



Alabama Department of Environmental Management  
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DEC 10 2015

Jon Graham, Mayor  
City of Calera  
10947 Highway 25  
Calera, AL 35040

RE: Draft Permit  
NPDES Permit No. AL0050938  
Calera Pollution Control Plant  
Shelby County, Alabama

Dear Mayor Graham:

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.

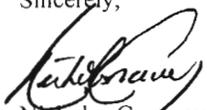
By copy of this letter and the draft permit, we are also requesting comments within the same time frame from EPA.

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](mailto: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 by email at [ncaraway@adem.state.al.us](mailto:ncaraway@adem.state.al.us) or by phone at (334) 274-4220.

Sincerely,



Nicholas Caraway  
Municipal Section  
Water Division

nwc/mfc  
Enclosure

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





# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: CITY OF CALERA  
10947 HIGHWAY 25  
CALERA, ALABAMA 35040

FACILITY LOCATION: CALERA POLLUTION CONTROL PLANT (1.5 MGD)  
2273 9TH STREET  
CALERA, ALABAMA  
SHELBY COUNTY

PERMIT NUMBER: AL0050938

RECEIVING WATERS: BUXAHATCHEE CREEK

*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**

**MUNICIPAL SECTION  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
PERