any facilities discharging to mercury impaired surface waters identified by EPA or ADEM [as identified on the latest §303(d) List] and any facility with a discharge that has reasonable potential to cause in-stream exceedence of a Water Quality Based Effluent Limit (WQBEL) shall be required to use EPA Method 1631E.

ENERSOLV
a Solutions Company

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:

LabNumber	Sample Description	Date/Time Collected	Date Submitted
1600609-01	Chase WWTP Composite	1/14/16 05:10	1/14/16
1600609-02	Chase WWTP Grab	1/14/16 05:30	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

RECEIVED
FEB 18 2016
IND / MUN BRANCH

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

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

LABORATORY ACCREDITATION BUREAU
Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

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
Sample Point:Chase WWTP Composite	**Sample ID: 1600609-01**	**Collected: 01/14/2016**		**Submitted: 01/14/2016**
Anions by IC				
Nitrate plus Nitrite-Nitrogen	1.19			
* Nitrate-Nitrogen CAS: 14797-55-8	1.19	mg/l		
* Nitrite-Nitrogen CAS: 14797-65-0	<0.150	mg/l		
Inorganics				
* Total Kjeldahl Nitrogen	<1.50	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	0.00482	mg/l		
* Total Recoverable Copper CAS: 7440-50-8	0.00796	mg/l		
* Total Recoverable Lead CAS: 7439-92-1	<0.00100	mg/l		
* Total Recoverable Nickel CAS: 7440-02-0	0.0335	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	0.0564	mg/l		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

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

LABORATORY ACCREDITATION BUREAU
Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

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
Sample Point:Chase WWTP Composite (Cont'd)	**Sample ID: 1600609-01**	**Collected: 01/14/2016**		**Submitted: 01/14/2016**
Metals by ICP-OES				
* Total Calcium CAS: 7440-70-2	66.3	mg/l		
Total Hardness	192			
* Total Magnesium CAS: 7439-95-4	5.58	mg/l		
Sample Point:Chase WWTP Grab	**Sample ID: 1600609-02**	**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	<0.00500	mg/l		
Semivolatiles by EPA 625				
1,2,4-Trichlorobenzene CAS: 120-82-1	<1.10 [1]	ug/l	Q	
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 [1]	ug/l	Q	
2,4-Dinitrotoluene CAS: 121-14-2	<1.10 [1]	ug/l	Q	
2,6-Dinitrotoluene CAS: 606-20-2	<1.25 [1]	ug/l	Q	
2-Chloronaphthalene CAS: 91-58-7	<1.60 [1]	ug/l	Q	
2-Chlorophenol CAS: 95-57-8	<1.30	ug/l		
2-Nitrophenol CAS: 88-75-5	<1.25 [1]	ug/l	Q	

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

Cert# L2239 Testing

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
Sample Point:Chase WWTP Grab (Cont'd)	**Sample ID: 1600609-02**	**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 [1]	ug/l	Q	
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 [1]	ug/l	Q	
Acenaphthylene CAS: 208-96-8	<1.65 [1]	ug/l	Q	
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 [1]	ug/l	Q	
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		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

Cert# L2239 Testing

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
Sample Point:Chase WWTP Grab (Cont'd)	**Sample ID: 1600609-02**	**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 [1]	ug/l	Q	
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 [1]	ug/l	Q	
Hexachlorobutadiene CAS: 87-68-3	<0.900 [1]	ug/l	Q	
Hexachloroethane CAS: 67-72-1	<1.00 [1]	ug/l	Q	
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 [1]	ug/l	Q	
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		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025

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
Sample Point:Chase WWTP Grab (Cont'd)	**Sample ID: 1600609-02**	**Collected: 01/14/2016**		**Submitted: 01/14/2016**
Pentachlorophenol CAS: 87-86-5	<5.00	ug/l		
Phenanthrene CAS: 85-01-8	<1.20 [1]	ug/l	Q	
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		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

Cert# L2239 Testing

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
Sample Point:Chase WWTP Grab (Cont'd)	**Sample ID: 1600609-02**	**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	<3.0 [1]	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		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025

Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

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
Sample Point:Chase WWTP Grab (Cont'd)	**Sample ID: 1600609-02**	**Collected: 01/14/2016**		**Submitted: 01/14/2016**
* Trichlorofluoromethane CAS: 75-69-4	<5.0	ug/l		
* Vinyl chloride CAS: 75-01-4	<1.5	ug/l		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

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

LABORATORY ACCREDITATION BUREAU

Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

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.

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

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

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

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.

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.

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

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.

Analysis Information

LabNumber	Analysis	SpecificMethod	Analyst	Analysis Start Date/Time	Analysis End Date/Time
1600609-01	Total Recoverable Silver	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Recoverable Arsenic	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Recoverable Beryllium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Calcium	EPA 200.7/6010C	DJN	01/18/2016 08:30	
1600609-01	Total Recoverable Cadmium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Recoverable Chromium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Recoverable Copper	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Hardness	EPA 200.7	/DJN	01/18/2016 08:30	
1600609-01	Total Magnesium	EPA 200.7/6010C	DJN	01/18/2016 08:30	
1600609-01	Total Recoverable Nickel	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Nitrite-Nitrogen	EPA 300.0	DJN	01/14/2016 22:09	
1600609-01	Nitrate-Nitrogen	EPA 300.0	DJN	01/14/2016 22:09	
1600609-01	Nitrate plus Nitrite-Nitrogen	EPA 300.0	/DJN	01/14/2016 22:09	
1600609-01	Total Phosphorus	EPA 365.3	MD	01/18/2016 08:45	
1600609-01	Total Recoverable Lead	EPA 200.8	KW	01/21/2016 10:37	
1600609-01	Total Recoverable Antimony	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Recoverable Selenium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Kjeldahl Nitrogen	SM 4500-Norg C	RAC	01/15/2016 06:00	
1600609-01	Total Recoverable Thallium	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-01	Total Recoveable Zinc	EPA 200.8/6020A	KW	01/21/2016 10:37	
1600609-02	Total Cyanide	ASTM D7511-09	JW	01/21/2016 10:20	
1600609-02	HEM (Oil and Grease)	EPA 1664A	JG	01/19/2016 06:50	
1600609-02	Phenolics (4AAP)	EPA 420.1	SH	01/15/2016 12:40	
1600609-02	BN/AE Semivolatiles	EPA 625	RH/AJW	01/18/2016 09:00	
1600609-02	Volatile Organic Analytes	EPA 624	ET	01/19/2016 13:11	

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

ENERSOLV
A Solutions Company

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

www.enersolv.com

COC NUMBER	358916
PAGE	1 of 2
Chase Renewal	

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**		**CITY/STATE/ZIP**
Ed Fincher	1800 Vermont Road		Huntsville, AL 35802-2064
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**	
SAMPLE COLLECTED BY	**EXPEDITED REPORT DELIVERY (SURCHARGE)**		
S. Vassar	**DATE DUE (REQUIRED)**		

REQUESTED ANALYSES

ENERSOLV LAB NO	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	GRAB	COMP	TRSB2	TRAS2	TRBE2	TRCD2	TRCR2	TRCU2	TRPB2	HCrIII	TRNI2	TRSE2	TRAG2	TRTL2	TRZN2	#HARDNESS
1600609-01	Huntsville-WPC-Chase	Chase WWTP	1-14-16	05:16		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Comments: Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.3°C

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date		Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time		Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date		Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time		SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Quart	HNO3	Metals A
1	Plastic	Pint	Ice	NO2+NO3 B

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
S. Vassar	1-14-16	13:01						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS
[signature]	1-14-16	1301	☑ Accepted ☐ Rejected ☐ Accepted with Exception

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

COC NUMBER	120856		
PAGE	2	of	2
Chase			

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**		**CITY/STATE/ZIP**
Ed Fincher	1800 Vermont Road		Huntsville, AL 35802-2064
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**	
SAMPLE COLLECTED BY		**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
S. Vassar		**DATE DUE (REQUIRED)**	

REQUESTED ANALYSES

ENERSOLV LAB NO	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	GRAB	COMP	NO2-NO3 IC	TKN	P-T				Oil and Grease	#CN-T	PHENOLICS	$624-FORM 2A	$625-FORM 2C			
1600609-01	Huntsville-WPC-Chase	Chase WWTP	1-14-16	05:10		X	X	X	X											
-02			1-14-16	05:30	X								X	X	X	X	X			

Comments:
NO2-NO3 has a 48hr hold time
Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.3°C

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date	N/A	Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time	N/A	Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time	N/A	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Pint	NaOH	Cyanide A
1	Glass	Amber Liter	H2SO4	Phenolics B
2	Glass	Amber Liter	Plain	625 Form 2A CDE
2/2	Glass	40ml Vials	HCL/Plain	624 Form 2C FGHI
2	Glass	Liter	1:1 HCL	O/G JK
1	Plastic	Pint	H2SO4	C TKN,P

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
S. Vassar	1-14-16	13:01						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS
	1.14.16	1301	☑ Accepted ☐ Rejected ☐ Accepted with Exception

ENERSOLV
a Solutions Company

October 17, 2013

Mr. Ed Fincher
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:

Sample ID Number	Sample Description	Date Collected	Time Collected	Date Submitted
AC46691	Chase WWTP Comp.	10/9/13	05:00	10/9/13
AC46692	Chase WWTP Grab	10/9/13	05:00	10/9/13

ENERSOLV maintains a quality system compliant with **ISO 17025:2005** and meets the relevant quality system requirements of **ISO 9001:2000**. Although not all tests performed by *ENERSOLV* are covered by this quality system, all tests have been conducted in accordance with *ENERSOLV* Standard Operating Procedures and Quality Control Program using, where applicable, U.S.E.P.A. approved 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.

Reviewed by:

Karen Sutton

Karen Sutton
Vice President Client Services

2220 Beltline Road SW • Decatur, Alabama 35601
P.O. Box 1646 • Decatur, Alabama 35602 • (256) 350-0846 • Fax: (256) 350-0686

Report Date: 10/17/13
Report Time: 8:27

SAMPLE RESULTS REPORT

REPORT TO
Mr. Ed Fincher City of Huntsville WPC 1800 Vermont Road Huntsville, AL 35802-2064

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.

NELAP Accredited
Florida DOH
#E871078

EPA/ADEM 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

Sample Point: Chase WWTP Comp. **Collected: 10/09/2013** **Submitted: 10/09/2013**

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AC46691	* Total Calcium CAS: 7440-70-2	67.1	mg/l		
AC46691	Hardness	195	mg/l as CaCO3		
AC46691	* Total Mercury CAS: 7439-97-6	<0.000200	mg/l		
AC46691	Total Magnesium CAS: 7439-95-4	6.71	mg/l		
AC46691	Nitrite-Nitrogen	0.432	mg/l		
AC46691	Nitrate-Nitrogen CAS: 7697-37-2	4.90	mg/l		
AC46691	Nitrate plus Nitrite-Nitrogen	5.33	mg/l		
AC46691	* Total Phosphorus CAS: 7723-14-0	1.41	mg/l		
AC46691	* Total Kjeldahl Nitrogen	3.01	mg/l		
AC46691	Total Recoverable Silver CAS: 7440-22-4	<0.00100	mg/l		
AC46691	Total Recoverable Arsenic CAS: 7440-38-2	<0.00050	mg/l		
AC46691	Total Recoverable Beryllium CAS: 7440-41-7	<0.00100	mg/l		
AC46691	Total Recoverable Cadmium CAS: 7440-43-9	<0.00100	mg/l		
AC46691	Total Recoverable Chromium CAS: 7440-47-3	0.0324	mg/l		
AC46691	Total Recoverable Copper CAS: 7440-50-8	0.0207	mg/l		
AC46691	Total Recoverable Nickel	0.150	mg/l		
AC46691	Total Recoverable Lead CAS: 7439-92-1	<0.00100	mg/l		
AC46691	Total Recoverable Antimony	0.0152	mg/L		
AC46691	Total Recoverable Selenium CAS: 7782-49-2	<0.00100	mg/l		
AC46691	Total Recoverable Thallium	<0.00100	mg/l		
AC46691	Total Recoverable Zinc CAS: 7440-66-6	0.384	mg/l		

Report Date: 10/17/13

Report Time: 8:27

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

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.

NELAP Accredited Florida DOH #E871078

EPA/ADEM 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

Sample Point: Chase WWTP Grab **Collected: 10/09/2013** **Submitted: 10/09/2013**

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AC46692	1,1,1-Trichloroethane CAS: 71-55-6	<3.0	ug/l		
AC46692	1,1,2,2-Tetrachloroethane CAS: 79-34-5	<3.0	ug/l		
AC46692	1,1,2-Trichloroethane CAS: 79-00-5	<3.0	ug/l		
AC46692	1,1-Dichloroethane CAS: 75-34-3	<3.0	ug/l		
AC46692	1,1-Dichloroethylene CAS: 75-35-4	<3.0	ug/l		
AC46692	1,2-Dichlorobenzene CAS: 95-50-1	<3.0	ug/l		
AC46692	1,2-Dichloroethane CAS: 107-06-2	<3.0	ug/l		
AC46692	1,2-Dichloropropane CAS: 78-87-5	<3.0	ug/l		
AC46692	1,3-Dichlorobenzene CAS: 541-73-1	<3.0	ug/l		
AC46692	1,4-Dichlorobenzene CAS: 106-46-7	<3.0	ug/l		
AC46692	2-Chloroethylvinyl ether CAS: 110-75-8	<3.0	ug/l		
AC46692	Acrolein CAS: 107-02-8	<5.0	ug/l		
AC46692	Acrylonitrile CAS: 107-13-1	<5.0	ug/l		
AC46692	Benzene CAS: 71-43-2	<3.0	ug/l		
AC46692	Bromoform CAS: 75-25-2	<3.0	ug/l		
AC46692	Carbon tetrachloride CAS: 56-23-5	<3.0	ug/l		
AC46692	Chlorobenzene CAS: 108-90-7	<3.0	ug/l		
AC46692	Chlorodibromomethane CAS: 124-48-1	<3.0	ug/l		
AC46692	Chloroethane CAS: 75-00-3	<5.0	ug/l		
AC46692	Chloroform CAS: 67-66-3	<3.0	ug/l		
AC46692	cis-1,3-Dichloropropylene CAS: 10061-01-5	<3.0	ug/l		
AC46692	Dichlorobromomethane CAS: 75-27-4	<3.0	ug/l		

Report Date: 10/17/13
Report Time: 8:27

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

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.

NELAP Accredited
Florida DOH
#E871078

EPA/ADEM 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

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AC46692	Ethyl benzene CAS: 100-41-4	<3.0	ug/l		
AC46692	Methyl bromide CAS: 74-83-9	<5.0	ug/l		
AC46692	Methyl chloride CAS: 74-87-3	<5.0	ug/l		
AC46692	Methylene chloride CAS: 75-09-2	<5.0	ug/l		
AC46692	Tetrachloroethylene CAS: 127-18-4	<3.0	ug/l		
AC46692	Toluene CAS: 108-88-3	<3.0	ug/l		
AC46692	Trans-1,2-Dichloroethylene CAS: 156-60-5	<3.0	ug/l		
AC46692	trans-1,3-Dichloropropylene CAS: 10061-02-6	<3.0	ug/l		
AC46692	Trichloroethylene CAS: 79-01-6	<3.0	ug/l		
AC46692	Vinyl chloride CAS: 75-01-4	<5.0	ug/l		
AC46692	1,2,4-Trichlorobenzene CAS: 120-82-1	<7.6	ug/l		
AC46692	1,2-Diphenylhydrazine CAS: 122-66-7	<10	ug/l		
AC46692	2,4,6-Trichlorophenol CAS: 88-06-2	<10	ug/l		
AC46692	2,4-Dichlorophenol CAS: 120-83-2	<7.6	ug/l		
AC46692	2,4-Dimethylphenol CAS: 105-67-9	<26	ug/l		
AC46692	2,4-Dinitrophenol CAS: 51-28-5	<51	ug/l		
AC46692	2,4-Dinitrotoluene CAS: 121-14-2	<10	ug/l		
AC46692	2,6-Dinitrotoluene CAS: 606-20-2	<7.6	ug/l		
AC46692	2-Chloronaphthalene CAS: 91-58-7	<10	ug/l		
AC46692	2-Chlorophenol CAS: 95-57-8	<7.6	ug/l		
AC46692	2-Nitrophenol CAS: 88-75-5	<10	ug/l		
AC46692	3,3'-Dichlorobenzidine CAS: 91-94-1	<15	ug/l		
AC46692	3,4-Benzofluoranthene CAS: 205-99-2	<10	ug/l		

Report Date: 10/17/13

Report Time: 8:27

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

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.

NELAP Accredited Florida DOH #E871078

EPA/ADEM 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.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AC46692	4,6-Dinitro-o-cresol CAS: 534-52-1	<51	ug/l		
AC46692	4-Bromophenyl phenyl ether CAS: 101-55-3	<10	ug/l		
AC46692	4-Chlorophenyl phenyl ether CAS: 7005-72-3	<7.6	ug/l		
AC46692	4-Nitrophenol CAS: 100-02-7	<51	ug/l		
AC46692	Acenaphthene CAS: 83-32-9	<10	ug/l		
AC46692	Acenaphthylene CAS: 208-96-8	<13	ug/l		
AC46692	Anthracene CAS: 120-12-7	<7.6	ug/l		
AC46692	Benzidine CAS: 92-87-5	<76	ug/l	Q	
AC46692	Benzo(a)anthracene CAS: 56-55-3	<7.6	ug/l		
AC46692	Benzo(a)pyrene CAS: 50-32-8	<7.6	ug/l		
AC46692	Benzo(ghi)perylene CAS: 191-24-2	<10	ug/l		
AC46692	Benzo(k)fluoranthene CAS: 207-08-9	<7.6	ug/l		
AC46692	Bis(2-chloroethoxy)methane CAS: 111-91-1	<7.6	ug/l		
AC46692	Bis(2-chloroethyl)ether CAS: 111-44-4	<10	ug/l		
AC46692	Bis(2-chloroisopropyl)ether CAS: 108-60-1	<7.6	ug/l		
AC46692	Bis(2-ethylhexyl)phthalate CAS: 117-81-7	<26	ug/l		
AC46692	Butyl benzyl phthalate CAS: 85-68-7	<26	ug/l		
AC46692	Chrysene CAS: 218-01-9	<7.6	ug/l		
AC46692	Dibenzo(a,h)anthracene CAS: 53-70-3	<13	ug/l		
AC46692	Diethyl phthalate CAS: 84-66-2	<13	ug/l		
AC46692	Dimethyl phthalate CAS: 131-11-3	<10	ug/l		
AC46692	Di-n-butylphthalate CAS: 84-74-2	<10	ug/l		
AC46692	Di-n-octylphthalate CAS: 117-84-0	<15	ug/l		

Report Date: 10/17/13
Report Time: 8:27

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

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.

NELAP Accredited
Florida DOH
#E871078

EPA/ADEM 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

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AC46692	Fluoranthene CAS: 206-44-0	<7.6	ug/l		
AC46692	Fluorene CAS: 86-73-7	<7.6	ug/l		
AC46692	Hexachlorobenzene CAS: 118-74-1	<13	ug/l		
AC46692	Hexachlorobutadiene CAS: 87-68-3	<13	ug/l		
AC46692	Hexachlorocyclopentadiene CAS: 77-47-4	<13	ug/l		
AC46692	Hexachloroethane CAS: 67-72-1	<13	ug/l	Q	
AC46692	Indeno(1,2,3-cd)pyrene CAS: 193-39-5	<13	ug/l		
AC46692	Isophorone CAS: 78-59-1	<10	ug/l		
AC46692	Naphthalene CAS: 91-20-3	<5.1	ug/l		
AC46692	Nitrobenzene CAS: 98-95-3	<15	ug/l		
AC46692	N-Nitrosodimethylamine CAS: 62-75-9	<20	ug/l		
AC46692	N-Nitrosodi-n-propylamine CAS: 621-64-7	<7.6	ug/l		
AC46692	N-Nitrosodiphenylamine CAS: 86-30-6	<7.6	ug/l		
AC46692	p-Chloro-m-cresol CAS: 59-50-7	<10	ug/l		
AC46692	Pentachlorophenol CAS: 87-86-5	<51	ug/l		
AC46692	Phenanthrene CAS: 85-01-8	<5.1	ug/l		
AC46692	Phenol CAS: 108-95-2	<5.1	ug/l		
AC46692	Pyrene CAS: 129-00-0	<15	ug/l		
AC46692	Total Cyanide CAS: 57-12-5	<0.00500	mg/l		
AC46692	* HEM (Oil and Grease)	<5.00	mg/l		
AC46692	Phenolics (4AAP)	<0.0100	mg/l		

Report Date: 10/17/13
Report Time: 8:27

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

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.

NELAP Accredited
Florida DOH
#E871078

EPA/ADEM 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.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit

Data Qualifiers:

B: Estimated BOD/CBOD value - final dissolved oxygen value less than 1.0 mg/l.
D: Estimated BOD/CBOD value - sample dissolved oxygen depletion less than method required 2.0 mg/l.
G: Glucose/Glutamic Acid standard outside quality control criteria for BOD/CBOD.
H: Sample beyond accepted holding time.
J: Estimated value- the analyte was positively identified; the quantitation is an estimation (e.g. matrix interference, outside calibration range).
N: Presumptive evidence of presence (parameter tentatively identified based on mass spectral library search; quality control requirements confirmation was not met, i.e., presence of analyte was not confirmed by alternative procedure.)
Q: One or more quality control criteria (LCS, surrogate spike recovery, continued calibration, etc.) failed. Data may be estimated or biased.
T: Test temperature fell outside method specified range.
Y: Analysis performed from improperly preserved sample.

Analysis Information

Sample ID	Analysis	Method	Analyst	Analysis Start Date/Time		BOD/CBOD/Fecal Analysis End Date/Time
AC46691	Hardness	EPA 200.7	DJN	10/14/2013	18:59	
AC46691	Nitrate plus Nitrite-Nitrogen	EPA 300.0	HGT	10/09/2013	17:15	
AC46691	Nitrate-Nitrogen	EPA 300.0	HGT	10/09/2013	17:15	
AC46691	Nitrite-Nitrogen	EPA 300.0	HGT	10/09/2013	17:15	
AC46691	Total Calcium	EPA 200.7	DJN	10/14/2013	18:59	
AC46691	Total Kjeldahl Nitrogen	SM 4500-Norg C	RAC	10/10/2013	07:00	
AC46691	Total Magnesium	EPA 200.7	DJN	10/14/2013	18:59	
AC46691	Total Mercury	EPA 245.1	KW	10/16/2013	16:27	
AC46691	Total Phosphorus	EPA 365.3	SH	10/11/2013	10:15	
AC46691	Total Recoverable Antimony	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Arsenic	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Beryllium	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Cadmium	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Chromium	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Copper	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Lead	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Nickel	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Selenium	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Silver	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Thallium	EPA 200.8	KW	10/15/2013	16:30	
AC46691	Total Recoverable Zinc	EPA 200.8	KW	10/15/2013	16:30	
AC46692	Form 2A Volatiles	EPA 624	FW	10/14/2013	14:12	
AC46692	Form 2C Semivolatiles	EPA 625	ET	10/11/2013	18:42	
AC46692	HEM (Oil and Grease)	EPA 1664A	RAC	10/14/2013	09:30	

Report Date: 10/17/13

Report Time: 8:27

SAMPLE RESULTS REPORT

REPORT TO
Mr. Ed Fincher City of Huntsville WPC 1800 Vermont Road Huntsville, AL 35802-2064

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.

NELAP Accredited
Florida DOH
#E871078

EPA/ADEM 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

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AC46692	Phenolics (4AAP)	EPA 420.1	JW	10/15/2013	11:15
AC46692	Total Cyanide	ASTM D7511-09	JW	10/14/2013	11:15

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

ENERSOLV
a Solutions Company

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

www.enersolv.com

COC NUMBER	46670		
PAGE	1	of	2
Chase Renewal			

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Ed Fincher	1800 Vermont Road	Huntsville, AL 35802-2064

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION

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

REQUESTED ANALYSES

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	DATE	TIME	GRAB	COMP	TRSB	TRAS	TRBE	TRCD	TRCR	TRCU	TRPB	HG-AA	TRNI	TRSE	TRAG	TRTL	TRZN	#HARDNESS
AC46691	Huntsville-WPC-Chase	Chase WWTP	10-7-13	05:00		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Comments: Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.6°

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date		Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time		Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date		Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time		SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Quart	HNO3	A Metals
1	Plastic	Pint	Ice	B NO2+NO3

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
S. Vassar	10-9-13	1255	Jimmy Shaw	10-9-13	1345			
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Jimmy Shaw	10-9-13	1255						

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS
J Shaw	10-9-13	1345	☒ Accepted ☐ Rejected ☐ Accepted with Exception

ENERSOLV
a Solutions Company

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

www.enersolv.com

COC NUMBER	111786		
PAGE	2	of	2
Chase			

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Ed Fincher	1800 Vermont Road	Huntsville, AL 35802-2064

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION

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

REQUESTED ANALYSES

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	DATE	TIME	GRAB	COMP	NO2-NO3 IC	TKN	P-T				Oil and Grease	#CN-T	PHENOLICS	$624-FORM 2A	$625-FORM 2C			
AC46691	Huntsville-WPC-Chase	Chase WWTP	10-9-13	05:00		X	X	X	X											
692			10-9-13	05:00	X								X	X	X	X	X			

Comments:

NO2-NO3 has a 48hr hold time

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.6C

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date	N/A	Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time	N/A	Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time	N/A	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Pint	NaOH	Cyanide A
1	Glass	Amber Liter	H2SO4	Phenolics B
2	Glass	Amber Liter	Plain	625 Form 2A CDE
2/2	Glass	40ml Vials	HCL/Plain	624 Form 2C FGHI
2	Glass	Liter	1:1 HCL	O/G JK
1	Plastic	Pint	H2SO4	C TKN,P

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
S Vassar	10-9-13	1255	Jimmy Sharp	10-9-13	1345			
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Jimmy Sharp	10-9-13	1255						

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS
Sharp	10-9-13	1345	☑ Accepted ☐ Rejected ☐ Accepted with Exception

Enersolv Form FLD-020-SOP A rev. 5

ENERSOLV
a Solutions Company

January 27, 2012

Mr. Ed Fincher
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:

Sample ID Number	Sample Description	Date Collected	Time Collected	Date Submitted
AB80049	Chase WWTP	1/18/12	05:00	1/18/12
AB80050	Chase WWTP	1/18/12	04:32	1/18/12

ENERSOLV maintains a quality system compliant with the **National Environmental Laboratory Accreditation Program (NELAP)** and **ISO 17025:2005** and meets the relevant quality system requirements of **ISO 9001:2000**. Although not all tests performed by *ENERSOLV* are covered by these quality systems, all tests have been conducted in accordance with *ENERSOLV* Standard Operating Procedures and Quality Control Program using, where applicable, U.S.E.P.A. approved 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.

Reviewed by:

William D. Hollerman, Ph.D.
Vice President Technical Services

2220 Beltline Road SW • Decatur, Alabama 35601
P.O. Box 1646 • Decatur, Alabama 35602 • (256) 350-0846 • Fax: (256) 350-0686

Report Date: 1/27/12

Report Time: 11:59

SAMPLE RESULTS REPORT

REPORT TO
Mr. Ed Fincher 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.

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

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert# L2239 Testing

EPA/ADEM Certification No. 40160

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

Sample Point: Chase WWTP **Collected: 01/18/2012** **Submitted: 01/18/2012**

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB80049	*Total Calcium CAS: 7440-70-2	59.3	mg/l		
AB80049	Hardness	168	mg/l as CaCO3		
AB80049	*Total Mercury CAS: 7439-97-6	<0.000200	mg/l		
AB80049	Total Magnesium CAS: 7439-95-4	4.82	mg/l		
AB80049	Nitrite-Nitrogen	<0.15	mg/l		
AB80049	Nitrate-Nitrogen CAS: 7697-37-2	4.29	mg/l		
AB80049	Nitrate plus Nitrite-Nitrogen	4.29	mg/l		
AB80049	*Total Phosphorus CAS: 7723-14-0	1.52	mg/l		
AB80049	*Total Kjeldahl Nitrogen	3.10	mg/l		
AB80049	*Total Recoverable Silver CAS: 7440-22-4	<0.0200	mg/l		
AB80049	*Total Recoverable Arsenic CAS: 7440-38-2	<0.0520	mg/l		
AB80049	*Total Recoverable Beryllium CAS: 7440-41-7	<0.00200	mg/l		
AB80049	*Total Recoverable Cadmium CAS: 7440-43-9	<0.00800	mg/l		
AB80049	*Total Recoverable Chromium CAS: 7440-47-3	0.085	mg/l		
AB80049	*Total Recoverable Copper CAS: 7440-50-8	0.0374	mg/l		
AB80049	*Total Recoverable Nickel	0.112	mg/l		
AB80049	*Total Recoverable Lead CAS: 7439-92-1	<0.0750	mg/l		
AB80049	*Total Recoverable Antimony	<0.0780	mg/L		
AB80049	*Total Recoverable Selenium CAS: 7782-49-2	<0.200	mg/l		
AB80049	Total Recoverable Thallium	<0.0500	mg/l		
AB80049	*Total Recoverable Zinc CAS: 7440-66-6	0.608	mg/l		

Report Date: 1/27/12
Report Time: 11:59

SAMPLE RESULTS REPORT

REPORT TO
Mr. Ed Fincher 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.

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

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert# L2239 Testing

EPA/ADEM Certification
No. 40160

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.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
Sample Point: Chase WWTP		**Collected: 01/18/2012**		**Submitted: 01/18/2012**	
AB80050	1,1,1-Trichloroethane CAS: 71-55-6	<3.0	ug/l		
AB80050	1,1,2,2-Tetrachloroethane CAS: 79-34-5	<3.0	ug/l		
AB80050	1,1,2-Trichloroethane CAS: 79-00-5	<3.0	ug/l		
AB80050	1,1-Dichloroethane CAS: 75-34-3	<3.0	ug/l		
AB80050	1,1-Dichloroethylene CAS: 75-35-4	<3.0	ug/l		
AB80050	1,2-Dichlorobenzene CAS: 95-50-1	<3.0	ug/l		
AB80050	1,2-Dichloroethane CAS: 107-06-2	<3.0	ug/l		
AB80050	1,2-Dichloropropane CAS: 78-87-5	<3.0	ug/l		
AB80050	1,3-Dichlorobenzene CAS: 541-73-1	<3.0	ug/l		
AB80050	1,4-Dichlorobenzene CAS: 106-46-7	<3.0	ug/l		
AB80050	2-Chloroethylvinyl ether CAS: 110-75-8	<3.0	ug/l		
AB80050	Acrolein CAS: 107-02-8	<5.0	ug/l		
AB80050	Acrylonitrile CAS: 107-13-1	<5.0	ug/l		
AB80050	Benzene CAS: 71-43-2	<3.0	ug/l		
AB80050	Bromoform CAS: 75-25-2	<3.0	ug/l		
AB80050	Carbon tetrachloride CAS: 56-23-5	<3.0	ug/l		
AB80050	Chlorobenzene CAS: 108-90-7	<3.0	ug/l		
AB80050	Chlorodibromomethane CAS: 124-48-1	<3.0	ug/l		
AB80050	Chloroethane CAS: 75-00-3	<5.0	ug/l		
AB80050	Chloroform CAS: 67-66-3	<3.0	ug/l		
AB80050	cis-1,3-Dichloropropylene CAS: 10061-01-5	<3.0	ug/l		
AB80050	Dichlorobromomethane CAS: 75-27-4	<3.0	ug/l		

Report Date: 1/27/12

Report Time: 11:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
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.

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

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

Cert# L2239 Testing

EPA/ADEM Certification No. 40160

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

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB80050	Ethyl benzene CAS: 100-41-4	<3.0	ug/l		
AB80050	Methyl bromide CAS: 74-83-9	<5.0	ug/l		
AB80050	Methyl chloride CAS: 74-87-3	<5.0	ug/l		
AB80050	Methylene chloride CAS: 75-09-2	<5.0	ug/l		
AB80050	Tetrachloroethylene CAS: 127-18-4	<3.0	ug/l		
AB80050	Toluene CAS: 108-88-3	<3.0	ug/l		
AB80050	Trans-1,2-Dichloroethylene CAS: 156-60-5	<3.0	ug/l		
AB80050	trans-1,3-Dichloropropylene CAS: 10061-02-6	<3.0	ug/l		
AB80050	Trichloroethylene CAS: 79-01-6	<3.0	ug/l		
AB80050	Vinyl chloride CAS: 75-01-4	<5.0	ug/l		
AB80050	1,2,4-Trichlorobenzene CAS: 120-82-1	<7.8	ug/l		
AB80050	1,2-Diphenylhydrazine CAS: 122-66-7	<10	ug/l		
AB80050	2,4,6-Trichlorophenol CAS: 88-06-2	<10	ug/l		
AB80050	2,4-Dichlorophenol CAS: 120-83-2	<7.8	ug/l		
AB80050	2,4-Dimethylphenol CAS: 105-67-9	<26	ug/l		
AB80050	2,4-Dinitrophenol CAS: 51-28-5	<52	ug/l		
AB80050	2,4-Dinitrotoluene CAS: 121-14-2	<10	ug/l		
AB80050	2,6-Dinitrotoluene CAS: 606-20-2	<7.8	ug/l		
AB80050	2-Chloronaphthalene CAS: 91-58-7	<10	ug/l		
AB80050	2-Chlorophenol CAS: 95-57-8	<7.8	ug/l		
AB80050	2-Nitrophenol CAS: 88-75-5	<10	ug/l		
AB80050	3,3'-Dichlorobenzidine CAS: 91-94-1	<16	ug/l		
AB80050	3,4-Benzofluoranthene CAS: 205-99-2	<10	ug/l		
AB80050	4,6-Dinitro-o-cresol CAS: 534-52-1	<52	ug/l		

Report Date: 1/27/12

Report Time: 11:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
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.
ENERSOLV also maintains ISO/IEC 17025 accreditation through Laboratory Accreditation Bureau for the specific tests listed in L-A-B Certificate #L2239 Testing.
Tests within the scope of accreditation are indicated by an asterisk (*).

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert# L2239 Testing

EPA/ADEM Certification
No. 40160

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.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB80050	4-Bromophenyl phenyl ether CAS: 101-55-3	<10	ug/l		
AB80050	4-Chlorophenyl phenyl ether CAS: 7005-72-3	<7.8	ug/l		
AB80050	4-Nitrophenol CAS: 100-02-7	<52	ug/l		
AB80050	Acenaphthene CAS: 83-32-9	<10	ug/l		
AB80050	Acenaphthylene CAS: 208-96-8	<13	ug/l		
AB80050	Anthracene CAS: 120-12-7	<7.8	ug/l		
AB80050	Benzidine CAS: 92-87-5	<78	ug/l	Q	
AB80050	Benzo(a)anthracene CAS: 56-55-3	<7.8	ug/l		
AB80050	Benzo(a)pyrene CAS: 50-32-8	<7.8	ug/l		
AB80050	Benzo(ghi)perylene CAS: 191-24-2	<10	ug/l		
AB80050	Benzo(k)fluoranthene CAS: 207-08-9	<7.8	ug/l		
AB80050	Bis(2-chloroethoxy)methane CAS: 111-91-1	<7.8	ug/l		
AB80050	Bis(2-chloroethyl)ether CAS: 111-44-4	<10	ug/l		
AB80050	Bis(2-chloroisopropyl)ether CAS: 108-60-1	<7.8	ug/l		
AB80050	Bis(2-ethylhexyl)phthalate CAS: 117-81-7	32	ug/l		
AB80050	Butyl benzyl phthalate CAS: 85-68-7	<26	ug/l		
AB80050	Chrysene CAS: 218-01-9	<7.8	ug/l		
AB80050	Dibenzo(a,h)anthracene CAS: 53-70-3	<13	ug/l		
AB80050	Diethyl phthalate CAS: 84-66-2	<13	ug/l		
AB80050	Dimethyl phthalate CAS: 131-11-3	<10	ug/l		
AB80050	Di-n-butylphthalate CAS: 84-74-2	<10	ug/l		
AB80050	Di-n-octylphthalate CAS: 117-84-0	<16	ug/l		
AB80050	Fluoranthene CAS: 206-44-0	<7.8	ug/l		
AB80050	Fluorene CAS: 86-73-7	<7.8	ug/l		

Report Date: 1/27/12

Report Time: 11:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
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.

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

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025

Cert# L2239 Testing

EPA/ADEM Certification No. 40160

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

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB80050	Hexachlorobenzene CAS: 118-74-1	<13	ug/l		
AB80050	Hexachlorobutadiene CAS: 87-68-3	<13	ug/l		
AB80050	Hexachlorocyclopentadiene CAS: 77-47-4	<13	ug/l		
AB80050	Hexachloroethane CAS: 67-72-1	<13	ug/l		
AB80050	Indeno(1,2,3-cd)pyrene CAS: 193-39-5	<13	ug/l		
AB80050	Isophorone CAS: 78-59-1	<10	ug/l		
AB80050	Naphthalene CAS: 91-20-3	<5.2	ug/l		
AB80050	Nitrobenzene CAS: 98-95-3	<16	ug/l		
AB80050	N-Nitrosodimethylamine CAS: 62-75-9	<21	ug/l		
AB80050	N-Nitrosodi-n-propylamine CAS: 621-64-7	<7.8	ug/l		
AB80050	N-Nitrosodiphenylamine CAS: 86-30-6	<7.8	ug/l		
AB80050	p-Chloro-m-cresol CAS: 59-50-7	<10	ug/l		
AB80050	Pentachlorophenol CAS: 87-86-5	<52	ug/l		
AB80050	Phenanthrene CAS: 85-01-8	<5.2	ug/l		
AB80050	Phenol CAS: 108-95-2	<5.2	ug/l		
AB80050	Pyrene CAS: 129-00-0	<16	ug/l		
AB80050	Total Cyanide CAS: 57-12-5	<0.0100	mg/l		
AB80050	*HEM (Oil and Grease)	<5.00	mg/l		
AB80050	Phenolics (4AAP)	<0.0100	mg/l		

Report Date: 1/27/12
Report Time: 11:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
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.

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

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert# L2239 Testing

EPA/ADEM Certification No. 40160

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.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit

Data Qualifiers:

B: Estimated BOD/CBOD value - final dissolved oxygen value less than 1.0 mg/l.
D: Estimated BOD/CBOD value - sample dissolved oxygen depletion less than method required 2.0 mg/l.
G: Glucose/Glutamic Acid standard outside quality control criteria for BOD/CBOD.
H: Sample beyond accepted holding time.
J: Estimated value- the analyte was positively identified; the quantitation is an estimation (e.g. matrix interference, outside calibration range).
N: Presumptive evidence of presence (parameter tentatively identified based on mass spectral library search; quality control requirements confirmation was not met, i.e., presence of analyte was not confirmed by alternative procedure.)
Q: One or more quality control criteria (LCS, surrogate spike recovery, continued calibration, etc.) failed. Data may be estimated or biased.
Y: Analysis performed from improperly preserved sample.

Analysis Information

Sample ID	Analysis	Method	Analyst	Analysis Start Date/Time		BOD/CBOD/Fecal Analysis End Date/Time
AB80049	Hardness	EPA 200.7	DJN	01/24/2012	12:04	
AB80049	Nitrate plus Nitrite-Nitrogen	EPA 300.0	KW	01/19/2012	20:01	
AB80049	Nitrate-Nitrogen	EPA 300.0	KW	01/19/2012	20:01	
AB80049	Nitrite-Nitrogen	EPA 300.0	KW	01/19/2012	20:01	
AB80049	Total Calcium	EPA 200.7	DJN	01/24/2012	12:04	
AB80049	Total Kjeldahl Nitrogen	SM 4500-Norg C	RAC	01/20/2012	06:00	
AB80049	Total Magnesium	EPA 200.7	DJN	01/24/2012	12:04	
AB80049	Total Mercury	EPA 245.1	KW	01/20/2012	09:30	
AB80049	Total Phosphorus	EPA 365.3	JW	01/20/2012	11:55	
AB80049	Total Recoverable Antimony	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Arsenic	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Beryllium	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Cadmium	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Chromium	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Copper	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Lead	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Nickel	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Selenium	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Silver	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Thallium	EPA 200.7	DJN	01/24/2012	12:29	
AB80049	Total Recoverable Zinc	EPA 200.7	DJN	01/24/2012	12:29	
AB80050	Form 2A Volatiles	EPA 624	FW	01/23/2012	12:10	
AB80050	Form 2C Semivolatiles	EPA 625	ET	01/19/2012	19:18	
AB80050	HEM (Oil and Grease)	EPA 1664A	DOG	01/24/2012	05:45	
AB80050	Phenolics (4AAP)	EPA 420.1	JW	01/23/2012	08:30	

Report Date: 1/27/12

Report Time: 11:59

SAMPLE RESULTS REPORT

REPORT TO
Mr. Ed Fincher 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.

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

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert# L2239 Testing

EPA/ADEM Certification
No. 40160

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

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit

AB80050	Total Cyanide	SM 4500-CN	JW	01/19/2012	08:05	

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

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

www.enersolv.com

COC NUMBER	710327
PAGE	1 of 2
Chase Renewal	

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Ed Fincher	1800 Vermont Road	Huntsville, AL 35802-2064

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION

SAMPLE COLLECTED BY: Mark Jones

EXPEDITED REPORT DELIVERY (SURCHARGE)

DATE DUE (REQUIRED)

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	GRAB	COMP	TRSB	TRAS	TRBE	TRCD	TRCR	TRCU	TRPB	HG-AA	TRNI	TRSE	TRAG	TRTL	TRZN	#HARDNESS
AB80049	Huntsville-WPC-Chase	Chase WWTP	1-18-12	05:00		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

REQUESTED ANALYSES

Comments:

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 1.6c

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date		Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time		Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date		Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time		SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Quart	HNO3	A Metals
1	Plastic	Pint	Ice	B NO2+NO3

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Mark Jones	1-18-12	1235	Melvin Duncan	1-18-12	1345			
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Melvin Duncan	1-18-12	1235						

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
	1-18-12	1345	☑ Accepted ☐ Rejected ☐ Accepted with Exception

ENERSOLV
a Solutions Company

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

www.enersolv.com

COC NUMBER	1802663		
PAGE	2	of	2
Chase			

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Ed Fincher	1800 Vermont Road	Huntsville, AL 35802-2064

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
Mark me		

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

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	GRAB	COMP	REQUESTED ANALYSES: NO2-NO3 IC	TKN	P-T				Oil and Grease	#CN-T	PHENOLICS	$624-FORM 2A	$625-FORM 2C			
AB80044	Huntsville-WPC-Chase	Chase WWTP	1-18-12	~~04:30~~ 05:00		X	X	X	X											
050			1-18-12	04:32	X								X	X	X	X	X			

Comments:

NO2-NO3 has a 48hr hold time

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 1.6c

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date	N/A	Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time	N/A	Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time	N/A	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Pint	NaOH	A Cyanide
1	Glass	Amber Liter	H2SO4	B Phenolics
2	Glass	Amber Liter	Plain	CD 625 Form 2A
2/2	Glass	40ml Vials	HCL/Plain	EFGH 624 Form 2C
2	Glass	Liter	1:1 HCL	IJ O/G
1	Plastic	Pint	H2SO4	C TKN,P

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Mark Jones	1-18-12	1235	Melissa Nunn	1-18-12	1345			
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Melissa Nunn	1-18-12	1235						

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
Shah	1/18/12	1345	☑ Accepted ☐ Rejected ☐ Accepted with Exception

ENERSOLV
a Solutions Company

April 21, 2010

Mr. Ed Fincher
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:

Sample ID Number	Sample Description	Date Collected	Date Submitted
AB15006	Chase Area WWTP	4/14/10	4/14/10

ENERSOLV maintains a quality system compliant with **ISO 17025:2005** and meets the relevant quality system requirements of **ISO 9001:2000**. Although not all tests performed by *ENERSOLV* are covered by this quality system, all tests have been conducted in accordance with *ENERSOLV* Standard Operating Procedures and Quality Control Program using, where applicable, U.S.E.P.A. approved methodology.

This cover page is an integral part 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.

Reviewed by:

Karen Sutton

Karen Sutton
Vice President Client Services

P.O. Box 1646 • Decatur, Alabama 35602 • (256) 350-0846 • Fax: (256) 350-0686

Report Date: 4/21/10
Report Time: 12:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

ENERSOLV maintains Laboratory Accreditation Bureau accreditation to ISO/IEC 17025:2005 for the specific tests listed in L-A-B Certificate #L2239 Testing. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert. No. L2239 Testing
ISO 17025
EPA/ADEM Certification
No. 40160

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 without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
Sample Point: Chase Area WWTP		**Collected: 04/14/2010**		**Submitted: 04/14/2010**	
AB15006	1,1,1-Trichloroethane CAS: 71-55-6	<3.0	ug/l		
AB15006	1,1,2,2-Tetrachloroethane CAS: 79-34-5	<3.0	ug/l		
AB15006	1,1,2-Trichloroethane CAS: 79-00-5	<3.0	ug/l		
AB15006	1,1-Dichloroethane CAS: 75-34-3	<3.0	ug/l		
AB15006	1,1-Dichloroethylene CAS: 75-35-4	<3.0	ug/l		
AB15006	1,2-Dichloroethane CAS: 107-06-2	<3.0	ug/l		
AB15006	1,2-Dichloropropane CAS: 78-87-5	<3.0	ug/l		
AB15006	2-Chloroethylvinyl ether CAS: 110-75-8	<3.0	ug/l		
AB15006	Acrolein CAS: 107-02-8	<5.0	ug/l		
AB15006	Acrylonitrile CAS: 107-13-1	<5.0	ug/l		
AB15006	Benzene CAS: 71-43-2	<3.0	ug/l		
AB15006	Bromoform CAS: 75-25-2	<3.0	ug/l		
AB15006	Carbon tetrachloride CAS: 56-23-5	<3.0	ug/l		
AB15006	Chlorobenzene CAS: 108-90-7	<3.0	ug/l		
AB15006	Chlorodibromomethane CAS: 124-48-1	<3.0	ug/l		
AB15006	Chloroethane CAS: 75-00-3	<5.0	ug/l		
AB15006	Chloroform CAS: 67-66-3	<3.0	ug/l		
AB15006	cis-1,3-Dichloropropylene CAS: 10061-01-5	<3.0	ug/l		
AB15006	Dichlorobromomethane CAS: 75-27-4	<3.0	ug/l		
AB15006	Ethyl benzene CAS: 100-41-4	<3.0	ug/l		
AB15006	Methyl bromide CAS: 74-83-9	<5.0	ug/l		
AB15006	Methyl chloride CAS: 74-87-3	<5.0	ug/l		

Report Date: 4/21/10
Report Time: 12:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

ENERSOLV maintains Laboratory Accreditation Bureau accreditation to ISO/IEC 17025:2005 for the specific tests listed in L-A-B Certificate #L2239 Testing. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert. No. L2239 Testing
ISO 17025
EPA/ADEM Certification
No. 40160

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 without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB15006	Methylene chloride CAS: 75-09-2	<5.0	ug/l		
AB15006	Tetrachloroethylene CAS: 127-18-4	<3.0	ug/l		
AB15006	Toluene CAS: 108-88-3	<3.0	ug/l		
AB15006	Trans-1,2-Dichloroethylene CAS: 156-60-5	<3.0	ug/l		
AB15006	trans-1,3-Dichloropropylene CAS: 10061-02-6	<3.0	ug/l		
AB15006	Trichloroethylene CAS: 79-01-6	<3.0	ug/l		
AB15006	Vinyl chloride CAS: 75-01-4	<5.0	ug/l		
AB15006	1,2,4-Trichlorobenzene CAS: 120-82-1	<9.5	ug/l		
AB15006	1,2-Diphenylhydrazine CAS: 122-66-7	<8.5	ug/l		
AB15006	2,4,6-Trichlorophenol CAS: 88-06-2	<9.0	ug/l		
AB15006	2,4-Dichlorophenol CAS: 120-83-2	<4.5	ug/l		
AB15006	2,4-Dimethylphenol CAS: 105-67-9	<50	ug/l		
AB15006	2,4-Dinitrophenol CAS: 51-28-5	<50	ug/l		
AB15006	2,4-Dinitrotoluene CAS: 121-14-2	<4.0	ug/l		
AB15006	2,6-Dinitrotoluene CAS: 606-20-2	<4.5	ug/l		
AB15006	2-Chloronaphthalene CAS: 91-58-7	<7.0	ug/l		
AB15006	2-Chlorophenol CAS: 95-57-8	<7.5	ug/l		
AB15006	2-Nitrophenol CAS: 88-75-5	<9.0	ug/l		
AB15006	3,3'-Dichlorobenzidine CAS: 91-94-1	<12	ug/l		
AB15006	3,4-Benzofluoranthene CAS: 205-99-2	<7.5	ug/l		
AB15006	4,6-Dinitro-o-cresol CAS: 534-52-1	<50	ug/l		
AB15006	4-Bromophenyl phenyl ether CAS: 101-55-3	<6.5	ug/l		
AB15006	4-Chlorophenyl phenyl ether CAS: 7005-72-3	<5.0	ug/l		

Report Date: 4/21/10
Report Time: 12:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

ENERSOLV maintains Laboratory Accreditation Bureau accreditation to ISO/IEC 17025:2005 for the specific tests listed in L-A-B Certificate #L2239 Testing. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert. No. L2239 Testing
ISO 17025
EPA/ADEM Certification
No. 40160

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 without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB15006	4-Nitrophenol CAS: 100-02-7	<50	ug/l		
AB15006	Acenaphthene CAS: 83-32-9	<7.5	ug/l		
AB15006	Acenaphthylene CAS: 208-96-8	<11	ug/l		
AB15006	Anthracene CAS: 120-12-7	<5.5	ug/l		
AB15006	Benzidine CAS: 92-87-5	<75	ug/l		
AB15006	Benzo(a)anthracene CAS: 56-55-3	<8.0	ug/l		
AB15006	Benzo(a)pyrene CAS: 50-32-8	<7.5	ug/l		
AB15006	Benzo(ghi)perylene CAS: 191-24-2	<10	ug/l		
AB15006	Benzo(k)fluoranthene CAS: 207-08-9	<9.0	ug/l		
AB15006	Bis(2-chloroethoxy)methane CAS: 111-91-1	<5.0	ug/l		
AB15006	Bis(2-chloroethyl)ether CAS: 111-44-4	<5.5	ug/l		
AB15006	Bis(2-chloroisopropyl)ether CAS: 108-60-1	<6.0	ug/l		
AB15006	Bis(2-ethylhexyl)phthalate CAS: 117-81-7	<42	ug/l		
AB15006	Butyl benzyl phthalate CAS: 85-68-7	<20	ug/l		
AB15006	Chrysene CAS: 218-01-9	<7.0	ug/l		
AB15006	Dibenzo(a,h)anthracene CAS: 53-70-3	<16	ug/l		
AB15006	Diethyl phthalate CAS: 84-66-2	<12	ug/l		
AB15006	Dimethyl phthalate CAS: 131-11-3	<10	ug/l		
AB15006	Di-n-butylphthalate CAS: 84-74-2	<9.5	ug/l		
AB15006	Di-n-octylphthalate CAS: 117-84-0	<20	ug/l		
AB15006	Fluoranthene CAS: 206-44-0	<8.5	ug/l		
AB15006	Fluorene CAS: 86-73-7	<9.5	ug/l		
AB15006	Hexachlorobenzene CAS: 118-74-1	<12	ug/l		

Report Date: 4/21/10
Report Time: 12:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

ENERSOLV maintains Laboratory Accreditation Bureau accreditation to ISO/IEC 17025:2005 for the specific tests listed in L-A-B Certificate #L2239 Testing. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert. No. L2239 Testing
ISO 17025
EPA/ADEM Certification
No. 40160

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 without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB15006	Hexachlorobutadiene CAS: 87-68-3	<18	ug/l		
AB15006	Hexachlorocyclopentadiene CAS: 77-47-4	<16	ug/l		
AB15006	Hexachloroethane CAS: 67-72-1	<17	ug/l		
AB15006	Indeno(1,2,3-cd)pyrene CAS: 193-39-5	<11	ug/l		
AB15006	Isophorone CAS: 78-59-1	<8.0	ug/l		
AB15006	Naphthalene CAS: 91-20-3	<4.0	ug/l		
AB15006	Nitrobenzene CAS: 98-95-3	<7.5	ug/l		
AB15006	N-Nitrosodimethylamine CAS: 62-75-9	<18	ug/l		
AB15006	N-Nitrosodi-n-propylamine CAS: 621-64-7	<6.5	ug/l		
AB15006	N-Nitrosodiphenylamine CAS: 86-30-6	<7.0	ug/l		
AB15006	p-Chloro-m-cresol CAS: 59-50-7	<6.5	ug/l		
AB15006	Pentachlorophenol CAS: 87-86-5	<50	ug/l		
AB15006	Phenanthrene CAS: 85-01-8	<5.5	ug/l		
AB15006	Phenol CAS: 108-95-2	<4.5	ug/l		
AB15006	Pyrene CAS: 129-00-0	<10	ug/l		
AB15006	*Total Calcium CAS: 7440-70-2	65.8	mg/l		
AB15006	Total Cyanide CAS: 57-12-5	<0.0100	mg/l		
AB15006	Hardness	187	mg/l as CaCO3		
AB15006	*Total Mercury CAS: 7439-97-6	<0.000200	mg/l		
AB15006	Total Magnesium CAS: 7439-95-4	5.41	mg/l		
AB15006	Nitrite-Nitrogen	<0.15	mg/l		
AB15006	Nitrate-Nitrogen CAS: 7697-37-2	9.88	mg/l		
AB15006	Nitrate plus Nitrite-Nitrogen	9.88	mg/l		

Report Date: 4/21/10
Report Time: 12:59

SAMPLE RESULTS REPORT

REPORT TO

Mr. Ed Fincher
City of Huntsville WPC
1800 Vermont Road
Huntsville, AL 35802-2064

ENERSOLV maintains Laboratory Accreditation Bureau accreditation to ISO/IEC 17025:2005 for the specific tests listed in L-A-B Certificate #L2239 Testing. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert. No. L2239 Testing
ISO 17025
EPA/ADEM Certification
No. 40160

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 without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
AB15006	*HEM (Oil and Grease)	<5.00	mg/l		
AB15006	*Phenolics (4AAP)	<0.0100	mg/l		
AB15006	*Total Phosphorus CAS: 7723-14-0	1.11	mg/l		
AB15006	*Total Kjeldahl Nitrogen	2.43	mg/l		
AB15006	*Total Recoverable Silver CAS: 7440-22-4	<0.0100	mg/l		
AB15006	*Total Recoverable Arsenic CAS: 7440-38-2	<0.0520	mg/l		
AB15006	*Total Recoverable Beryllium CAS: 7440-41-7	<0.00200	mg/l		
AB15006	*Total Recoverable Cadmium CAS: 7440-43-9	<0.00800	mg/l		
AB15006	*Total Recoverable Chromium CAS: 7440-47-3	0.0347	mg/l		
AB15006	*Total Recoverable Copper CAS: 7440-50-8	0.0178	mg/l		
AB15006	*Total Recoverable Nickel	0.0992	mg/l		
AB15006	*Total Recoverable Lead CAS: 7439-92-1	<0.0750	mg/l		
AB15006	*Total Recoverable Antimony	<0.0780	mg/L		
AB15006	*Total Recoverable Selenium CAS: 7782-49-2	<0.200	mg/l		
AB15006	Total Recoverable Thallium	<0.0500	mg/l		
AB15006	*Total Recoverable Zinc CAS: 7440-66-6	0.197	mg/l		

Data Qualifiers:
N: Nontarget analyte. The analyte is a tentatively identified compound (using mass spectrometry)
J: Estimated - the analyte was positively identified; the quantitation is an estimation (e.g. matrix interference, outside calibration range, tentatively identified compound, incorrect preservation)
Q: One or more quality control criteria (LCS, surrogate spike recovery, continued calibration, etc.) failed. Data may be estimated or biased.

Report Date: 4/21/10
Report Time: 12:59

SAMPLE RESULTS REPORT

REPORT TO
Mr. Ed Fincher City of Huntsville WPC 1800 Vermont Road Huntsville, AL 35802-2064

ENERSOLV maintains Laboratory Accreditation Bureau accreditation to ISO/IEC 17025:2005 for the specific tests listed in L-A-B Certificate #1.2239 Testing. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert. No. L2239 Testing
ISO 17025
EPA/ADEM Certification
No. 40160

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 without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit

Analysis Information

Sample ID	Analysis	Method	Analyst	Analysis Start Date/Time		BOD/CBOD/Fecal Analysis End Date/Time
AB15006	Form 2A Volatiles	EPA 624	FDW	04/19/2010	15:19	
AB15006	Form 2C Semivolatiles	EPA 625	ET	04/19/2010	19:14	
AB15006	Hardness	EPA 200.7	KW	04/15/2010	13:47	
AB15006	HEM (Oil and Grease)	EPA 1664A	DOG	04/15/2010	05:45	
AB15006	Nitrate plus Nitrite-Nitrogen	EPA 300.0	HGT	04/14/2010	19:59	
AB15006	Nitrate-Nitrogen	EPA 300.0	HGT	04/14/2010	19:59	
AB15006	Nitrite-Nitrogen	EPA 300.0	HGT	04/14/2010	19:59	
AB15006	Phenolics (4AAP)	EPA 420.1	DJN	04/15/2010	08:00	
AB15006	Total Calcium	EPA 200.7	KW	04/15/2010	13:47	
AB15006	Total Cyanide	SM 4500-CN	DJN	04/15/2010	07:15	
AB15006	Total Kjeldahl Nitrogen	SM 4500-Norg C	RAC	04/15/2010	06:00	
AB15006	Total Magnesium	EPA 200.7	KW	04/15/2010	13:47	
AB15006	Total Mercury	EPA 245.1	KW	04/15/2010	14:45	
AB15006	Total Phosphorus	EPA 365.3	DJN	04/16/2010	08:30	
AB15006	Total Recoverable Antimony	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Arsenic	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Beryllium	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Cadmium	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Chromium	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Copper	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Lead	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Nickel	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Selenium	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Silver	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Thallium	EPA 200.7	KW	04/15/2010	13:41	
AB15006	Total Recoverable Zinc	EPA 200.7	KW	04/15/2010	13:41	

ENERSOLV
a Solutions Company

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

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

www.enersolv.com

COC NUMBER	1190790		
PAGE	1	of	2
Chase Renewal			

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		
CLIENT POINT OF CONTACT	**CLIENT PHYSICAL ADDRESS**		**CITY/STATE/ZIP**
Ed Fincher	1800 Vermont Road		Huntsville, AL 35802-2064
CLIENT EMAIL	**PHONE NUMBER**	**OTHER INFORMATION**	
SAMPLE COLLECTED BY		**EXPEDITED REPORT DELIVERY (SURCHARGE)**	
Jimmy Jones		**DATE DUE (REQUIRED)**	

REQUESTED ANALYSES

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	GRAB	COMP	TRSB	TRAS	TRBE	TRCD	TRCR	TRCU	TRPB	HG-AA	TRNI	TRSE	TRAG	TRTL	TRZN	#HARDNESS
A315006	Huntsville-WPC-Chase	Chase WWTP	4-14-10	0530		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Comments:

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 7.8c

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date		Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time		Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date		Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time		SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Quart	HNO3	Metals
1	Plastic	Pint	Ice	NO2+NO3

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Jimmy Jones	4-14-10	0645	Ed Fincher	4-14-10	0730	Ed Fincher	4-14-10	1645
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
Ed Fincher	4-14-10	0645	Ed Fincher	4-14-10	0730	Jerry Shaw	4-14-10	1645
RECEIVED FOR LABORATORY USE BY: (SIGNATURE)			**DATE**	**TIME**	**SAMPLE STATUS:**			
Jerry Shaw 13:30 4-14-10			4-14-10	1630	☒ Accepted	☐ Rejected	☐ Accepted with Exception	

Enersolv Form FLD-020-SOP A rev. 5

ENERSOLV
a Solutions Company

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

www.enersolv.com

COC NUMBER	189660		
PAGE	2	of	2
Chase			

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
Water Pollution Control	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Ed Fincher	1800 Vermont Road	Huntsville, AL 35802-2064

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION

SAMPLE COLLECTED BY: Jimmy Jones

EXPEDITED REPORT DELIVERY (SURCHARGE)

DATE DUE (REQUIRED)

REQUESTED ANALYSES

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	DATE	TIME	GRAB	COMP	NO2-NO3 IC	TKN	P-T				Oil and Grease	#CN-T	PHENOLICS	$624-FORM 2A	$625-FORM 2C			
AB15006	Huntsville-WPC-Chase	Chase WWTP	4-14-10	0530		X	X	X	X											
4					X								X	X	X	X	X			

Comments:

NO2-NO3 has a 48hr hold time

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 3.3C

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date	N/A	Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time	N/A	Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time	N/A	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Pint	NaOH	Cyanide
1	Glass	Amber Liter	H2SO4	Phenolics
2	Glass	Amber Liter	Plain	625 Form 2A
2/2	Glass	40ml Vials	HCL/Plain	624 Form 2C
2	Glass	Liter	1:1 HCL	O/G
1	Plastic	Pint	H2SO4	TKN,P

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Jimmy Jones	4-14-10	0645	[signature]	4-14-10	0730	[signature]	4-14-10	10 45
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
[signature]	4-14-10	0645 0710	[signature]	4-14-10	0730	Jerry Ihrer	4-14-10	10 45

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
Jerry Ihrer 1 & 2 4-14-10 [signature]	4-14-10	1220	☑ Accepted ☐ Rejected ☐ Accepted with Exception

Enersolv Form FLD-020-SOP A rev. 5

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Analytical Results

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Report Table of Contents

Account
HSV2

Project
440540

Chase Expanded

This report consists of this Table of Contents and the following pages:

Report Name	Description		Pages
440540_r03_03_ProjectResults	Ana-Lab Project P:440540 C:HSV2	Project Results	6
440540_r10_05_PROJQCG	Ana-Lab Project P:440540 C:HSV2	Project Quality Control Groups	29
440540_r99_09_CoC_HSV2_1_of_1	Ana-Lab CoC HSV2 440540_1_of_1		3
		Total Pages:	38

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results

Account	*Project*
HSV2-M	**440540**

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Chase Expanded

Results

Accredited	Parameter	Results	Units	RL	Flags	CAS	Bottle
096892	**Chase Expanded**	COMP: 04-28 0520 - 04-29 0515				*Received:*	04/30/2009
	Liquid Aqueous Composite Stop 05:15 4/29/09	*Collected by:*		*Affiliation:*	City of Huntsville,		05:15
	EPA 200.8, Rev. 5.4		*Analyzed:*	*WOB*	*05/01/2009*	*1644* *QCgroup*	*316380*
AN	Antimony	2.81	ug/L	2.00		7440-36-0	03
AN	Arsenic	<2.00	ug/L	2.00		7440-38-2	03
AN	Beryllium	<1.00	ug/L	1.00		7440-41-7	03
AN	Cadmium	0.350	ug/L	1.00	J	7440-43-9	03
AN	Chromium	18.8	ug/L	1.00		7440-47-3	03
AN	Copper	17.1	ug/L	1.00		7440-50-8	03
AN	Lead	5.54	ug/L	1.00		7439-92-1	03
AN	Nickel	138	ug/L	1.00		7440-02-0	03
AN	Selenium	20.9	ug/L	2.00		7782-49-2	03
AN	Silver	0.210	ug/L	1.00	J	7440-22-4	03
AN	Thallium	<1.00	ug/L	1.00		7440-28-0	03
AN	Zinc	82.2	ug/L	5.00		7440-66-6	03
	EPA 245.1, Rev. 3.0		*Analyzed:*	*WOB*	*05/04/2009*	*0729* *QCgroup*	*316417*
AN	Mercury	<0.150	ug/L	0.150		7439-97-6	05
	EPA 300.0, Rev. 2.1		*Analyzed:*	*GDG*	*05/01/2009*	*1830* *QCgroup*	*316636*
AN	Nitrate-Nitrite Nitrogen	3.23	mg/L	1.00			02
	EPA 351.2, Rev 2.0		*Analyzed:*	*RSV*	*05/04/2009*	*1841* *QCgroup*	*316540*
AN	Total Kjeldahl Nitrogen	3.19	mg/L	0.0500			04
	EPA 365.3		*Analyzed:*	*RED*	*05/07/2009*	*1400* *QCgroup*	*317038*
AN	Phosphorus	0.733	mg/L	0.10		7723-14-0	02
	SM2340 C 20th Ed.		*Analyzed:*	*JDD*	*05/05/2009*	*1055* *QCgroup*	*316613*
AN	Total Hardness (as CaCO3)	190	mg/L	50			01

The above methods that we used are approved for NPDES reporting as listed in 40 CFR 136 Table 1B or Ana-Lab has specific approval from EPA to use these methods for NPDES reporting.

096893	**Chase Expanded**					*Received:*	04/30/2009
	Liquid Aqueous	*Collected by:*	Mark Jones	*Affiliation:*	City of Huntsville,	04/29/2009	04:45
			Analyzed:	*CAL*	*05/11/2009*	*2:09*	
z	Calculated TTO	<10	ug/L	10			

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results

Account **HSV2-M**

Project **440540**

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Chase Expanded

Results

Accredited	Parameter	Results	Units	RL	Flags	CAS	Bottle
096893	**Chase Expanded**					*Received:*	04/30/2009
	Liquid Aqueous	*Collected by:*	Mark Jones	*Affiliation:*	City of Huntsville,	04/29/2009	04:45
	EPA 1664 A		*Analyzed:*	*RED*	*05/08/2009*	*0735*	*QCgroup* *317071*
AN	Oil and Grease (HEM)	<4.6	mg/L	4.6			03
	EPA 420.1 (1978)		*Analyzed:*	*RSV*	*05/04/2009*	*1848*	*QCgroup* *316542*
AN	Phenols	0.0189	mg/L	0.00500			10
	EPA Method 624		*Analyzed:*	*JLH*	*05/01/2009*	*1625*	*QCgroup* *316406*
AN	Acrolein	<5.00	ug/L	5.00		107-02-8	06
AN	Acrylonitrile	<1.00	ug/L	1.00		107-13-1	06
AN	Benzene	<1.00	ug/L	1.00		71-43-2	06
AN	Bromodichloromethane	<1.00	ug/L	1.00		75-27-4	06
AN	Bromoform	<1.00	ug/L	1.00		75-25-2	06
AN	Bromomethane (Methyl Bromi	<1.00	ug/L	1.00		74-83-9	06
AN	Carbon Tetrachloride	<1.00	ug/L	1.00		56-23-5	06
AN	Chlorobenzene	<1.00	ug/L	1.00		108-90-7	06
AN	Chloroethane	<1.00	ug/L	1.00		75-00-3	06
AN	2-Chloroethylvinyl ether	<1.00	ug/L	1.00		110-75-8	06
AN	Chloroform	0.420	ug/L	1.00	J	67-66-3	06
AN	Chloromethane	<1.00	ug/L	1.00		74-87-3	06
AN	Dibromochloromethane	<1.00	ug/L	1.00		124-48- 1	06
AN	1,1-Dichloroethane	<1.00	ug/L	1.00		75-34-3	06
AN	trans-1,2-Dichloroethene	<1.00	ug/L	1.00		156-60-5	06
AN	1,2-Dichloropropane	<1.00	ug/L	1.00		78-87-5	06
AN	Ethylbenzene	<1.00	ug/L	1.00		100-41-4	06
AN	Methylene chloride	<1.00	ug/L	1.00		75-09-2	06
AN	1,1,2,2-Tetrachloroethane	<1.00	ug/L	1.00		79-34-5	06
AN	Tetrachloroethylene	<1.00	ug/L	1.00		127-18-4	06
AN	Toluene	<1.00	ug/L	1.00		108-88-3	06
AN	1,1,1-Trichloroethane	<1.00	ug/L	1.00		71-55-6	06
AN	1,1,2-Trichloroethane	<1.00	ug/L	1.00		79-00-5	06
AN	Trichloroethylene	<1.00	ug/L	1.00		79-01-6	06
AN	Vinyl chloride	<1.00	ug/L	1.00		75-01-4	06
	EPA Method 625		*Analyzed:*	*LCY*	*05/07/2009*	*1615*	*QCgroup* *317075*
AN	Acenaphthene	<1.04	ug/L	1.04		83-32-9	08
AN	Acenaphthylene	<1.04	ug/L	1.04		208-96-8	08
AN	Anthracene	<1.04	ug/L	1.04		120-12-7	08

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results

Account: HSV2-M

Project: 440540

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Chase Expanded

Results

Accredited	Parameter	Results	Units	RL	Flags	CAS	Bottle
096893	**Chase Expanded**						Received: 04/30/2009
	Liquid Aqueous	Collected by: Mark Jones		Affiliation: City of Huntsville,			04/29/2009 04:45
	EPA Method 625			Analyzed:	LCY 05/07/2009	1615 QCgroup	317075
AN	Benzidine	<2.08	ug/L	2.08		92-87-5	08
AN	Benzo(a)anthracene	<1.04	ug/L	1.04		56-55-3	08
AN	Chrysene -Benzo(a)phenanthrene	<1.04	ug/L	1.04		218-01-9	08
AN	Benzo(a)pyrene	<1.04	ug/L	1.04		50-32-8	08
AN	Benzo(b)fluoranthene	<1.04	ug/L	1.04		205-99-2	08
AN	Benzo(ghi)perylene	<1.04	ug/L	1.04		191-24-2	08
AN	Fluoranthene-Benzo(j,k)fluorene	<1.04	ug/L	1.04		206-44-0	08
AN	Benzo(k)fluoranthene	<1.04	ug/L	1.04		207-08-9	08
AN	Benzyl Butyl phthalate	<1.04	ug/L	1.04		85-68-7	08
AN	4-Bromophenyl phenyl ether	<1.04	ug/L	1.04		101-55-3	08
AN	Di-n-butylphthalate	<1.04	ug/L	1.04		84-74-2	08
AN	Indeno(1,2,3-cd)pyrene	<1.04	ug/L	1.04		193-39-5	08
AN	Bis(2-chloroethoxy)methane	<1.04	ug/L	1.04		111-91-1	08
AN	Bis(2-chloroethyl)ether	<1.04	ug/L	1.04		111-44-4	08
AN	Bis(2-chloroisopropyl)ether	<1.04	ug/L	1.04		108-60-1	08
AN	2-Chloronaphthalene	<1.04	ug/L	1.04		91-58-7	08
AN	2-Chlorophenol	<1.04	ug/L	1.04		95-57-8	08
AN	4-Chlorophenyl phenyl ethe	<1.04	ug/L	1.04		7005-72-3	08
AN	Dibenz(a,h)anthracene	<1.04	ug/L	1.04		53-70-3	08
AN	1,3-Dichlorobenzene	<1.04	ug/L	1.04		541-73-1	08
AN	1,2-Dichlorobenzene	<1.04	ug/L	1.04		95-50-1	08
AN	1,4-Dichlorobenzene	<2.08	ug/L	2.08		106-46-7	08
AN	3,3'-Dichlorobenzidine	<1.04	ug/L	1.04		91-94-1	08
AN	Diethyl phthalate	<1.04	ug/L	1.04		84-66-2	08
AN	Dimethyl phthalate	<1.04	ug/L	1.04		131-11-3	08
AN	2,4-Dimethylphenol	<1.04	ug/L	1.04		105-67-9	08
AN	2,4-Dinitrophenol	<1.04	ug/L	1.04		51-28-5	08
AN	2,4-Dinitrotoluene	<1.04	ug/L	1.04		121-14-2	08
AN	2,6-Dinitrotoluene	<1.04	ug/L	1.04		606-20-2	08
AN	1,2-DPH (as azobenzene)	<1.04	ug/L	1.04		122-66-7	08
AN	Bis(2-ethylhexyl)phthalate	<2.08	ug/L	2.08		117-81-7	08
AN	Fluorene	<1.04	ug/L	1.04		86-73-7	08
AN	Hexachlorobenzene	<1.04	ug/L	1.04		118-74-1	08
AN	Hexachlorobutadiene	<2.08	ug/L	2.08		87-68-3	08
AN	Hexachlorocyclopentadiene	<1.04	ug/L	1.04		77-47-4	08

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results

Account **HSV2-M**

Project **440540**

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Chase Expanded

Results

Accredited	Parameter	Results	Units	RL	Flags	CAS	Bottle
096893	**Chase Expanded**					*Received:*	04/30/2009
	Liquid Aqueous	*Collected by:*	Mark Jones	*Affiliation:*	City of Huntsville,	04/29/2009	04:45
	EPA Method 625			*Analyzed:*	*LCY* *05/07/2009*	*1615* *QCgroup*	*317075*
AN	Hexachloroethane	<1.04	ug/L	1.04		67-72-1	08
AN	Isophorone	<1.04	ug/L	1.04		78-59-1	08
AN	p-Chloro-m-Cresol (4-Chloro-3-me	<1.04	ug/L	1.04		59-50-7	08
AN	4,6-Dinitro-2-methylphenol	<2.08	ug/L	2.08		534-52-1	08
AN	Naphthalene	<1.04	ug/L	1.04		91-20-3	08
AN	Nitrobenzene	<1.04	ug/L	1.04		98-95-3	08
AN	2-Nitrophenol	<1.04	ug/L	1.04		88-75-5	08
AN	4-Nitrophenol	<1.04	ug/L	1.04		100-02-7	08
AN	N-Nitrosodimethylamine	<2.08	ug/L	2.08		62-75-9	08
AN	N-Nitrosodiphenylamine (as DPA	<5.20	ug/L	5.20		86-30-6	08
AN	Di-n-octylphthalate	<1.04	ug/L	1.04		117-84-0	08
AN	Pentachlorophenol	<5.20	ug/L	5.20		87-86-5	08
AN	Phenanthrene	<1.04	ug/L	1.04		85-01-08	08
AN	Phenol	<5.20	ug/L	5.20		108-95-2	08
AN	N-Nitrosodi-n-propylamine	<1.04	ug/L	1.04		621-64-7	08
AN	Pyrene	<1.04	ug/L	1.04		129-00-0	08
AN	1,2,4-Trichlorobenzene	<2.08	ug/L	2.08		120-82-1	08
AN	2,4,6-Trichlorophenol	<1.04	ug/L	1.04		88-06-2	08
	EPA Method 625-scan			*Analyzed:*	*LCY* *05/07/2009*	*1615* *QCgroup*	*317075*
AN	2,3,7,8-TCDD Scan	<1.04	ug/L	1.04			08
	SM 4500 CN E 20th Ed			*Analyzed:*	*RSV* *05/04/2009*	*1200* *QCgroup*	*316497*
AN	Cyanide	<0.00500	mg/L	0.00500			09

The above methods that we used are approved for NPDES reporting as listed in 40 CFR 136 Table 1B or Ana-Lab has specific approval from EPA to use these methods for NPDES reporting.

Sample Preparation

096892	**Chase Expanded**	COMP: 04-28 0520 - 04-29 0515				*Received:*	04/30/2009
		4/29/09					
				Analyzed:	*CCP* *04/30/2009*	*11:23*	
z	Bottle pH	<2	SU				01

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results

Account: HSV2-M

Project: 440540

Report To:

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Chase Expanded

Sample Preparation

096892 Chase Expanded COMP: 04-28 0520 - 04-29 0515 Received: 04/30/2009

4/29/09

				Analyzed:	CCP	04/30/2009	11:23		
	EPA 200.2, Rev 2.8			Analyzed:	HVM	05/01/2009	0700	QCgroup	316155
AN	Liquid Metals Digestion	50/50	ml						01
	EPA 245.1, Rev. 3.0			Analyzed:	PJD	05/01/2009	1300	QCgroup	316260
AN	Mercury Liquid Metals Digestion	50/25	ml						01
	EPA 351.2, Rev 2.0			Analyzed:	MKV	05/01/2009	0930	QCgroup	316175
AN	TKN Block Digestion	20/20	ml						02

096893 Chase Expanded Received: 04/30/2009

	EPA 420.1 (1978)			Analyzed:	MDD	05/04/2009	1100	QCgroup	316429
AN	Phenol Distillation	50/50	ml						04
	EPA Method 624			Analyzed:	JLH	05/01/2009	1625		
AN	TTO(AL) VOC 40 CFR Pt 122 Table	Entered							06
	EPA Method 625			Analyzed:	TRP	05/01/2009	0830	QCgroup	316271
AN	Liquid-Liquid Extraction, BNA	1/961	ml						01
	EPA Method 625			Analyzed:	LCY	05/07/2009	1615		
AN	TTO(AL) SVOC 40 CFR 122 Table	Entered							08
	SM 4500-CN- C, 20th			Analyzed:	MKV	05/02/2009	0830	QCgroup	316312
AN	Cyanide Distillation	25/50	ml						05

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Results

Account	*Project*
HSV2-M	**440540**

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Chase Expanded

Qualifiers:

J - Analyte detected below quantitation limit

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, EPA National Lead Laboratory Accreditation Program #637.01, US Consumer Product Safety Commission #1095, US Department of Agriculture Soil Import Permit S-37592, Texas Commission on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201-06-TX, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, USEPA UCMR2 Approved Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved, State of Kansas Department of Health and Environment Waste Water and Solid/Hazardous Waste Cert. E-10365, Alabama Department of Environmental Management Drinking Water #41540. Ana-Lab is also accredited to the international ISO-17025 standard by the American Association for Laboratory Accreditation (A2LA Certificate # 0637-01). The Accredited column designates accreditation by U -- UCMR2 (EPA), A -- A2LA, N -- NELAC, or z -- not covered under one of these scopes of accreditation.
These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number.

Roy White

Roy White, MS, Quality Director

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316636 I Liquid Aqueous EPA 300.0, Rev. 2.1

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
Chloride	316636	ND	0.00767	0.300	mg/L		0000814815
Fluoride	316636	ND	0.00213	0.100	mg/L		0000814815
Nitrate	316636	ND	0.00263	0.0500	mg/L		0000814815
Nitrate-Nitrite Nitrogen	316636	ND	0.000732	0.0200	mg/L		0000814815
Nitrate-Nitrogen Total	316636	ND	0.000593	0.0100	mg/L		0000814815
Nitrite	316636	ND	0.000839	0.0500	mg/L		0000814815
Nitrite-Nitrogen, Total	316636	ND	0.000262	0.0100	mg/L		0000814815
Ortho-phosphate as P	316636	ND	0.00133	0.0100	mg/L		0000814815
Sulfate	316636	ND	0.159	0.300	mg/L		0000814815

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Chloride	10.2	10.0	mg/L	102	90.0 - 110		0000814812
Chloride	10.3	10.0	mg/L	103	90.0 - 110		0000814828
Chloride	10.3	10.0	mg/L	103	90.0 - 110		0000814844
Fluoride	10.3	10.0	mg/L	103	90.0 - 110		0000814812
Fluoride	10.5	10.0	mg/L	105	90.0 - 110		0000814828
Fluoride	10.5	10.0	mg/L	105	90.0 - 110		0000814844
Nitrate	10.1	10.0	mg/L	101	90.0 - 110		0000814844
Nitrate	10.2	10.0	mg/L	102	90.0 - 110		0000814812
Nitrate	10.2	10.0	mg/L	102	90.0 - 110		0000814828
Nitrate-Nitrite Nitrogen	5.21	5.30	mg/L	98.3	90.0 - 110		0000814844
Nitrate-Nitrite Nitrogen	5.22	5.30	mg/L	98.5	90.0 - 110		0000814812
Nitrate-Nitrite Nitrogen	5.26	5.30	mg/L	99.2	90.0 - 110		0000814828
Nitrate-Nitrogen Total	2.28	2.26	mg/L	101	90.0 - 110		0000814844
Nitrate-Nitrogen Total	2.30	2.26	mg/L	102	90.0 - 110		0000814812
Nitrate-Nitrogen Total	2.31	2.26	mg/L	102	90.0 - 110		0000814828
Nitrite	9.57	10.0	mg/L	95.7	90.0 - 110		0000814812
Nitrite	9.60	10.0	mg/L	96.0	90.0 - 110		0000814844
Nitrite	9.66	10.0	mg/L	96.6	90.0 - 110		0000814828
Nitrite-Nitrogen, Total	2.92	3.04	mg/L	96.1	90.0 - 110		0000814812
Nitrite-Nitrogen, Total	2.93	3.04	mg/L	96.4	90.0 - 110		0000814844
Nitrite-Nitrogen, Total	2.95	3.04	mg/L	97.0	90.0 - 110		0000814828
Ortho-phosphate as P	3.53	3.26	mg/L	108	90.0 - 110		0000814812
Ortho-phosphate as P	3.54	3.26	mg/L	109	90.0 - 110		0000814828
Ortho-phosphate as P	3.54	3.26	mg/L	109	90.0 - 110		0000814844
Sulfate	10.2	10.0	mg/L	102	90.0 - 110		0000814812

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To
Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316636 I Liquid Aqueous **EPA 300.0, Rev. 2.1**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Sulfate	10.2	10.0	mg/L	102	90.0 - 110		0000814844
Sulfate	10.4	10.0	mg/L	104	90.0 - 110		0000814828

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Chloride	316636	0.976	1.00	mg/L	97.6	90.0 - 110	0000814813	
Fluoride	316636	0.947	1.00	mg/L	94.7	90.0 - 110	0000814813	
Nitrate	316636	0.949	1.00	mg/L	94.9	90.0 - 110	0000814813	
Nitrate-Nitrite Nitrogen	316636	0.491	0.530	mg/L	92.6	90.0 - 110	0000814813	
Nitrate-Nitrogen Total	316636	0.214	0.226	mg/L	94.7	90.0 - 110	0000814813	
Nitrite	316636	0.909	1.00	mg/L	90.9	90.0 - 110	0000814813	
Nitrite-Nitrogen, Total	316636	0.277	0.304	mg/L	91.1	90.0 - 110	0000814813	
Ortho-phosphate as P	316636	0.294	0.326	mg/L	90.2	90.0 - 110	0000814813	
Sulfate	316636	1.09	1.00	mg/L	109	90.0 - 110	0000814813	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Chloride	316636	0.976	0.954	1.00	90.0 - 110	97.6	95.4	mg/L	2.28	20.0
Fluoride	316636	0.947	0.973	1.00	90.0 - 110	94.7	97.3	mg/L	2.71	20.0
Nitrate	316636	0.949	0.938	1.00	90.0 - 110	94.9	93.8	mg/L	1.17	20.0
Nitrate-Nitrite Nitrogen	316636	0.491	0.494	0.530	90.0 - 110	92.6	93.2	mg/L	0.646	20.0
Nitrate-Nitrogen Total	316636	0.214	0.212	0.226	90.0 - 110	94.7	93.8	mg/L	0.955	20.0
Nitrite	316636	0.909	0.926	1.00	90.0 - 110	90.9	92.6	mg/L	1.85	20.0
Nitrite-Nitrogen, Total	316636	0.277	0.282	0.304	90.0 - 110	91.1	92.8	mg/L	1.85	20.0
Ortho-phosphate as P	316636	0.294	0.325	0.326	90.0 - 110	90.2	99.7	mg/L	10.0	20.0
Sulfate	316636	1.09	1.09	1.00	90.0 - 110	109	109	mg/L	0	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Chloride	097151	41.9	41.6	33.3	10.0	90.0 - 110	86.0 *	83.0 *	mg/L	3.55	30.0
Fluoride	097151	9.22	9.68	ND	10.0	90.0 - 110	92.2	96.8	mg/L	4.87	30.0
Nitrate	097151	9.35	9.11	ND	10.0	90.0 - 110	93.5	91.1	mg/L	2.60	30.0
Nitrate-Nitrite Nitrogen	097151	5.12	5.04	ND	5.30	90.0 - 110	96.6	95.1	mg/L	1.56	30.0
Nitrate-Nitrogen Total	097151	2.11	2.06	ND	2.26	90.0 - 110	93.4	91.2	mg/L	2.38	30.0
Nitrite	097151	9.89	9.76	ND	10.0	90.0 - 110	98.9	97.6	mg/L	1.32	30.0
Nitrite-Nitrogen, Total	097151	3.01	2.98	ND	3.04	90.0 - 110	99.0	98.0	mg/L	1.02	30.0
Ortho-phosphate as P	097151	3.06	3.29	ND	3.26	90.0 - 110	93.9	101	mg/L	7.29	30.0
Sulfate	097151	25.1	25.0	16.0	10.0	90.0 - 110	91.0	90.0	mg/L	1.10	30.0

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316636 I **Liquid Aqueous** **EPA 300.0, Rev. 2.1**

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Chloride	097155	40.7	40.6	30.6	10.0	90.0 - 110	101	100	mg/L	0.995	30.0
Fluoride	097155	9.70	9.68	ND	10.0	90.0 - 110	97.0	96.8	mg/L	0.206	30.0
Nitrate	097155	9.03	9.13	ND	10.0	90.0 - 110	90.3	91.3	mg/L	1.10	30.0
Nitrate-Nitrite Nitrogen	097155	4.96	4.98	ND	5.30	90.0 - 110	93.6	94.0	mg/L	0.426	30.0
Nitrate-Nitrogen Total	097155	2.04	2.06	ND	2.26	90.0 - 110	90.3	91.2	mg/L	0.992	30.0
Nitrite	097155	9.59	9.57	ND	10.0	90.0 - 110	95.9	95.7	mg/L	0.209	30.0
Nitrite-Nitrogen, Total	097155	2.92	2.92	ND	3.04	90.0 - 110	96.1	96.1	mg/L	0	30.0
Ortho-phosphate as P	097155	3.01	3.26	ND	3.26	90.0 - 110	92.3	100	mg/L	8.01	30.0
Sulfate	097155	19.1	19.1	9.19	10.0	90.0 - 110	99.1	99.1	mg/L	0	30.0

316380 M **Liquid Aqueous** **EPA 200.8, Rev. 5.4**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
Antimony	316155	0.580	0.432	2.00	ug/L		0000809426
Arsenic	316155	ND	0.616	2.00	ug/L		0000809426
Beryllium	316155	ND	0.0767	1.00	ug/L		0000809426
Cadmium	316155	ND	0.249	1.00	ug/L		0000809426
Chromium	316155	0.330	0.136	1.00	ug/L		0000809426
Copper	316155	ND	0.519	1.00	ug/L		0000809426
Lead	316155	1.30	0.164	1.00	ug/L	*	0000809426
Nickel	316155	ND	0.151	1.00	ug/L		0000809426
Selenium	316155	ND	1.60	2.00	ug/L		0000809426
Silver	316155	ND	0.0785	1.00	ug/L		0000809426
Thallium	316155	0.820	0.310	1.00	ug/L		0000809426
Zinc	316155	ND	3.07	5.00	ug/L		0000809426

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Antimony	284	300	ug/L	94.7	90.0 - 110		0000809439
Antimony	287	300	ug/L	95.7	90.0 - 110		0000809421
Antimony	290	300	ug/L	96.7	90.0 - 110		0000809428
Antimony	290	300	ug/L	96.7	90.0 - 110		0000809446
Arsenic	284	300	ug/L	94.7	90.0 - 110		0000809460
Arsenic	284	300	ug/L	94.7	90.0 - 110		0000809468
Arsenic	286	300	ug/L	95.3	90.0 - 110		0000809449
Arsenic	289	300	ug/L	96.3	90.0 - 110		0000809488
Arsenic	289	300	ug/L	96.3	90.0 - 110		0000809499

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316380 **M** **Liquid Aqueous** **EPA 200.8, Rev. 5.4**

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Arsenic	292	300	ug/L	97.3	90.0 - 110		0000809478
Arsenic	294	300	ug/L	98.0	90.0 - 110		0000809447
Arsenic	305	300	ug/L	102	90.0 - 110		0000809439
Arsenic	309	300	ug/L	103	90.0 - 110		0000809446
Arsenic	310	300	ug/L	103	90.0 - 110		0000809421
Arsenic	310	300	ug/L	103	90.0 - 110		0000809428
Beryllium	309	300	ug/L	103	90.0 - 110		0000809421
Beryllium	313	300	ug/L	104	90.0 - 110		0000809439
Beryllium	316	300	ug/L	105	90.0 - 110		0000809428
Beryllium	318	300	ug/L	106	90.0 - 110		0000809446
Cadmium	285	300	ug/L	95.0	90.0 - 110		0000809449
Cadmium	286	300	ug/L	95.3	90.0 - 110		0000809468
Cadmium	289	300	ug/L	96.3	90.0 - 110		0000809488
Cadmium	290	300	ug/L	96.7	90.0 - 110		0000809499
Cadmium	292	300	ug/L	97.3	90.0 - 110		0000809460
Cadmium	293	300	ug/L	97.7	90.0 - 110		0000809447
Cadmium	293	300	ug/L	97.7	90.0 - 110		0000809478
Cadmium	300	300	ug/L	100	90.0 - 110		0000809439
Cadmium	302	300	ug/L	101	90.0 - 110		0000809421
Cadmium	302	300	ug/L	101	90.0 - 110		0000809446
Cadmium	305	300	ug/L	102	90.0 - 110		0000809417
Cadmium	305	300	ug/L	102	90.0 - 110		0000809428
Chromium	289	300	ug/L	96.3	90.0 - 110		0000809449
Chromium	289	300	ug/L	96.3	90.0 - 110		0000809460
Chromium	293	300	ug/L	97.7	90.0 - 110		0000809468
Chromium	298	300	ug/L	99.3	90.0 - 110		0000809478
Chromium	298	300	ug/L	99.3	90.0 - 110		0000809488
Chromium	300	300	ug/L	100	90.0 - 110		0000809447
Chromium	302	300	ug/L	101	90.0 - 110		0000809499
Chromium	307	300	ug/L	102	90.0 - 110		0000809428
Chromium	308	300	ug/L	103	90.0 - 110		0000809439
Chromium	310	300	ug/L	103	90.0 - 110		0000809417
Chromium	310	300	ug/L	103	90.0 - 110		0000809421
Chromium	314	300	ug/L	105	90.0 - 110		0000809446
Copper	287	300	ug/L	95.7	90.0 - 110		0000809449
Copper	288	300	ug/L	96.0	90.0 - 110		0000809460
Copper	290	300	ug/L	96.7	90.0 - 110		0000809468

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316380 M Liquid Aqueous **EPA 200.8, Rev. 5.4**

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Copper	290	300	ug/L	96.7	90.0 - 110		0000809499
Copper	291	300	ug/L	97.0	90.0 - 110		0000809488
Copper	294	300	ug/L	98.0	90.0 - 110		0000809478
Copper	296	300	ug/L	98.7	90.0 - 110		0000809447
Copper	305	300	ug/L	102	90.0 - 110		0000809439
Copper	307	300	ug/L	102	90.0 - 110		0000809428
Copper	308	300	ug/L	103	90.0 - 110		0000809417
Copper	308	300	ug/L	103	90.0 - 110		0000809446
Copper	309	300	ug/L	103	90.0 - 110		0000809421
Lead	288	300	ug/L	96.0	90.0 - 110		0000809468
Lead	294	300	ug/L	98.0	90.0 - 110		0000809449
Lead	295	300	ug/L	98.3	90.0 - 110		0000809460
Lead	295	300	ug/L	98.3	90.0 - 110		0000809488
Lead	296	300	ug/L	98.7	90.0 - 110		0000809447
Lead	298	300	ug/L	99.3	90.0 - 110		0000809499
Lead	302	300	ug/L	101	90.0 - 110		0000809478
Lead	304	300	ug/L	101	90.0 - 110		0000809417
Lead	304	300	ug/L	101	90.0 - 110		0000809421
Lead	305	300	ug/L	102	90.0 - 110		0000809439
Lead	308	300	ug/L	103	90.0 - 110		0000809446
Lead	312	300	ug/L	104	90.0 - 110		0000809428
Nickel	286	300	ug/L	95.3	90.0 - 110		0000809460
Nickel	289	300	ug/L	96.3	90.0 - 110		0000809468
Nickel	290	300	ug/L	96.7	90.0 - 110		0000809449
Nickel	292	300	ug/L	97.3	90.0 - 110		0000809488
Nickel	295	300	ug/L	98.3	90.0 - 110		0000809478
Nickel	296	300	ug/L	98.7	90.0 - 110		0000809447
Nickel	296	300	ug/L	98.7	90.0 - 110		0000809499
Nickel	304	300	ug/L	101	90.0 - 110		0000809421
Nickel	307	300	ug/L	102	90.0 - 110		0000809439
Nickel	308	300	ug/L	103	90.0 - 110		0000809428
Nickel	309	300	ug/L	103	90.0 - 110		0000809417
Nickel	309	300	ug/L	103	90.0 - 110		0000809446
Selenium	282	300	ug/L	94.0	90.0 - 110		0000809460
Selenium	285	300	ug/L	95.0	90.0 - 110		0000809468
Selenium	286	300	ug/L	95.3	90.0 - 110		0000809449
Selenium	290	300	ug/L	96.7	90.0 - 110		0000809499

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316380 M Liquid Aqueous **EPA 200.8, Rev. 5.4**

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Selenium	291	300	ug/L	97.0	90.0 - 110		0000809488
Selenium	292	300	ug/L	97.3	90.0 - 110		0000809447
Selenium	296	300	ug/L	98.7	90.0 - 110		0000809478
Selenium	305	300	ug/L	102	90.0 - 110		0000809446
Selenium	306	300	ug/L	102	90.0 - 110		0000809417
Selenium	306	300	ug/L	102	90.0 - 110		0000809439
Selenium	308	300	ug/L	103	90.0 - 110		0000809421
Selenium	309	300	ug/L	103	90.0 - 110		0000809428
Silver	284	300	ug/L	94.7	90.0 - 110		0000809449
Silver	289	300	ug/L	96.3	90.0 - 110		0000809468
Silver	289	300	ug/L	96.3	90.0 - 110		0000809488
Silver	290	300	ug/L	96.7	90.0 - 110		0000809447
Silver	290	300	ug/L	96.7	90.0 - 110		0000809460
Silver	290	300	ug/L	96.7	90.0 - 110		0000809478
Silver	290	300	ug/L	96.7	90.0 - 110		0000809499
Silver	300	300	ug/L	100	90.0 - 110		0000809439
Silver	302	300	ug/L	101	90.0 - 110		0000809421
Silver	303	300	ug/L	101	90.0 - 110		0000809446
Silver	304	300	ug/L	101	90.0 - 110		0000809417
Silver	304	300	ug/L	101	90.0 - 110		0000809428
Thallium	307	300	ug/L	102	90.0 - 110		0000809421
Thallium	307	300	ug/L	102	90.0 - 110		0000809439
Thallium	311	300	ug/L	104	90.0 - 110		0000809446
Thallium	314	300	ug/L	105	90.0 - 110		0000809428
Zinc	282	300	ug/L	94.0	90.0 - 110		0000809449
Zinc	284	300	ug/L	94.7	90.0 - 110		0000809468
Zinc	289	300	ug/L	96.3	90.0 - 110		0000809460
Zinc	290	300	ug/L	96.7	90.0 - 110		0000809499
Zinc	292	300	ug/L	97.3	90.0 - 110		0000809447
Zinc	292	300	ug/L	97.3	90.0 - 110		0000809478
Zinc	292	300	ug/L	97.3	90.0 - 110		0000809488
Zinc	301	300	ug/L	100	90.0 - 110		0000809439
Zinc	302	300	ug/L	101	90.0 - 110		0000809421
Zinc	303	300	ug/L	101	90.0 - 110		0000809446
Zinc	304	300	ug/L	101	90.0 - 110		0000809428

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316380 **M** **Liquid Aqueous** **EPA 200.8, Rev. 5.4**

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Antimony	108	100	ug/L	108	90.0 - 110		0000809414
Arsenic	99.8	100	ug/L	99.8	90.0 - 110		0000809414
Beryllium	103	100	ug/L	103	90.0 - 110		0000809414
Cadmium	104	100	ug/L	104	90.0 - 110		0000809414
Chromium	99.3	100	ug/L	99.3	90.0 - 110		0000809414
Copper	101	100	ug/L	101	90.0 - 110		0000809414
Lead	101	100	ug/L	101	90.0 - 110		0000809414
Nickel	100	100	ug/L	100	90.0 - 110		0000809414
Selenium	102	100	ug/L	102	90.0 - 110		0000809414
Silver	102	100	ug/L	102	90.0 - 110		0000809414
Thallium	100	100	ug/L	100	90.0 - 110		0000809414
Zinc	101	100	ug/L	101	90.0 - 110		0000809414

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Antimony	316155	511	500	ug/L	102	85.0 - 115	0000809427	
Arsenic	316155	539	500	ug/L	108	85.0 - 115	0000809427	
Beryllium	316155	207	200	ug/L	104	85.0 - 115	0000809427	
Cadmium	316155	256	250	ug/L	102	85.0 - 115	0000809427	
Chromium	316155	538	500	ug/L	108	85.0 - 115	0000809427	
Copper	316155	532	500	ug/L	106	85.0 - 115	0000809427	
Lead	316155	530	500	ug/L	106	85.0 - 115	0000809427	
Nickel	316155	530	500	ug/L	106	85.0 - 115	0000809427	
Selenium	316155	508	500	ug/L	102	85.0 - 115	0000809427	
Silver	316155	103	100	ug/L	103	85.0 - 115	0000809427	
Thallium	316155	465	500	ug/L	93.0	85.0 - 115	0000809427	
Zinc	316155	524	500	ug/L	105	85.0 - 115	0000809427	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Antimony	316155	511	519	500	85.0 - 115	102	104	ug/L	1.94	20.0
Arsenic	316155	539	548	500	85.0 - 115	108	110	ug/L	1.83	20.0
Beryllium	316155	207	199	200	85.0 - 115	104	99.5	ug/L	4.42	20.0
Cadmium	316155	256	254	250	85.0 - 115	102	102	ug/L	0	20.0
Chromium	316155	538	545	500	85.0 - 115	108	109	ug/L	0.922	20.0
Copper	316155	532	538	500	85.0 - 115	106	108	ug/L	1.87	20.0
Lead	316155	530	531	500	85.0 - 115	106	106	ug/L	0	20.0

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316380 M **Liquid Aqueous** **EPA 200.8, Rev. 5.4**

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Nickel	316155	530	535	500	85.0 - 115	106	107	ug/L	0.939	20.0
Selenium	316155	508	516	500	85.0 - 115	102	103	ug/L	0.976	20.0
Silver	316155	103	104	100	85.0 - 115	103	104	ug/L	0.966	20.0
Thallium	316155	465	466	500	85.0 - 115	93.0	93.2	ug/L	0.215	20.0
Zinc	316155	524	528	500	85.0 - 115	105	106	ug/L	0.948	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Antimony	096896	512	518	1.03	500	70.0 - 130	102	103	ug/L	0.976	30.0
Arsenic	096896	550	552	ND	500	70.0 - 130	110	110	ug/L	0	30.0
Beryllium	096896	213	215	ND	200	70.0 - 130	106	108	ug/L	1.87	30.0
Cadmium	096896	252	254	ND	250	70.0 - 130	101	102	ug/L	0.985	30.0
Chromium	096896	543	540	2.07	500	70.0 - 130	108	108	ug/L	0	30.0
Copper	096896	526	527	1.98	500	70.0 - 130	105	105	ug/L	0	30.0
Lead	096896	522	522	5.06	500	70.0 - 130	103	103	ug/L	0	30.0
Nickel	096896	523	529	1.50	500	70.0 - 130	104	106	ug/L	1.90	30.0
Selenium	096896	513	514	ND	500	70.0 - 130	103	103	ug/L	0	30.0
Silver	096896	102	103	ND	100	70.0 - 130	102	103	ug/L	0.976	30.0
Thallium	096896	441	452	ND	500	70.0 - 130	88.2	90.4	ug/L	2.46	30.0
Zinc	096896	539	537	38.1	500	70.0 - 130	100	99.8	ug/L	0.200	30.0
Antimony	096898	515	518	3.04	500	70.0 - 130	102	103	ug/L	0.976	30.0
Arsenic	096898	540	544	1.83	500	70.0 - 130	108	108	ug/L	0	30.0
Beryllium	096898	209	216	ND	200	70.0 - 130	104	108	ug/L	3.77	30.0
Cadmium	096898	249	252	0.430	250	70.0 - 130	99.4	101	ug/L	1.60	30.0
Chromium	096898	542	533	2.21	500	70.0 - 130	108	106	ug/L	1.87	30.0
Copper	096898	516	524	3.54	500	70.0 - 130	102	104	ug/L	1.94	30.0
Lead	096898	523	524	5.60	500	70.0 - 130	103	104	ug/L	0.966	30.0
Nickel	096898	516	518	3.12	500	70.0 - 130	103	103	ug/L	0	30.0
Selenium	096898	506	507	5.31	500	70.0 - 130	100	100	ug/L	0	30.0
Silver	096898	99.6	101	0.170	100	70.0 - 130	99.4	101	ug/L	1.60	30.0
Thallium	096898	455	458	5.24	500	70.0 - 130	90.0	90.6	ug/L	0.664	30.0
Zinc	096898	518	517	21.5	500	70.0 - 130	99.3	99.1	ug/L	0.202	30.0

316417 M **Liquid Aqueous** **EPA 245.1, Rev. 3.0**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
Mercury	316260	ND	0.0438	0.0750	ug/L		0000810131

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316417 M **Liquid Aqueous** **EPA 245.1, Rev. 3.0**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	5.14	5.00	ug/L	103	90.0 - 110		0000810130
Mercury	5.14	5.00	ug/L	103	90.0 - 110		0000810141
Mercury	5.14	5.00	ug/L	103	90.0 - 110		0000810152
Mercury	5.14	5.00	ug/L	103	90.0 - 110		0000810160

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	5.42	5.00	ug/L	108	90.0 - 110		0000810128

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Mercury	316260	4.59	5.00	ug/L	91.8	85.0 - 115	0000810132	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Mercury	316260	4.59	4.64	5.00	85.0 - 115	91.8	92.8	ug/L	1.08	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	096890	4.61	4.66	ND	5.00	70.0 - 130	92.2	93.2	ug/L	1.08	14.0
Mercury	096904	4.15	4.91	ND	5.00	70.0 - 130	83.0	98.2	ug/L	16.8 *	14.0

316406 O **Liquid Aqueous** **EPA Method 624**

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	BFB1.D	174	9	0.5	0 - 2.00		0000809889
BFB Mass 174	BFB1.D	95	1780	70.8	50.0 - 100		0000809889
BFB Mass 175	BFB1.D	174	140	7.9	5.00 - 9.00		0000809889
BFB Mass 176	BFB1.D	174	1776	99.8	95.0 - 101		0000809889
BFB Mass 177	BFB1.D	176	113	6.4	5.00 - 9.00		0000809889
BFB Mass 50	BFB1.D	95	563	22.4	15.0 - 40.0		0000809889
BFB Mass 75	BFB1.D	95	1267	50.4	30.0 - 60.0		0000809889
BFB Mass 95	BFB1.D	95	2513	100.0	100 - 100		0000809889
BFB Mass 96	BFB1.D	95	166	6.6	5.00 - 9.00		0000809889

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
1,1,1-Trichloroethane	316406	ND	0.0712	1.00	ug/L		0000809894

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316406 **O** **Liquid Aqueous** **EPA Method 624**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*Out*	*File*
1,1,2,2-Tetrachloroethane	316406	ND	0.224	1.00	ug/L		0000809894
1,1,2-Trichloroethane	316406	ND	0.117	1.00	ug/L		0000809894
1,1-Dichloroethane	316406	ND	0.124	1.00	ug/L		0000809894
1,2-Dichloropropane	316406	ND	0.0870	1.00	ug/L		0000809894
2-Chloroethylvinyl ether	316406	ND	0.189	1.00	ug/L		0000809894
Acrolein	316406	ND	2.48	5.00	ug/L		0000809894
Acrylonitrile	316406	ND	0.384	1.00	ug/L		0000809894
Benzene	316406	ND	0.0323	1.00	ug/L		0000809894
Bromodichloromethane	316406	ND	0.0870	1.00	ug/L		0000809894
Bromoform	316406	ND	0.172	1.00	ug/L		0000809894
Bromomethane (Methyl Bromi	316406	ND	0.378	1.00	ug/L		0000809894
Carbon Tetrachloride	316406	ND	0.0689	1.00	ug/L		0000809894
Chlorobenzene	316406	ND	0.0947	1.00	ug/L		0000809894
Chloroethane	316406	ND	0.142	1.00	ug/L		0000809894
Chloroform	316406	ND	0.131	1.00	ug/L		0000809894
Chloromethane	316406	ND	0.0989	1.00	ug/L		0000809894
Dibromochloromethane	316406	ND	0.103	1.00	ug/L		0000809894
Ethylbenzene	316406	ND	0.0989	1.00	ug/L		0000809894
Methylene chloride	316406	ND	0.191	1.00	ug/L		0000809894
Tetrachloroethylene	316406	ND	0.150	1.00	ug/L		0000809894
Toluene	316406	ND	0.100	1.00	ug/L		0000809894
trans-1,2-Dichloroethene	316406	ND	0.120	1.00	ug/L		0000809894
Trichloroethylene	316406	ND	0.219	1.00	ug/L		0000809894
Vinyl chloride	316406	ND	0.212	1.00	ug/L		0000809894

CCC

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,1-Dichloroethylene	21.48	20.0	ug/L	107	70.0 - 130		0000809890
1,2-Dichloropropane	20.84	20.0	ug/L	104	70.0 - 130		0000809890
Chloroform	20.91	20.0	ug/L	105	70.0 - 130		0000809890
Ethylbenzene	21.33	20.0	ug/L	107	70.0 - 130		0000809890
Toluene	21.15	20.0	ug/L	106	70.0 - 130		0000809890
Vinyl chloride	23.76	20.0	ug/L	119	70.0 - 130		0000809890

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,1,1-Trichloroethane	25.3	20.0	ug/L	126	80.0 - 120	*	0000809890

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To
Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316406 O Liquid Aqueous **EPA Method 624**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,1,2,2-Tetrachloroethane	20.4	20.0	ug/L	102	80.0 - 120		0000809890
1,1,2-Trichloroethane	20.4	20.0	ug/L	102	80.0 - 120		0000809890
1,1-Dichloroethane	21.1	20.0	ug/L	106	80.0 - 120		0000809890
1,2-Dichloropropane	20.8	20.0	ug/L	104	80.0 - 120		0000809890
2-Chloroethylvinyl ether	18.8	20.0	ug/L	94.0	80.0 - 120		0000809890
Acrolein	14.6	20.0	ug/L	73.0	80.0 - 120	*	0000809890
Acrylonitrile	17.4	20.0	ug/L	87.0	80.0 - 120		0000809890
Benzene	21.2	20.0	ug/L	106	80.0 - 120		0000809890
Bromodichloromethane	21.5	20.0	ug/L	108	80.0 - 120		0000809890
Bromoform	19.4	20.0	ug/L	97.0	80.0 - 120		0000809890
Bromomethane (Methyl Bromi	17.2	20.0	ug/L	86.0	80.0 - 120		0000809890
Carbon Tetrachloride	22.0	20.0	ug/L	110	80.0 - 120		0000809890
Chlorobenzene	20.6	20.0	ug/L	103	80.0 - 120		0000809890
Chloroethane	20.4	20.0	ug/L	102	80.0 - 120		0000809890
Chloroform	20.9	20.0	ug/L	104	80.0 - 120		0000809890
Chloromethane	17.3	20.0	ug/L	86.5	80.0 - 120		0000809890
Dibromochloromethane	19.6	20.0	ug/L	98.0	80.0 - 120		0000809890
Ethylbenzene	21.3	20.0	ug/L	106	80.0 - 120		0000809890
Methylene chloride	20.8	20.0	ug/L	104	80.0 - 120		0000809890
Tetrachloroethylene	21.8	20.0	ug/L	109	80.0 - 120		0000809890
Toluene	21.2	20.0	ug/L	106	80.0 - 120		0000809890
trans-1,2-Dichloroethene	21.2	20.0	ug/L	106	80.0 - 120		0000809890
Trichloroethylene	21.2	20.0	ug/L	106	80.0 - 120		0000809890
Vinyl chloride	23.8	20.0	ug/L	119	80.0 - 120		0000809890

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	096893	UNKNOWN	24930	33360	16680	66720		0000809899	316406
ChlorobenzeneD5 (ISTD)	096893	UNKNOWN	56937	73048	36520	146100		0000809899	316406
1,4-DichlorobenzeneD4 (ISTD)	096995	UNKNOWN	30406	33360	16680	66720		0000809902	316406
ChlorobenzeneD5 (ISTD)	096995	UNKNOWN	67352	73048	36520	146100		0000809902	316406
1,4-DichlorobenzeneD4 (ISTD)	BLANK	Blank	31255	33360	16680	66720		0000809894	316406
ChlorobenzeneD5 (ISTD)	BLANK	Blank	70565	73048	36520	146100		0000809894	316406
1,4-DichlorobenzeneD4 (ISTD)	CCC/SP	CCV	33360	33360	16680	66720		0000809890	316406

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316406 O Liquid Aqueous EPA Method 624

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
ChlorobenzeneD5 (ISTD)	CCC/SP	CCV	73048	73048	36520	146100		0000809890	316406
1,4-DichlorobenzeneD4 (ISTD)	LCS 20	LCS	33551	33360	16680	66720		0000809892	316406
1,4-DichlorobenzeneD4 (ISTD)	LCS 20	LCS Dup	33956	33360	16680	66720		0000809893	316406
ChlorobenzeneD5 (ISTD)	LCS 20	LCS Dup	72592	73048	36520	146100		0000809893	316406
ChlorobenzeneD5 (ISTD)	LCS 20	LCS	72814	73048	36520	146100		0000809892	316406

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	096893	UNKNOWN	13.490	13.470	13.41	13.53		0000809899	316406
ChlorobenzeneD5 (ISTD)	096893	UNKNOWN	9.870	9.850	9.790	9.910		0000809899	316406
1,4-DichlorobenzeneD4 (ISTD)	096995	UNKNOWN	13.490	13.470	13.41	13.53		0000809902	316406
ChlorobenzeneD5 (ISTD)	096995	UNKNOWN	9.870	9.850	9.790	9.910		0000809902	316406
1,4-DichlorobenzeneD4 (ISTD)	BLANK	Blank	13.490	13.470	13.41	13.53		0000809894	316406
ChlorobenzeneD5 (ISTD)	BLANK	Blank	9.860	9.850	9.790	9.910		0000809894	316406
1,4-DichlorobenzeneD4 (ISTD)	LCS 20	LCS	13.480	13.470	13.41	13.53		0000809892	316406
1,4-DichlorobenzeneD4 (ISTD)	LCS 20	LCS Dup	13.480	13.470	13.41	13.53		0000809893	316406
ChlorobenzeneD5 (ISTD)	LCS 20	LCS	9.860	9.850	9.790	9.910		0000809892	316406
ChlorobenzeneD5 (ISTD)	LCS 20	LCS Dup	9.870	9.850	9.790	9.910		0000809893	316406

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,1,1-Trichloroethane	316406	24.6	20.0	ug/L	123	65.9 - 124	0000809892	
1,1,2,2-Tetrachloroethane	316406	19.3	20.0	ug/L	96.5	71.3 - 130	0000809892	
1,1,2-Trichloroethane	316406	20.6	20.0	ug/L	103	65.6 - 132	0000809892	
1,1-Dichloroethane	316406	20.6	20.0	ug/L	103	70.0 - 120	0000809892	
1,2-Dichloropropane	316406	21.1	20.0	ug/L	106	80.0 - 125	0000809892	
2-Chloroethylvinyl ether	316406	19.9	20.0	ug/L	99.5	54.4 - 122	0000809892	
Acrolein	316406	9.23	20.0	ug/L	46.2	10.0 - 960	0000809892	
Acrylonitrile	316406	17.7	20.0	ug/L	88.5	61.3 - 136	0000809892	
Benzene	316406	20.9	20.0	ug/L	104	77.9 - 121	0000809892	
Bromodichloromethane	316406	20.4	20.0	ug/L	102	63.4 - 121	0000809892	
Bromoform	316406	19.0	20.0	ug/L	95.0	70.0 - 119	0000809892	

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316406 O Liquid Aqueous **EPA Method 624**

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Bromomethane (Methyl Bromi	316406	17.0	20.0	ug/L	85.0	53.3 - 138	0000809892	
Carbon Tetrachloride	316406	21.8	20.0	ug/L	109	62.3 - 127	0000809892	
Chlorobenzene	316406	21.1	20.0	ug/L	106	80.8 - 117	0000809892	
Chloroethane	316406	20.1	20.0	ug/L	100	73.7 - 118	0000809892	
Chloroform	316406	20.8	20.0	ug/L	104	73.2 - 119	0000809892	
Chloromethane	316406	19.8	20.0	ug/L	99.0	70.0 - 130	0000809892	
Dibromochloromethane	316406	19.5	20.0	ug/L	97.5	63.3 - 122	0000809892	
Ethylbenzene	316406	21.8	20.0	ug/L	109	70.0 - 130	0000809892	
Methylene chloride	316406	20.4	20.0	ug/L	102	62.4 - 126	0000809892	
Tetrachloroethylene	316406	22.5	20.0	ug/L	112	76.6 - 121	0000809892	
Toluene	316406	21.6	20.0	ug/L	108	70.0 - 130	0000809892	
trans-1,2-Dichloroethene	316406	21.2	20.0	ug/L	106	78.9 - 122	0000809892	
Trichloroethylene	316406	21.3	20.0	ug/L	106	82.8 - 120	0000809892	
Vinyl chloride	316406	19.9	20.0	ug/L	99.5	70.9 - 123	0000809892	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1-Trichloroethane	316406	24.6	23.3	20.0	65.9 - 124	123	116	ug/L	5.86	30.0
1,1,2,2-Tetrachlorocthane	316406	19.3	19.2	20.0	71.3 - 130	96.5	96.0	ug/L	0.519	30.0
1,1,2-Trichloroethane	316406	20.6	19.9	20.0	65.6 - 132	103	99.5	ug/L	3.46	30.0
1,1-Dichloroethane	316406	20.6	19.8	20.0	70.0 - 120	103	99.0	ug/L	3.96	30.0
1,2-Dichloropropane	316406	21.1	19.8	20.0	80.0 - 125	106	99.0	ug/L	6.83	30.0
2-Chloroethylvinyl ether	316406	19.9	20.0	20.0	54.4 - 122	99.5	100	ug/L	0.501	30.0
Acrolein	316406	9.23	9.88	20.0	10.0 - 960	46.2	49.4	ug/L	6.69	30.0
Acrylonitrile	316406	17.7	17.5	20.0	61.3 - 136	88.5	87.5	ug/L	1.14	30.0
Benzene	316406	20.9	19.9	20.0	77.9 - 121	104	99.5	ug/L	4.42	30.0
Bromodichloromethane	316406	20.4	19.2	20.0	63.4 - 121	102	96.0	ug/L	6.06	30.0
Bromoform	316406	19.0	18.1	20.0	70.0 - 119	95.0	90.5	ug/L	4.85	30.0
Bromomethane (Methyl Bromi	316406	17.0	15.9	20.0	53.3 - 138	85.0	79.5	ug/L	6.69	30.0
Carbon Tetrachloride	316406	21.8	20.8	20.0	62.3 - 127	109	104	ug/L	4.69	30.0
Chlorobenzene	316406	21.1	19.7	20.0	80.8 - 117	106	98.5	ug/L	7.33	30.0
Chloroethane	316406	20.1	18.8	20.0	73.7 - 118	100	94.0	ug/L	6.19	30.0
Chloroform	316406	20.8	19.6	20.0	73.2 - 119	104	98.0	ug/L	5.94	30.0
Chloromethane	316406	19.8	19.0	20.0	70.0 - 130	99.0	95.0	ug/L	4.12	30.0
Dibromochloromethane	316406	19.5	18.6	20.0	63.3 - 122	97.5	93.0	ug/L	4.72	30.0
Ethylbenzene	316406	21.8	21.2	20.0	70.0 - 130	109	106	ug/L	2.79	30.0

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316406 O Liquid Aqueous **EPA Method 624**

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Methylene chloride	316406	20.4	19.3	20.0	62.4 - 126	102	96.5	ug/L	5.54	30.0
Tetrachloroethylene	316406	22.5	21.2	20.0	76.6 - 121	112	106	ug/L	5.50	30.0
Toluene	316406	21.6	20.9	20.0	70.0 - 130	108	104	ug/L	3.77	30.0
trans-1,2-Dichloroethene	316406	21.2	20.5	20.0	78.9 - 122	106	102	ug/L	3.85	30.0
Trichloroethylene	316406	21.3	19.6	20.0	82.8 - 120	106	98.0	ug/L	7.84	30.0
Vinyl chloride	316406	19.9	18.8	20.0	70.9 - 123	99.5	94.0	ug/L	5.68	30.0

MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,1,1-Trichloroethane	096995	221	237	ND	200	25.0 - 153	110	118	ug/L	7.02	30.0
1,1,2,2-Tetrachloroethane	096995	190	181	ND	200	52.1 - 135	95.0	90.5	ug/L	4.85	30.0
1,1,2-Trichloroethane	096995	196	186	ND	200	35.2 - 155	98.0	93.0	ug/L	5.24	30.0
1,1-Dichloroethane	096995	194	189	ND	200	70.4 - 117	97.0	94.5	ug/L	2.61	30.0
1,2-Dichloropropane	096995	192	190	ND	200	28.4 - 152	96.0	95.0	ug/L	1.05	30.0
2-Chloroethylvinyl ether	096995	190	180	ND	200	18.2 - 145	95.0	90.0	ug/L	5.41	30.0
Acrolein	096995	110	141	ND	200	5.00 - 250	55.0	70.5	ug/L	24.7	30.0
Acrylonitrile	096995	181	171	ND	200	65.0 - 130	90.5	85.5	ug/L	5.68	30.0
Benzene	096995	197	193	ND	200	19.2 - 158	98.5	96.5	ug/L	2.05	30.0
Bromodichloromethane	096995	190	184	ND	200	15.0 - 147	95.0	92.0	ug/L	3.21	30.0
Bromoform	096995	179	170	ND	200	35.8 - 121	89.5	85.0	ug/L	5.16	30.0
Bromomethane (Methyl Bromi	096995	159	173	ND	200	32.9 - 146	79.5	86.5	ug/L	8.43	30.0
Carbon Tetrachloride	096995	201	194	ND	200	19.2 - 140	100	97.0	ug/L	3.05	30.0
Chlorobenzene	096995	189	185	ND	200	80.6 - 118	94.5	92.5	ug/L	2.14	30.0
Chloroethane	096995	187	186	ND	200	61.1 - 131	93.5	93.0	ug/L	0.536	30.0
Chloroform	096995	198	189	ND	200	27.3 - 145	99.0	94.5	ug/L	4.65	30.0
Chloromethane	096995	186	185	ND	200	47.0 - 290	93.0	92.5	ug/L	0.539	30.0
Dibromochloromethane	096995	182	177	ND	200	35.1 - 122	91.0	88.5	ug/L	2.79	30.0
Ethylbenzene	096995	200	198	ND	200	76.1 - 123	100	99.0	ug/L	1.01	30.0
Methylene chloride	096995	195	187	ND	200	63.5 - 125	97.5	93.5	ug/L	4.19	30.0
Tetrachloroethylene	096995	211	195	ND	200	50.3 - 132	106	97.5	ug/L	8.35	30.0
Toluene	096995	195	190	ND	200	49.5 - 130	97.5	95.0	ug/L	2.60	30.0
trans-1,2-Dichloroethene	096995	199	201	ND	200	39.0 - 140	99.5	100	ug/L	0.501	30.0
Trichloroethylene	096995	197	192	ND	200	27.8 - 148	98.5	96.0	ug/L	2.57	30.0
Vinyl chloride	096995	180	178	ND	200	51.9 - 141	90.0	89.0	ug/L	1.12	30.0

SPCC

Parameter	*Sample*	*RF*	*Minimum*	*File*

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316406 **O** **Liquid Aqueous** **EPA Method 624**

SPCC

Parameter	*Sample*	*RF*	*Minimum*	*File*
1,1,2,2-Tetrachloroethane	SPCC	1.212	0.300	0000809891
1,1-Dichloroethane	SPCC	0.830	0.100	0000809891
Bromoform	SPCC	0.266	0.100	0000809891
Chlorobenzene	SPCC	1.110	0.300	0000809891
Chloromethane	SPCC	0.521	0.100	0000809891

Surrogate

Parameter	*Sample*	*Type*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
1,2-DCA-d4 (SURR)	096893	UNKNOWN	27.8	20.0	ug/L	139	65.5 - 181	0000809899
Bromofluorobenzene (SURR)	096893	UNKNOWN	20.2	20.0	ug/L	101	73.5 - 120	0000809899
Dibromofluoromethane (SURR)	096893	UNKNOWN	23.6	20.0	ug/L	118	78.2 - 120	0000809899
TolueneD8 (SURR)	096893	UNKNOWN	20.1	20.0	ug/L	100	70.0 - 130	0000809899
1,2-DCA-d4 (SURR)	096995	UNKNOWN	217	200	ug/L	108	65.5 - 181	0000809902
Bromofluorobenzene (SURR)	096995	UNKNOWN	204	200	ug/L	102	73.5 - 120	0000809902
Dibromofluoromethane (SURR)	096995	UNKNOWN	209	200	ug/L	104	78.2 - 120	0000809902
TolueneD8 (SURR)	096995	UNKNOWN	204	200	ug/L	102	70.0 - 130	0000809902
1,2-DCA-d4 (SURR)	BLANK	Blank	20.7	20.0	ug/L	104	65.5 - 181	0000809894
Bromofluorobenzene (SURR)	BLANK	Blank	19.9	20.0	ug/L	99.5	73.5 - 120	0000809894
Dibromofluoromethane (SURR)	BLANK	Blank	20.1	20.0	ug/L	100	78.2 - 120	0000809894
TolueneD8 (SURR)	BLANK	Blank	20.6	20.0	ug/L	103	70.0 - 130	0000809894
1,2-DCA-d4 (SURR)	CCC/SP	CCV	20.6	20.0	ug/L	103	65.5 - 181	0000809890
Bromofluorobenzene (SURR)	CCC/SP	CCV	20.5	20.0	ug/L	102	73.5 - 120	0000809890
Dibromofluoromethane (SURR)	CCC/SP	CCV	20.0	20.0	ug/L	100	78.2 - 120	0000809890
TolueneD8 (SURR)	CCC/SP	CCV	19.9	20.0	ug/L	99.5	70.0 - 130	0000809890
1,2-DCA-d4 (SURR)	LCS 20	LCS	20.2	20.0	ug/L	101	65.5 - 181	0000809892
1,2-DCA-d4 (SURR)	LCS 20	LCS Dup	20.2	20.0	ug/L	101	65.5 - 181	0000809893
Bromofluorobenzene (SURR)	LCS 20	LCS	20.0	20.0	ug/L	100	73.5 - 120	0000809892
Bromofluorobenzene (SURR)	LCS 20	LCS Dup	20.0	20.0	ug/L	100	73.5 - 120	0000809893
Dibromofluoromethane (SURR)	LCS 20	LCS Dup	20.4	20.0	ug/L	102	78.2 - 120	0000809893

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316406 O Liquid Aqueous **EPA Method 624**

Surrogate

Parameter	*Sample*	*Type*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
Dibromofluoromethane (SURR)	LCS 20	LCS	20.5	20.0	ug/L	102	78.2 - 120	0000809892
ToluneneD8 (SURR)	LCS 20	LCS	20.3	20.0	ug/L	102	70.0 - 130	0000809892
ToluneneD8 (SURR)	LCS 20	LCS Dup	20.3	20.0	ug/L	102	70.0 - 130	0000809893

317075 O Liquid Aqueous **EPA Method 625**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*Out*	*File*
1,2,4-Trichlorobenzene	316271	ND	0.00118	0.00200	mg/L		0000822375
1,2-Dichlorobenzene	316271	ND	0.000888	0.00100	mg/L		0000822375
1,2-DPH (as azobenzene)	316271	ND	0.000230	0.00100	mg/L		0000822375
1,3-Dichlorobenzene	316271	ND	0.00102	0.00100	mg/L		0000822375
1,4-Dichlorobenzene	316271	ND	0.00111	0.00200	mg/L		0000822375
2,4,6-Trichlorophenol	316271	ND	0.000233	0.00100	mg/L		0000822375
2,4-Dimethylphenol	316271	ND	0.000178	0.00100	mg/L		0000822375
2,4-Dinitrophenol	316271	ND	0.000921	0.00100	mg/L		0000822375
2,4-Dinitrotoluene	316271	ND	0.000139	0.00100	mg/L		0000822375
2,6-Dinitrotoluene	316271	ND	0.000144	0.00100	mg/L		0000822375
2-Chloronaphthalene	316271	ND	0.000158	0.00100	mg/L		0000822375
2-Chlorophenol	316271	ND	0.000180	0.00100	mg/L		0000822375
2-Nitrophenol	316271	ND	0.000258	0.00100	mg/L		0000822375
3,3'-Dichlorobenzidine	316271	ND	0.000178	0.00100	mg/L		0000822375
4,6-Dinitro-2-methylphenol	316271	ND	0.00160	0.00200	mg/L		0000822375
4-Bromophenyl phenyl ether	316271	ND	0.000162	0.00100	mg/L		0000822375
4-Chlorophenyl phenyl ethe	316271	ND	0.000166	0.00100	mg/L		0000822375
4-Nitrophenol	316271	ND	0.000897	0.00100	mg/L		0000822375
Acenaphthene	316271	ND	0.000126	0.00100	mg/L		0000822375
Acenaphthylene	316271	ND	0.000164	0.00100	mg/L		0000822375
Anthracene	316271	ND	0.000180	0.00100	mg/L		0000822375
Benzidine	316271	ND	0.00168	0.00200	mg/L		0000822375
Benzo(a)anthracene	316271	ND	0.0000767	0.00100	mg/L		0000822375
Benzo(a)pyrene	316271	ND	0.000148	0.00100	mg/L		0000822375
Benzo(b)fluoranthene	316271	ND	0.000200	0.00100	mg/L		0000822375
Benzo(ghi)perylene	316271	ND	0.000245	0.00100	mg/L		0000822375
Benzo(k)fluoranthene	316271	ND	0.000145	0.00100	mg/L		0000822375
Benzyl Butyl phthalate	316271	ND	0.000161	0.00100	mg/L		0000822375
Bis(2-chloroethoxy)methane	316271	ND	0.000217	0.00100	mg/L		0000822375

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 **O** **Liquid Aqueous** **EPA Method 625**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
Bis(2-chloroethyl)ether	316271	ND	0.000205	0.00100	mg/L		0000822375
Bis(2-chloroisopropyl)ether	316271	ND	0.000103	0.00100	mg/L		0000822375
Bis(2-ethylhexyl)phthalate	316271	ND	0.00137	0.00200	mg/L		0000822375
Chrysene	316271	ND	0.000136	0.00100	mg/L		0000822375
-Benzo(a)phenanthrene							
Dibenz(a,h)anthracene	316271	ND	0.000150	0.00100	mg/L		0000822375
Diethyl phthalate	316271	ND	0.000153	0.00100	mg/L		0000822375
Dimethyl phthalate	316271	ND	0.000146	0.00100	mg/L		0000822375
Di-n-butylphthalate	316271	0.000320	0.000410	0.00100	mg/L		0000822375
Di-n-octylphthalate	316271	ND	0.0000721	0.00100	mg/L		0000822375
Fluoranthene-Benzo(j,k)fluor	316271	ND	0.000261	0.00100	mg/L		0000822375
ene							
Fluorene	316271	ND	0.000148	0.00100	mg/L		0000822375
Hexachlorobenzene	316271	ND	0.000180	0.00100	mg/L		0000822375
Hexachlorobutadiene	316271	ND	0.00113	0.00200	mg/L		0000822375
Hexachlorocyclopentadiene	316271	ND	0.00103	0.00100	mg/L		0000822375
Hexachloroethane	316271	ND	0.000934	0.00100	mg/L		0000822375
Indeno(1,2,3-cd)pyrene	316271	ND	0.000160	0.00100	mg/L		0000822375
Isophorone	316271	ND	0.000219	0.00100	mg/L		0000822375
Naphthalene	316271	ND	0.000183	0.00100	mg/L		0000822375
Nitrobenzene	316271	ND	0.000164	0.00100	mg/L		0000822375
N-Nitrosodimethylamine	316271	ND	0.00125	0.00200	mg/L		0000822375
N-Nitrosodi-n-propylamine	316271	ND	0.000224	0.00100	mg/L		0000822375
N-Nitrosodiphenylamine (as	316271	ND	0.00256	0.00500	mg/L		0000822375
DPA							
p-Chloro-m-Cresol	316271	ND	0.000303	0.00100	mg/L		0000822375
(4-Chloro-3-me							
Pentachlorophenol	316271	ND	0.00256	0.00500	mg/L		0000822375
Phenanthrene	316271	ND	0.000151	0.00100	mg/L		0000822375
Phenol	316271	0.00167	0.000802	0.00500	mg/L		0000822375
Pyrene	316271	ND	0.000234	0.00100	mg/L		0000822375

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,2,4-Trichlorobenzene	49.4	50.0	mg/L	98.8	80.0 - 120		0000822372
1,2-Dichlorobenzene	50.6	50.0	mg/L	101	80.0 - 120		0000822372
1,2-DPH (as azobenzene)	42.0	50.0	mg/L	84.0	80.0 - 120		0000822372
1,3-Dichlorobenzene	49.2	50.0	mg/L	98.4	80.0 - 120		0000822372

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 O Liquid Aqueous **EPA Method 625**

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,4-Dichlorobenzene	48.8	50.0	mg/L	97.6	80.0 - 120		0000822372
2,4,6-Trichlorophenol	57.2	50.0	mg/L	114	80.0 - 120		0000822372
2,4-Dimethylphenol	44.2	50.0	mg/L	88.4	80.0 - 120		0000822372
2,4-Dinitrophenol	53.5	50.0	mg/L	107	80.0 - 120		0000822372
2,4-Dinitrotoluene	51.8	50.0	mg/L	104	80.0 - 120		0000822372
2,6-Dinitrotoluene	52.2	50.0	mg/L	104	80.0 - 120		0000822372
2-Chloronaphthalene	48.9	50.0	mg/L	97.8	80.0 - 120		0000822372
2-Chlorophenol	48.3	50.0	mg/L	96.6	80.0 - 120		0000822372
2-Nitrophenol	51.2	50.0	mg/L	102	80.0 - 120		0000822372
3,3'-Dichlorobenzidine	47.1	50.0	mg/L	94.2	80.0 - 120		0000822372
4,6-Dinitro-2-methylphenol	51.4	50.0	mg/L	103	80.0 - 120		0000822372
4-Bromophenyl phenyl ether	54.5	50.0	mg/L	109	80.0 - 120		0000822372
4-Chlorophenyl phenyl ethe	52.2	50.0	mg/L	104	80.0 - 120		0000822372
4-Nitrophenol	58.8	50.0	mg/L	118	80.0 - 120		0000822372
Acenaphthene	49.5	50.0	mg/L	99.0	80.0 - 120		0000822372
Acenaphthylene	49.4	50.0	mg/L	98.8	80.0 - 120		0000822372
Anthracene	44.8	50.0	mg/L	89.6	80.0 - 120		0000822372
Benzidine	26.7	50.0	mg/L	53.4	80.0 - 120	*	0000822372
Benzo(a)anthracene	51.5	50.0	mg/L	103	80.0 - 120		0000822372
Benzo(a)pyrene	56.8	50.0	mg/L	114	80.0 - 120		0000822372
Benzo(b)fluoranthene	55.1	50.0	mg/L	110	80.0 - 120		0000822372
Benzo(ghi)perylene	55.9	50.0	mg/L	112	80.0 - 120		0000822372
Benzo(k)fluoranthene	53.6	50.0	mg/L	107	80.0 - 120		0000822372
Benzyl Butyl phthalate	58.3	50.0	mg/L	117	80.0 - 120		0000822372
Bis(2-chloroethoxy)methane	44.0	50.0	mg/L	88.0	80.0 - 120		0000822372
Bis(2-chloroethyl)ether	63.0	50.0	mg/L	126	80.0 - 120	*	0000822372
Bis(2-chloroisopropyl)ether	42.8	50.0	mg/L	85.6	80.0 - 120		0000822372
Bis(2-ethylhexyl)phthalate	56.8	50.0	mg/L	114	80.0 - 120		0000822372
Chrysene -Benzo(a)phenanthrene	47.0	50.0	mg/L	94.0	80.0 - 120		0000822372
Dibenz(a,h)anthracene	53.8	50.0	mg/L	108	80.0 - 120		0000822372
Diethyl phthalate	52.0	50.0	mg/L	104	80.0 - 120		0000822372
Dimethyl phthalate	51.0	50.0	mg/L	102	80.0 - 120		0000822372
Di-n-butylphthalate	50.3	50.0	mg/L	101	80.0 - 120		0000822372
Di-n-octylphthalate	51.5	50.0	mg/L	103	80.0 - 120		0000822372
Fluoranthene-Benzo(j,k)fluor ene	50.6	50.0	mg/L	101	80.0 - 120		0000822372

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To
Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 O Liquid Aqueous EPA Method 625

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Fluorene	50.1	50.0	mg/L	100	80.0 - 120		0000822372
Hexachlorobenzene	54.3	50.0	mg/L	109	80.0 - 120		0000822372
Hexachlorobutadiene	55.1	50.0	mg/L	110	80.0 - 120		0000822372
Hexachlorocyclopentadiene	47.5	50.0	mg/L	95.0	80.0 - 120		0000822372
Hexachloroethane	48.2	50.0	mg/L	96.4	80.0 - 120		0000822372
Indeno(1,2,3-cd)pyrene	56.0	50.0	mg/L	112	80.0 - 120		0000822372
Isophorone	49.2	50.0	mg/L	98.4	80.0 - 120		0000822372
Naphthalene	48.2	50.0	mg/L	96.4	80.0 - 120		0000822372
Nitrobenzene	47.7	50.0	mg/L	95.4	80.0 - 120		0000822372
N-Nitrosodimethylamine	59.6	50.0	mg/L	119	80.0 - 120		0000822372
N-Nitrosodi-n-propylamine	59.4	50.0	mg/L	119	80.0 - 120		0000822372
N-Nitrosodiphenylamine (as DPA	47.6	50.0	mg/L	95.2	80.0 - 120		0000822372
p-Chloro-m-Cresol (4-Chloro-3-me	48.3	50.0	mg/L	96.6	80.0 - 120		0000822372
Pentachlorophenol	53.9	50.0	mg/L	108	80.0 - 120		0000822372
Phenanthrene	45.1	50.0	mg/L	90.2	80.0 - 120		0000822372
Phenol	40.3	50.0	mg/L	80.6	80.0 - 120		0000822372
Pyrene	60.4	50.0	mg/L	121	80.0 - 120	*	0000822372

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	DFTPP1	198	29941	50.8	40.0 - 60.0		0000822374
DFTPP Mass 197	DFTPP1	198	0	0.0	0 - 1.00		0000822374
DFTPP Mass 198	DFTPP1	198	58965	100.0	100 - 100		0000822374
DFTPP Mass 199	DFTPP1	198	3978	6.7	5.00 - 9.00		0000822374
DFTPP Mass 275	DFTPP1	198	13086	22.2	10.0 - 30.0		0000822374
DFTPP Mass 365	DFTPP1	198	1322	2.2	1.00 - 100		0000822374
DFTPP Mass 441	DFTPP1	443	4471	80.0	0 - 100		0000822374
DFTPP Mass 442	DFTPP1	198	28200	47.8	40.0 - 100		0000822374
DFTPP Mass 443	DFTPP1	442	5588	19.8	17.0 - 23.0		0000822374
DFTPP Mass 51	DFTPP1	198	21311	36.1	30.0 - 60.0		0000822374
DFTPP Mass 68	DFTPP1	69	0	0.0	0 - 2.00		0000822374
DFTPP Mass 69	DFTPP1	198	31557	53.5	0 - 100		0000822374
DFTPP Mass 70	DFTPP1	69	128	0.4	0 - 2.00		0000822374

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 O Liquid Aqueous **EPA Method 625**

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	096893	UNKNOWN	57680	67668	33830	135300		0000822368	317075
Acenaphthene-d10-ISTD	096893	UNKNOWN	127720	141697	70850	283400		0000822368	317075
Chrysene-d12-ISTD	096893	UNKNOWN	198808	173428	86710	346900		0000822368	317075
Naphthalene-d8-ISTD	096893	UNKNOWN	202218	237235	118600	474500		0000822368	317075
Perylene-d12-ISTD	096893	UNKNOWN	125452	93282	46640	186600		0000822368	317075
Phenanthrene-d10-ISTD	096893	UNKNOWN	209245	261914	131000	523800		0000822368	317075
1,4-Dichlorobenzene-d4-ISTD	316271	LCS	49188	67668	33830	135300		0000822376	317075
1,4-Dichlorobenzene-d4-ISTD	316271	LCS Dup	50829	67668	33830	135300		0000822377	317075
1,4-Dichlorobenzene-d4-ISTD	316271	Blank	63108	67668	33830	135300		0000822375	317075
Acenaphthene-d10-ISTD	316271	LCS	108381	141697	70850	283400		0000822376	317075
Acenaphthene-d10-ISTD	316271	LCS Dup	111330	141697	70850	283400		0000822377	317075
Acenaphthene-d10-ISTD	316271	Blank	138989	141697	70850	283400		0000822375	317075
Chrysene-d12-ISTD	316271	LCS	137452	173428	86710	346900		0000822376	317075
Chrysene-d12-ISTD	316271	LCS Dup	148324	173428	86710	346900		0000822377	317075
Chrysene-d12-ISTD	316271	Blank	189434	173428	86710	346900		0000822375	317075
Naphthalene-d8-ISTD	316271	LCS	177147	237235	118600	474500		0000822376	317075
Naphthalene-d8-ISTD	316271	LCS Dup	181809	237235	118600	474500		0000822377	317075
Naphthalene-d8-ISTD	316271	Blank	221735	237235	118600	474500		0000822375	317075
Perylene-d12-ISTD	316271	LCS	56736	93282	46640	186600		0000822376	317075
Perylene-d12-ISTD	316271	LCS Dup	84908	93282	46640	186600		0000822377	317075
Perylene-d12-ISTD	316271	Blank	112862	93282	46640	186600		0000822375	317075
Phenanthrene-d10-ISTD	316271	LCS Dup	176754	261914	131000	523800		0000822377	317075
Phenanthrene-d10-ISTD	316271	LCS	177698	261914	131000	523800		0000822376	317075
Phenanthrene-d10-ISTD	316271	Blank	226527	261914	131000	523800		0000822375	317075

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	096893	UNKNOWN	5.110	5.120	5.060	5.180		0000822368	317075
Acenaphthene-d10-ISTD	096893	UNKNOWN	7.640	7.640	7.580	7.700		0000822368	317075
Chrysene-d12-ISTD	096893	UNKNOWN	11.020	11.030	10.97	11.09		0000822368	317075
Naphthalene-d8-ISTD	096893	UNKNOWN	6.200	6.210	6.150	6.270		0000822368	317075
Perylene-d12-ISTD	096893	UNKNOWN	13.040	13.040	12.98	13.10		0000822368	317075
Phenanthrene-d10-ISTD	096893	UNKNOWN	8.840	8.850	8.790	8.910		0000822368	317075

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 **O** **Liquid Aqueous** **EPA Method 625**

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-IST D	316271	Blank	5.110	5.120	5.060	5.180		0000822375	317075
1,4-Dichlorobenzene-d4-IST D	316271	LCS	5.110	5.120	5.060	5.180		0000822376	317075
1,4-Dichlorobenzene-d4-IST D	316271	LCS Dup	5.110	5.120	5.060	5.180		0000822377	317075
Acenaphthene-d10-ISTD	316271	Blank	7.640	7.640	7.580	7.700		0000822375	317075
Acenaphthene-d10-ISTD	316271	LCS	7.640	7.640	7.580	7.700		0000822376	317075
Acenaphthene-d10-ISTD	316271	LCS Dup	7.640	7.640	7.580	7.700		0000822377	317075
Chrysene-d12-ISTD	316271	Blank	11.020	11.030	10.97	11.09		0000822375	317075
Chrysene-d12-ISTD	316271	LCS	11.020	11.030	10.97	11.09		0000822376	317075
Chrysene-d12-ISTD	316271	LCS Dup	11.020	11.030	10.97	11.09		0000822377	317075
Naphthalene-d8-ISTD	316271	Blank	6.200	6.210	6.150	6.270		0000822375	317075
Naphthalene-d8-ISTD	316271	LCS	6.200	6.210	6.150	6.270		0000822376	317075
Naphthalene-d8-ISTD	316271	LCS Dup	6.200	6.210	6.150	6.270		0000822377	317075
Perylene-d12-ISTD	316271	LCS	13.030	13.040	12.98	13.10		0000822376	317075
Perylene-d12-ISTD	316271	Blank	13.040	13.040	12.98	13.10		0000822375	317075
Perylene-d12-ISTD	316271	LCS Dup	13.040	13.040	12.98	13.10		0000822377	317075
Phenanthrene-d10-ISTD	316271	Blank	8.840	8.850	8.790	8.910		0000822375	317075
Phenanthrene-d10-ISTD	316271	LCS	8.840	8.850	8.790	8.910		0000822376	317075
Phenanthrene-d10-ISTD	316271	LCS Dup	8.840	8.850	8.790	8.910		0000822377	317075

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,2,4-Trichlorobenzene	316271	0.0156	0.0250	mg/L	62.4	22.0 - 147	0000822376	
1,2-Dichlorobenzene	316271	0.0168	0.0250	mg/L	67.2	32.0 - 129	0000822376	
1,2-DPH (as azobenzene)	316271	0.0233	0.0250	mg/L	93.2	0.100 - 130	0000822376	
1,3-Dichlorobenzene	316271	0.0160	0.0250	mg/L	64.0	0.100 - 172	0000822376	
1,4-Dichlorobenzene	316271	0.0160	0.0250	mg/L	64.0	20.0 - 124	0000822376	
2,4,6-Trichlorophenol	316271	0.0217	0.0250	mg/L	86.8	37.0 - 144	0000822376	
2,4-Dimethylphenol	316271	0.0181	0.0250	mg/L	72.4	32.0 - 119	0000822376	
2,4-Dinitrophenol	316271	0.0147	0.0250	mg/L	58.8	0.100 - 191	0000822376	
2,4-Dinitrotoluene	316271	0.0240	0.0250	mg/L	96.0	39.0 - 139	0000822376	
2,6-Dinitrotoluene	316271	0.0240	0.0250	mg/L	96.0	50.0 - 158	0000822376	
2-Chloronaphthalene	316271	0.0176	0.0250	mg/L	70.4	60.0 - 118	0000822376	
2-Chlorophenol	316271	0.0196	0.0250	mg/L	78.4	23.0 - 134	0000822376	
2-Nitrophenol	316271	0.0197	0.0250	mg/L	78.8	29.0 - 182	0000822376	
3,3'-Dichlorobenzidine	316271	0.0205	0.0250	mg/L	82.0	0.100 - 262	0000822376	

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 O Liquid Aqueous **EPA Method 625**

LCS

Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
4,6-Dinitro-2-methylphenol	316271	0.0178	0.0250	mg/L	71.2	0.100 - 191	0000822376	
4-Bromophenyl phenyl ether	316271	0.0253	0.0250	mg/L	101	53.0 - 127	0000822376	
4-Chlorophenyl phenyl ethe	316271	0.0210	0.0250	mg/L	84.0	25.0 - 158	0000822376	
4-Nitrophenol	316271	0.00322	0.0250	mg/L	12.9	0.100 - 132	0000822376	
Acenaphthene	316271	0.0194	0.0250	mg/L	77.6	47.0 - 145	0000822376	
Acenaphthylene	316271	0.0199	0.0250	mg/L	79.6	33.0 - 145	0000822376	
Anthracene	316271	0.0236	0.0250	mg/L	94.4	27.0 - 133	0000822376	
Benzidine	316271	0.0177	0.0250	mg/L	70.8	0.100 - 130	0000822376	
Benzo(a)anthracene	316271	0.0246	0.0250	mg/L	98.4	33.0 - 143	0000822376	
Benzo(a)pyrene	316271	0.0278	0.0250	mg/L	111	17.0 - 163	0000822376	
Benzo(b)fluoranthene	316271	0.0292	0.0250	mg/L	117	24.0 - 159	0000822376	
Benzo(ghi)perylene	316271	0.0235	0.0250	mg/L	94.0	0.100 - 219	0000822376	
Benzo(k)fluoranthene	316271	0.0307	0.0250	mg/L	123	11.0 - 162	0000822376	
Benzyl Butyl phthalate	316271	0.0176	0.0250	mg/L	70.4	0.100 - 152	0000822376	
Bis(2-chloroethoxy)methane	316271	0.0209	0.0250	mg/L	83.6	33.0 - 184	0000822376	
Bis(2-chloroethyl)ether	316271	0.0331	0.0250	mg/L	132	33.0 - 184	0000822376	
Bis(2-chloroisopropyl)ether	316271	0.0210	0.0250	mg/L	84.0	36.0 - 166	0000822376	
Bis(2-ethylhexyl)phthalate	316271	0.0281	0.0250	mg/L	112	8.00 - 158	0000822376	
Chrysene -Benzo(a)phenanthrene	316271	0.0234	0.0250	mg/L	93.6	17.0 - 168	0000822376	
Dibenz(a,h)anthracene	316271	0.0216	0.0250	mg/L	86.4	0.100 - 227	0000822376	
Diethyl phthalate	316271	0.0104	0.0250	mg/L	41.6	0.100 - 114	0000822376	
Dimethyl phthalate	316271	0.00169	0.0250	mg/L	6.76	0.100 - 112	0000822376	
Di-n-butylphthalate	316271	0.0213	0.0250	mg/L	85.2	1.00 - 118	0000822376	
Di-n-octylphthalate	316271	0.0311	0.0250	mg/L	124	4.00 - 146	0000822376	
Fluoranthene-Benzo(j,k)fluor ene	316271	0.0279	0.0250	mg/L	112	26.0 - 137	0000822376	
Fluorene	316271	0.0213	0.0250	mg/L	85.2	59.0 - 121	0000822376	
Hexachlorobenzene	316271	0.0276	0.0250	mg/L	110	0.100 - 152	0000822376	
Hexachlorobutadiene	316271	0.0163	0.0250	mg/L	65.2	24.0 - 116	0000822376	
Hexachlorocyclopentadiene	316271	0.0125	0.0250	mg/L	50.0	0.100 - 130	0000822376	
Hexachloroethane	316271	0.0146	0.0250	mg/L	58.4	40.0 - 113	0000822376	
Indeno(1,2,3-cd)pyrene	316271	0.0235	0.0250	mg/L	94.0	0.100 - 171	0000822376	
Isophorone	316271	0.0240	0.0250	mg/L	96.0	21.0 - 196	0000822376	
Naphthalene	316271	0.0179	0.0250	mg/L	71.6	21.0 - 133	0000822376	
Nitrobenzene	316271	0.0229	0.0250	mg/L	91.6	35.0 - 180	0000822376	
N-Nitrosodimethylamine	316271	0.0148	0.0250	mg/L	59.2	0.100 - 130	0000822376	

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 O Liquid Aqueous **EPA Method 625**

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
N-Nitrosodi-n-propylamine	316271	0.0280	0.0250	mg/L	112	0.100 - 230	0000822376	
N-Nitrosodiphenylamine (as DPA	316271	0.0260	0.0250	mg/L	104	0.100 - 130	0000822376	
p-Chloro-m-Cresol (4-Chloro-3-me	316271	0.0213	0.0250	mg/L	85.2	22.0 - 147	0000822376	
Pentachlorophenol	316271	0.0179	0.0250	mg/L	71.6	5.00 - 112	0000822376	
Phenanthrene	316271	0.0234	0.0250	mg/L	93.6	54.0 - 120	0000822376	
Phenol	316271	0.0101	0.0250	mg/L	40.4	5.00 - 112	0000822376	
Pyrene	316271	0.0288	0.0250	mg/L	115	52.0 - 115	0000822376	*

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,2,4-Trichlorobenzene	316271	0.0156	0.0160	0.0250	22.0 - 147	62.4	64.0	mg/L	2.53	40.0
1,2-Dichlorobenzene	316271	0.0168	0.0176	0.0250	32.0 - 129	67.2	70.4	mg/L	4.65	40.0
1,2-DPH (as azobenzene)	316271	0.0233	0.0239	0.0250	0.100 - 130	93.2	95.6	mg/L	2.54	40.0
1,3-Dichlorobenzene	316271	0.0160	0.0165	0.0250	0.100 - 172	64.0	66.0	mg/L	3.08	40.0
1,4-Dichlorobenzene	316271	0.0160	0.0164	0.0250	20.0 - 124	64.0	65.6	mg/L	2.47	40.0
2,4,6-Trichlorophenol	316271	0.0217	0.0224	0.0250	37.0 - 144	86.8	89.6	mg/L	3.17	40.0
2,4-Dimethylphenol	316271	0.0181	0.0178	0.0250	32.0 - 119	72.4	71.2	mg/L	1.67	40.0
2,4-Dinitrophenol	316271	0.0147	0.0180	0.0250	0.100 - 191	58.8	72.0	mg/L	20.2	40.0
2,4-Dinitrotoluene	316271	0.0240	0.0241	0.0250	39.0 - 139	96.0	96.4	mg/L	0.416	40.0
2,6-Dinitrotoluene	316271	0.0240	0.0242	0.0250	50.0 - 158	96.0	96.8	mg/L	0.830	40.0
2-Chloronaphthalene	316271	0.0176	0.0178	0.0250	60.0 - 118	70.4	71.2	mg/L	1.13	40.0
2-Chlorophenol	316271	0.0196	0.0195	0.0250	23.0 - 134	78.4	78.0	mg/L	0.512	40.0
2-Nitrophenol	316271	0.0197	0.0203	0.0250	29.0 - 182	78.8	81.2	mg/L	3.00	40.0
3,3'-Dichlorobenzidine	316271	0.0205	0.0222	0.0250	0.100 - 262	82.0	88.8	mg/L	7.96	40.0
4,6-Dinitro-2-methylphenol	316271	0.0178	0.0220	0.0250	0.100 - 191	71.2	88.0	mg/L	21.1	40.0
4-Bromophenyl phenyl ether	316271	0.0253	0.0265	0.0250	53.0 - 127	101	106	mg/L	4.83	40.0
4-Chlorophenyl phenyl ethe	316271	0.0210	0.0211	0.0250	25.0 - 158	84.0	84.4	mg/L	0.475	40.0
4-Nitrophenol	316271	0.00322	0.00323	0.0250	0.100 - 132	12.9	12.9	mg/L	0	40.0
Acenaphthene	316271	0.0194	0.0201	0.0250	47.0 - 145	77.6	80.4	mg/L	3.54	40.0
Acenaphthylene	316271	0.0199	0.0203	0.0250	33.0 - 145	79.6	81.2	mg/L	1.99	40.0
Anthracene	316271	0.0236	0.0243	0.0250	27.0 - 133	94.4	97.2	mg/L	2.92	40.0
Benzidine	316271	0.0177	0.0161	0.0250	0.100 - 130	70.8	64.4	mg/L	9.47	40.0
Benzo(a)anthracene	316271	0.0246	0.0245	0.0250	33.0 - 143	98.4	98.0	mg/L	0.407	40.0
Benzo(a)pyrene	316271	0.0278	0.0272	0.0250	17.0 - 163	111	109	mg/L	1.82	40.0
Benzo(b)fluoranthene	316271	0.0292	0.0267	0.0250	24.0 - 159	117	107	mg/L	8.93	40.0
Benzo(ghi)perylene	316271	0.0235	0.0274	0.0250	0.100 - 219	94.0	110	mg/L	15.7	40.0

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To
Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 O Liquid Aqueous **EPA Method 625**

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Benzo(k)fluoranthene	316271	0.0307	0.0263	0.0250	11.0 - 162	123	105	mg/L	15.8	40.0
Benzyl Butyl phthalate	316271	0.0176	0.0171	0.0250	0.100 - 152	70.4	68.4	mg/L	2.88	40.0
Bis(2-chloroethoxy)methane	316271	0.0209	0.0206	0.0250	33.0 - 184	83.6	82.4	mg/L	1.45	40.0
Bis(2-chloroethyl)ether	316271	0.0331	0.0334	0.0250	33.0 - 184	132	134	mg/L	1.50	40.0
Bis(2-chloroisopropyl)ether	316271	0.0210	0.0209	0.0250	36.0 - 166	84.0	83.6	mg/L	0.477	40.0
Bis(2-ethylhexyl)phthalate	316271	0.0281	0.0276	0.0250	8.00 - 158	112	110	mg/L	1.80	40.0
Chrysene -Benzo(a)phenanthrene	316271	0.0234	0.0238	0.0250	17.0 - 168	93.6	95.2	mg/L	1.69	40.0
Dibenz(a,h)anthracene	316271	0.0216	0.0260	0.0250	0.100 - 227	86.4	104	mg/L	18.5	40.0
Diethyl phthalate	316271	0.0104	0.0117	0.0250	0.100 - 114	41.6	46.8	mg/L	11.8	40.0
Dimethyl phthalate	316271	0.00169	0.00238	0.0250	0.100 - 112	6.76	9.52	mg/L	33.9	40.0
Di-n-butylphthalate	316271	0.0213	0.0225	0.0250	1.00 - 118	85.2	90.0	mg/L	5.48	40.0
Di-n-octylphthalate	316271	0.0311	0.0243	0.0250	4.00 - 146	124	97.2	mg/L	24.2	40.0
Fluoranthene-Benzo(j,k)fluor ene	316271	0.0279	0.0276	0.0250	26.0 - 137	112	110	mg/L	1.80	40.0
Fluorene	316271	0.0213	0.0216	0.0250	59.0 - 121	85.2	86.4	mg/L	1.40	40.0
Hexachlorobenzene	316271	0.0276	0.0281	0.0250	0.100 - 152	110	112	mg/L	1.80	40.0
Hexachlorobutadiene	316271	0.0163	0.0165	0.0250	24.0 - 116	65.2	66.0	mg/L	1.22	40.0
Hexachlorocyclopentadiene	316271	0.0125	0.0126	0.0250	0.100 - 130	50.0	50.4	mg/L	0.797	40.0
Hexachloroethane	316271	0.0146	0.0147	0.0250	40.0 - 113	58.4	58.8	mg/L	0.683	40.0
Indeno(1,2,3-cd)pyrene	316271	0.0235	0.0270	0.0250	0.100 - 171	94.0	108	mg/L	13.9	40.0
Isophorone	316271	0.0240	0.0239	0.0250	21.0 - 196	96.0	95.6	mg/L	0.418	40.0
Naphthalene	316271	0.0179	0.0187	0.0250	21.0 - 133	71.6	74.8	mg/L	4.37	40.0
Nitrobenzene	316271	0.0229	0.0228	0.0250	35.0 - 180	91.6	91.2	mg/L	0.438	40.0
N-Nitrosodimethylamine	316271	0.0148	0.0159	0.0250	0.100 - 130	59.2	63.6	mg/L	7.17	40.0
N-Nitrosodi-n-propylamine	316271	0.0280	0.0278	0.0250	0.100 - 230	112	111	mg/L	0.897	40.0
N-Nitrosodiphenylamine (as DPA	316271	0.0260	0.0261	0.0250	0.100 - 130	104	104	mg/L	0	40.0
p-Chloro-m-Cresol (4-Chloro-3-me	316271	0.0213	0.0208	0.0250	22.0 - 147	85.2	83.2	mg/L	2.38	40.0
Pentachlorophenol	316271	0.0179	0.0217	0.0250	5.00 - 112	71.6	86.8	mg/L	19.2	40.0
Phenanthrene	316271	0.0234	0.0236	0.0250	54.0 - 120	93.6	94.4	mg/L	0.851	40.0
Phenol	316271	0.0101	0.00988	0.0250	5.00 - 112	40.4	39.5	mg/L	2.25	40.0
Pyrene	316271	0.0288	0.0266	0.0250	52.0 - 115	115 *	106	mg/L	8.14	40.0

Surrogate

Parameter	*Sample*	*Type*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
2,4,6-Tribromophenol	096893	UNKNOWN	0.0971	0.104	mg/L	93.4	10.0 - 150	0000822368

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317075 O **Liquid Aqueous** **EPA Method 625**

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2-Fluorobiphenyl-SURR	096893	UNKNOWN	44.0	52.0	ug/L	84.6	30.0 - 150	0000822368
2-Fluorophenol-SURR	096893	UNKNOWN	44.8	104	ug/L	43.1	10.0 - 150	0000822368
4-Terphenyl-d14-SURR	096893	UNKNOWN	46.6	52.0	ug/L	89.6	30.0 - 150	0000822368
Nitrobenzene-d5-SURR	096893	UNKNOWN	45.2	52.0	ug/L	86.9	30.0 - 150	0000822368
Phenol-d6-SURR	096893	UNKNOWN	29.8	104	ug/L	28.7	10.0 - 150	0000822368
2,4,6-Tribromophenol	316271	Blank	0.0828	0.100	mg/L	82.8	10.0 - 150	0000822375
2,4,6-Tribromophenol	316271	LCS	0.0907	0.100	mg/L	90.7	10.0 - 150	0000822376
2,4,6-Tribromophenol	316271	LCS Dup	94.2	100	mg/L	94.2	10.0 - 150	0000822377
2-Fluorobiphenyl-SURR	316271	LCS	37300	50000	ug/L	74.6	30.0 - 150	0000822376
2-Fluorobiphenyl-SURR	316271	LCS Dup	37800	50000	ug/L	75.6	30.0 - 150	0000822377
2-Fluorobiphenyl-SURR	316271	Blank	39100	50000	ug/L	78.2	30.0 - 150	0000822375
2-Fluorophenol-SURR	316271	LCS	47500	100000	ug/L	47.5	10.0 - 150	0000822376
2-Fluorophenol-SURR	316271	LCS Dup	47800	100000	ug/L	47.8	10.0 - 150	0000822377
2-Fluorophenol-SURR	316271	Blank	50600	100000	ug/L	50.6	10.0 - 150	0000822375
4-Terphenyl-d14-SURR	316271	Blank	55300	50000	ug/L	111	30.0 - 150	0000822375
4-Terphenyl-d14-SURR	316271	LCS Dup	56800	50000	ug/L	114	30.0 - 150	0000822377
4-Terphenyl-d14-SURR	316271	LCS	62100	50000	ug/L	124	30.0 - 150	0000822376
Nitrobenzene-d5-SURR	316271	LCS Dup	43900	50000	ug/L	87.8	30.0 - 150	0000822377
Nitrobenzene-d5-SURR	316271	LCS	44500	50000	ug/L	89.0	30.0 - 150	0000822376
Nitrobenzene-d5-SURR	316271	Blank	45500	50000	ug/L	91.0	30.0 - 150	0000822375
Phenol-d6-SURR	316271	LCS Dup	31200	100000	ug/L	31.2	10.0 - 150	0000822377
Phenol-d6-SURR	316271	LCS	32300	100000	ug/L	32.3	10.0 - 150	0000822376
Phenol-d6-SURR	316271	Blank	32800	100000	ug/L	32.8	10.0 - 150	0000822375

316497 W **Liquid Aqueous** **SM 4500 CN E 20th Ed**

AWRL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Cyanide	9.60	10.0	ug/L	96.0	75.0 - 125		0000811844

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
Cyanide	316312	ND	6.07	10.0	ug/L		0000811867

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Cyanide	495	500	ug/L	99.0	90.0 - 110		0000811863
Cyanide	498	500	ug/L	99.6	90.0 - 110		0000811854

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To
Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316497 W **Liquid Aqueous** **SM 4500 CN E 20th Ed**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Cyanide	524	500	ug/L	105	90.0 - 110		0000811889
Cyanide	525	500	ug/L	105	90.0 - 110		0000811874
Cyanide	531	500	ug/L	106	90.0 - 110		0000811843
Cyanide	531	500	ug/L	106	90.0 - 110		0000811885

Duplicate

Parameter	Sample	Type	Result	Unknown	Unit	RPD	Out	Limit%
Cyanide	096432	Duplicate	ND	ND	ug/L	0		20.0
Cyanide	096525	Duplicate	ND	ND	ug/L	0		20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Cyanide	211	200	ug/L	106	90.0 - 110		0000811842

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Cyanide	316312	370	400	ug/L	92.5	85.0 - 115	0000811868	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Cyanide	316312	370	358	400	85.0 - 115	92.5	89.5	ug/L	3.30	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File	Out
Cyanide	096432	81.0	ND	100	ug/L	81.0	80.0 - 120	0000811872	
Cyanide	096525	95.0	ND	100	ug/L	95.0	80.0 - 120	0000811876	

316540 W **Liquid Aqueous** **EPA 351.2, Rev 2.0**

AWRL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Kjeldahl Nitrogen	54.1	50.0	ug/L	108	75.0 - 125		0000812513

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
Total Kjeldahl Nitrogen	316175	ND	26.3	50.0	ug/L		0000812514

CCV

Parameter	Readlng	Known	Units	Recover%	Limits%	Out	File
Total Kjeldahl Nitrogen	9690	10000	ug/L	96.9	90.0 - 110		0000812523

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316540 W **Liquid Aqueous** **EPA 351.2, Rev 2.0**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Kjeldahl Nitrogen	9690	10000	ug/L	96.9	90.0 - 110		0000812532
Total Kjeldahl Nitrogen	9690	10000	ug/L	96.9	90.0 - 110		0000812541

Duplicate

Parameter	Sample	Type	Result	Unknown	Unit	RPD	Out	Limit%
Total Kjeldahl Nitrogen	096894	Duplicate	386	394	ug/L	2.05		20.0
Total Kjeldahl Nitrogen	097166	Duplicate	238	256	ug/L	7.29		20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Total Kjeldahl Nitrogen	4640	5000	ug/L	92.8	90.0 - 110		0000812512

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Total Kjeldahl Nitrogen	316175	4880	5000	ug/L	97.6	90.0 - 110	0000812515	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Total Kjeldahl Nitrogen	316175	4880	4660	5000	90.0 - 110	97.6	93.2	ug/L	4.61	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File	Out
Total Kjeldahl Nitrogen	096894	5600	394	5000	ug/L	104	80.0 - 120	0000812519	
Total Kjeldahl Nitrogen	097166	5150	256	5000	ug/L	98.1	80.0 - 120	0000812522	

316542 W **Liquid Aqueous** **EPA 420.1 (1978)**

AWRL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Phenols	4.50	5.00	ug/L	90.0	75.0 - 125		0000812602

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	Out	File
Phenols	316429	3.20	2.26	5.00	ug/L		0000812603

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Phenols	298	300	ug/L	99.3	90.0 - 110		0000812621
Phenols	299	300	ug/L	99.7	90.0 - 110		0000812625
Phenols	301	300	ug/L	100	90.0 - 110		0000812613

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

316542 W **Liquid Aqueous** **EPA 420.1 (1978)**

Duplicate

Parameter	Sample	Type	Result	Unknown	Unit	RPD	Out	Limit%
Phenols	095621	Duplicate	93.5	92.7	ug/L	0.859		20.0
Phenols	096648	Duplicate	17.3	17.2	ug/L	0.580		20.0

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Phenols	202	200	ug/L	101	90.0 - 110		0000812601

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Phenols	316429	197	200	ug/L	98.5	90.0 - 110	0000812604	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Phenols	316429	197	197	200	90.0 - 110	98.5	98.5	ug/L	0	20.0

Mat. Spike

Parameter	Sample	Spike	Unknown	Known	Units	Recovery %	Limits %	File	Out
Phenols	095621	184	92.7	200	ug/L	45.4	80.0 - 120	0000812611	*
Phenols	096648	204	17.2	200	ug/L	93.4	80.0 - 120	0000812608	

316613 W **Liquid Aqueous** **SM2340 C 20th Ed.**

Blank

Parameter	Type	Result	Unit
Total Hardness (as CaCO3)	Blank	< 5	mg/L

Duplicate

Parameter	Sample	Type	Result	Duplicate	Unit	RPD	Limit%
Total Hardness (as CaCO3)	096890	Duplicate	170	170	mg/L	0	

LCS

Parameter	Type	Result	Known	Unit	Recover%	
Total Hardness (as CaCO3)	LCS	1000	1000	mg/L	100	75 - 125

Mat. Spike

Parameter	Type	Reading	Known	Unit	Recover%
Total Hardness (as CaCO3) 096890	Mat. Spike	1000	1000	mg/L	100

317038 W **Liquid Aqueous** **EPA 365.3**

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663
Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Quality Control

Report To

Ed Fincher
City of Huntsville, WWTP
1800 Vermont Road
Huntsville, AL 35802-2064

Project 440540

317038 W Liquid Aqueous EPA 365.3

Blank

Parameter		Type	Result		Unit		
Phosphorus		Blank	<0.01		mg/L		

LCS

Parameter		Type	Result	Known	Unit	Recover%	
Phosphorus		LCS	0.282	0.300	mg/L	94.0	75 - 125
Phosphorus		LCS	0.321	0.300	mg/L	107	75 - 125

Mat. Spike

Parameter		Type	Reading	Known	Unit	Recover%
Phosphorus	097663	Mat. Spike	0.321	0.300	mg/L	107
Phosphorus	096019	Mat. Spike	0.234	0.300	mg/L	78
Phosphorus	096019	Mat. Spike	0.237	0.300	mg/L	79
Phosphorus	097663	Mat. Spike	0.297	0.300	mg/L	99

Standard

Parameter	Type	Result	Known	Unit	Recover%	Limits%
Phosphorus	Standard	0.0610	0.0600	mg/L	102	90 - 110
Phosphorus	Standard	0.293	0.300	mg/L	97.7	90 - 110
Phosphorus	Standard	0.320	0.300	mg/L	107	90 - 110

317071 W Liquid Aqueous EPA 1664 A

Blank

Parameter		Type	Result		Unit		
Oil and Grease (HEM)		Blank	0.0000		grams		
Oil and Grease (HEM)		Blank	0.00020		grams		

LCS

Parameter		Type	Result	Known	Unit	Recover%	
Oil and Grease (HEM)	W17571	LCS	42.0	40	mg/L	105	75 - 125
Oil and Grease (HEM)	W17571	LCS	43.1	40	mg/L	108	75 - 125

Mat. Spike

Parameter		Type	Reading	Known	Unit	Recover%
Oil and Grease (HEM)	096899	Mat. Spike	0.0344	0.0400	mg/L	86.0

RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

ANALAB CORP. THE COMPLETE SERVICE LAB
2600 Dudley Rd
PO Box 9000
Kilgore, TX 75662
903.984.0551
(fx) 903.984.5914
e-mail: corp@ana-lab.com

Panhandle 806.355.3556 | Oklahoma 405.292.6630 | North-TX 817.261.6404 | Central-TX 512.821.0045
Rio Grand Valley 956.831.6437 | ArkLaMiss 318.219.9300 | Gulf Coast 281.333.9414 | Alabama 256.830.0788

Report to:			Project- Name / Location: Chase Expanded		
Company name:	Client Code: HSV2		Billing (if different)		
Address:					
City	State	Zip	City	State	Zip
Phone	Fax	E-mail	Phone	Fax	
Sampler Signature: Mark Jones	Printed Name: Mark Jones	Affiliation: HSV2	PO Number		

Analysis Requested: Routine 107 (SHL NNL)

Lab Number Do Not Use	Field Identification	Date	Time	Matrix	# of Containers		Comments	Routine 107 (SHL NNL)
096892	Chase Expanded	4-28-09	0520	liq/aq	1	Comp/Grab	metals 500 HNO3	X
		4-29-09	0515			Comp/Grab		
	Chase Expanded	4-28-09	0520		1	Comp/Grab	TKN, TPWB, & NNL 250 H2SO4	X
		4-29-09	0515			Comp/Grab		
893	Chase Expanded	4-29-09	0445		1	Comp/Grab	CN 250 w/ Ascorbic	X
					2	Comp/Grab	HEM 61 Qt H2SO4	X
					1	Comp/Grab	Phenols 250 Amber H2SO4	X
					1	Comp/Grab	TT Semivol Amber Qt	X
					2	Comp/Grab	TT VOI 0 HS NaHSO3	X
						Comp/Grab		

Date	Time	Relinquished by:	Is Hazardous for: ☐ HF ☐ CN ☐ S= ☐ other##	Received by:	☒ Wastewater ☐ Drinking Water ☐ SW846
		Printed Name / Signature / Affiliation		Printed Name / Signature / Affiliation	
4-29-09	1336	Mark Jones / Mark Jones / HSV2		S. Vassar / S. Vassar / Ana-Lab	
4-29-09	1500	S. Vassar / S. Vassar / Ana-Lab			
4/30/09	0930	FedEx		FED EX, FED EX Christi Parker Ana-Lab	

Samples Received on Ice? ☑ Yes ☐ No Method of Shipment ☐ Bus ☑ FedEX ☐ Lone Star ☐ UPS ☐ Hand delivered ☐ DHL ☐ other
Cooler/Sample Secure? ☑ Yes ☐ No Tracking or Shipping Number
Requested TAT ☐ Routine ☐ 3 day ☐ 2 Day ☐ next day

FED EX AIRBILL # 8654 6706 5486

4°C

003689 ☐
003233 ☐
003532 ☐
003688 ☐

440540 CoC Print Group 001 of 001

HSV2, HSV

500

FedEx. Express **US Airbill**

FedEx Tracking Number 8654 6706 5486

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 4-29-08 FedEx Tracking Number 865467065486

Sender's Name S. Vasser Phone 256 714-3080

Company ANA-LAB CORP/ALAB

Address 9694 MADISON BLVD STE B2

Dept./Floor/Suite/Room

City MADISON State AL ZIP 35758

2 Your Internal Billing Reference

3 To

Recipient Name ATT LOGIN Phone 903 984-0551

Company ANA-LAB CORPORATION

Recipient Address 2600 DUDLEY RD

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City KILGORE State TX ZIP 75662

0379537819

8654 6706 5486

fedex.com 1.800.GoFedEx 1.800.463.3339

Recipient's Copy

4a Express Package Service *Packages up to 150 lbs.*

- ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate. *To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- ☐ FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation. ** To most locations.

5 Packaging

- ☐ FedEx Envelope*
- ☐ FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- ☐ FedEx Box
- ☐ FedEx Tube
- ☒ Other

* Declared value limit $500.

6 Special Handling — Include FedEx address in Section 3.

- ☐ SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- ☐ HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- ☐ HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- ☒ No
- ☐ Yes — As per attached Shipper's Declaration.
- ☐ Yes — Shipper's Declaration not required.
- ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- ☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- ☒ Sender — Acct. No. in Section 1 will be billed.
- ☐ Recipient
- ☐ Third Party
- ☐ Credit Card
- ☐ Cash/Check
- ☐ Obtain Recip. Acct. No.

Total Packages 2 Total Weight 160 Credit Card Auth.

*Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- ☐ No Signature Required — Package may be left without obtaining a signature for delivery.
- ☐ Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee applies.

519

Rev. Date 10/08-Part #156279-[illegible] FedEx-PRINTED IN U.S.A.-SRS

DO NOT LIFT USING THIS TAG

TO (Recipient's Name) Please Print	Recipient's Phone Number ( )
Company	Dept./Floor/Suite/Room
Street Address (We cannot deliver to P.O. Boxes or P.O. Zip Codes)	

FedEx 0002/0002 THU - 30 APR AA
PRIORITY OVERNIGHT

MPS# 0681 7955 0150 4351
Mstr# 8654 6706 5486 0215

75662
TX-US
SHV

XX GGGA

emp# 740235 29APR09 18:12

Part # 150807-435 RIT 04/08

March 17, 2016

Pat Morgan
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:

LabNumber	Sample Description	Date/Time Collected	Date Submitted
1603061-01	Chase Effluent	3/8/16 06:10	3/8/16

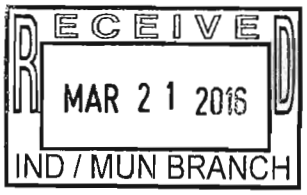
ENERSOLV is accredited to ISO/IEC 17025:2005 by Laboratory Accreditation Bureau and to the TNI 2003 Standard by the Florida Department of Health. Our quality system also meets relevant quality system requirements of ISO 9001:2008. Not all tests performed by *ENERSOLV* are covered by these accreditations. 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



ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

Report Date/Time: 03/17/2016 09:03

REPORT TO
Pat Morgan 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.

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
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
Sample Point: Chase Effluent	**Sample ID: 1603061-01**	**Collected: 03/08/2016**		**Submitted: 03/08/2016**
Inorganics				
Hexavalent Chromium CAS: 7440-47-3	<0.0100	mg/l		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

Report Date/Time: 03/17/2016 09:03

REPORT TO
Pat Morgan 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.

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
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.

Data Qualifiers: <: Less than reporting limit

Analysis Information

Lab Number	Analysis	SpecificMethod	Analyst	Analysis Start Date/Time	Analysis End Date/Time
1603061-01	Hexavalent Chromium	USGS I-1230-85	SH	03/08/2016 13:50	

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

ENERSOLV
A Solutions Company

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

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

www.enersolv.com

COC NUMBER 76207
PAGE 1 of 1

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
City of Huntsville - WPC	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Scott Vassar	1800 Vanuit Rd	Huntsville, AL 35802

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
scott.vassar@huntsvilleal.gov	256-883-3714	

SAMPLE COLLECTED BY: S. Vassar

EXPEDITED REPORT DELIVERY (SURCHARGE)

DATE DUE (REQUIRED)

REQUESTED ANALYSES

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	DATE	TIME	GRAB	COMP	HEX CHROM (7196)
160306-01	Hvlle-WPC-Chase	Effluent	3-8-16	06:10	X		X

Comments:

Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 2.5°C

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date	N/A	Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time	N/A	Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time	N/A	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Pint	Ice	Hexavalent Chromium A

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
S. Vassar	3-8-16	12:23						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
	3-8-16	1223	☑ Accepted ☐ Rejected ☐ Accepted with Exception

ENERSOLV
a Solutions Company

March 17, 2016

Pat Morgan
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:

LabNumber	Sample Description	Date/Time Collected	Date Submitted
1603105-01	Chase Effluent	3/9/16 06:10	3/9/16

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

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

Report Date/Time: 03/17/2016 10:04

REPORT TO

Pat Morgan
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.

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.

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

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
Cert# L2239 Testing

ADEM Drinking Water Certification No. 40160

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
Sample Point: Chase Effluent	**Sample ID: 1603105-01**	**Collected: 03/09/2016**		**Submitted: 03/09/2016**
Inorganics				
Hexavalent Chromium CAS: 7440-47-3	<0.0100	mg/l		

ENERSOLV
A Solutions Company

SAMPLE RESULTS REPORT

Report Date/Time: 03/17/2016 10:04

REPORT TO
Pat Morgan 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.

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
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.

Data Qualifiers: <: Less than reporting limit

Analysis Information

Lab Number	Analysis	SpecificMethod	Analyst	Analysis Start Date/Time	Analysis End Date/Time
1603105-01	Hexavalent Chromium	USGS 1-1230-85	RAC	03/09/2016 14:45	

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

ENERSOLV
a Solutions Company

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

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

www.enersolv.com

COC NUMBER: 76207
PAGE: 1 of 1

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
City of Huntsville - WPC	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Scott Vassar	1800 Vermont Rd	Huntsville, AL 35802

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
scott.vassar@huntsvilleal.gov	256-883-3714	

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

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	GRAB	COMP	REQUESTED ANALYSES: HEX CHROM (E.16)
1603105-01	Huile-WPC-Chase	Effluent	3-9-16	06:10	X		X

Comments: Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 1.6°C

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date	N/A	Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time	N/A	Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time	N/A	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Pint	Ice	Hexavalent Chromium A

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
S. Vassar	3-9-16	11:24						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
[signature]	3.9.16	1129	☑ Accepted ☐ Rejected ☐ Accepted with Exception

March 17, 2016

Pat Morgan
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:

LabNumber	Sample Description	Date/Time Collected	Date Submitted
1603224-01	Chase Effluent	3/10/16 06:10	3/10/16

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

ENERSOLV
A Solutions Company

SAMPLE RESULTS REPORT

Report Date/Time: 03/17/2016 14:55

REPORT TO

Pat Morgan
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.

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
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
Sample Point: Chase Effluent	**Sample ID: 1603224-01**	**Collected: 03/10/2016**		**Submitted: 03/10/2016**
Inorganics				
Hexavalent Chromium CAS: 7440-47-3	<0.0100	mg/l		

ENERSOLV
a Solutions Company

SAMPLE RESULTS REPORT

Report Date/Time: 03/17/2016 14:55

REPORT TO

Pat Morgan
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.

LABORATORY ACCREDITATION BUREAU ACCREDITED ISO/IEC 17025
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.

Data Qualifiers: <: Less than reporting limit

Analysis Information

Lab Number	Analysis	SpecificMethod	Analyst	Analysis Start Date/Time	Analysis End Date/Time
1603224-01	Hexavalent Chromium	USGS I-1230-85	RAC	03/10/2016 15:30	

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

ENERSOLV
a Solutions Company

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

www.enersolv.com

COC NUMBER: 76207
PAGE: 1 of 1

COMPANY/CLIENT NAME	ACCOUNT NUMBER	CLIENT P.O. NUMBER	ENERSOLV PROJECT NUMBER
City of Huntsville - WPC	1453		

CLIENT POINT OF CONTACT	CLIENT PHYSICAL ADDRESS	CITY/STATE/ZIP
Scott Vassar	1800 Vermet Rd	Huntsville, AL 35802

CLIENT EMAIL	PHONE NUMBER	OTHER INFORMATION
scott.vassar@huntsvilleal.gov	256-883-3714	

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

ENERSOLV LAB NO.	SAMPLE LOCATION CODE	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	GRAB	COMP	REQUESTED ANALYSES: HEX CHROM (7196)
1609274-01	Huile-WPC-Chase	Effluent	3-10-16	06:10	X		X

Comments: Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ 1.8°C

Field Information

Sampler		pH su	N/A	TRC mg/l	N/A	DO mg/l	N/A	Temp deg C	N/A
Start Date	N/A	Date	N/A	Date	N/A	Date	N/A	Date	N/A
Start Time	N/A	Time	N/A	Time	N/A	Time	N/A	Time	N/A
Stop Date	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A	Analyst	N/A
Stop Time	N/A	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	Parameter
1	Plastic	Pint	Ice	Hexavalent Chromium

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
S. Vassar	3-10-16	14:45						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
[signature]	3/10/16	1445	☑ Accepted ☐ Rejected ☐ Accepted with Exception

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

February 21, 2011

Client: Enersolv
Address: 2220 Beltline Rd SW
Decatur, AL 35602

Received: 2/11/2011
Project #: N/A

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	LOQ	Run	Analyst
Huntsville Chase	1102503-04	09-Feb-11	Mercury	18.1	ng/l	L	1631	1	0.5	16-Feb-11	MO
Huntsville Chase Spike Rec	1102503-05	09-Feb-11	Mercury	18.9	ng/l	L	1631	1	0.5	16-Feb-11	MO
Huntsville Chase Travel BLK	1102503-06	09-Feb-11	Mercury	ND	ng/l	L	1631	1	0.5	16-Feb-11	MO

RECEIVED
FEB 25 2016
IND / MUN BRANCH

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

May 24, 2011

Client: Enersolv
Address: 2220 Beltline Rd SW
Decatur, AL 35602

Received: 5/12/2011
Project #: N/A

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	LOQ	Run	Analyst
AB53518	1109242-01	11-May-11	Mercury	0.91	ng/l	L	1631	1	0.5	20-May-11	MO
AB53519	1109242-02	11-May-11	Mercury	0.81	ng/l	L	1631	1	0.5	20-May-11	MO
AB53520	1109242-03	11-May-11	Mercury	2.07	ng/l	L	1631	1	0.5	20-May-11	MO
AB53521	1109242-04	11-May-11	Mercury	7.87	ng/l	L	1631	1	0.5	20-May-11	MO
AB53522	1109242-05	11-May-11	Mercury	6.43	ng/l	L	1631	1	0.5	20-May-11	MO
AB53523	1109242-06	11-May-11	Mercury	2.65	ng/l	L	1631	1	0.5	20-May-11	MO

"Analytical Integrity" · EPA Certified · NELAP Certified
3310 Win Street · Cuyahoga Falls, Ohio 44223 • Phone: 330-253-8211 · Fax: 330-253-4489
Web Site: www.settek.com

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

September 07, 2011
Client: Enersolv
Address: 2220 Beltline Rd SW
Decatur, AL 35602
Received: 8/26/2011
Project #: N/A

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Matrix	Method	DF	LOQ	Run	Analyst
Huntsville Big Cove	1117645-04	24-Aug-11	Mercury	0.56	ng/l	L	1631	1	0.5	29-Aug-11	MO
Huntsville Big Cove Spike	1117645-05	24-Aug-11	Mercury	1.11	ng/l	L	1631	1	0.5	29-Aug-11	MO
Huntsville Big Cove Travel	1117645-06	24-Aug-11	Mercury	1.33	ng/l	L	1631	1	0.5	29-Aug-11	MO
Huntsville Chase	1117645-07	24-Aug-11	Mercury	6.39	ng/l	L	1631	1	0.5	29-Aug-11	MO
Huntsville Chase Spike	1117645-08	24-Aug-11	Mercury	7.59	ng/l	L	1631	1	0.5	29-Aug-11	MO
Huntsville Chase Blank	1117645-09	24-Aug-11	Mercury	1.49	ng/l	L	1631	1	0.5	29-Aug-11	MO

RECEIVED
FEB 25 2016
IND / MUN BRANCH

"Analytical Integrity" · EPA Certified · NELAP Certified
3310 Win Street · Cuyahoga Falls, Ohio 44223 • Phone: 330-253-8211 · Fax: 330-253-4489
Web Site: www.settek.com

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

WO#: **14121298**
Date Reported: **12/15/2014**
Company: Enersolv
Address: 2220 Beltline Rd SW
Decatur AL 35602
Received: 12/12/2014
Project#:

Client ID#	Lab ID#	Collected	Analyte	Result Units	Qual	Matrix	Method	DF	LOD	LOQ	Run	Analyst
AC92177 Huntsville Chase	001	12/8/2014	Mercury	12.7 ng/L		Non-Potable Water	EPA 1631 E	1	0.400	0.500	12/13/2014	MO

Client ID#	Lab ID#	Collected	Analyte	Result Units	Qual	Matrix	Method	DF	LOD	LOQ	Run	Analyst
AC92177 Huntsville Chase Duplicate	002	12/8/2014	Mercury	15.3 ng/L		Non-Potable Water	EPA 1631 E	1	0.400	0.500	12/13/2014	MO

Client ID#	Lab ID#	Collected	Analyte	Result Units	Qual	Matrix	Method	DF	LOD	LOQ	Run	Analyst
AC92177 Huntsville Chase Travel Blank	003	12/8/2014	Mercury	0.900 ng/L		Non-Potable Water	EPA 1631 E	1	0.400	0.500	12/13/2014	MO

RECEIVED
FEB 25 2016
IND / MUN BRANCH

Shane Cook, P.E.
Director

HUNTSVILLE

Water Pollution Control

April 14, 2015

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

RE: **City of Huntsville Chase WWTP Permit Renewal**
NPDES Permit No. AL0057428

Dear Ms. Ammons,

Enclosed you will find the Chase WWTP Permit Renewal Paperwork.

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

Sincerely,

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

Cc: File

Attachment: EPA Form1, EPA Form 2A, EPA Form 2F and ADEM Form 188 (Chase WWTP Permit Renewal)

RECEIVED
APR 16 2015
IND / MUN BRANCH

HUNTSVILLE

Tommy Battle
Mayor

December 11, 2015

Mr. Nicholas Lowe
Municipal Section
Water Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

RE: Chase Area WWTP Permit Renewal – Latitude and Longitude Front Gate

Mr. Lowe:

Please find the physical address along with the latitude and longitude (front gate) for the above mentioned WWTP:

Chase Area WWTP
NPDES Permit: AL0057428
909 Wess Taylor Rd.
Huntsville, AL 35811
Madison County, Alabama
Latitude: 34 Degrees 47 Minutes 09.34 Seconds
Longitude: 86 Degrees 28 Minutes 59.00 Seconds

Please do not hesitate to contact this office with any questions.

Sincerely,

Randall Stewart
City of Huntsville
Operations Superintendent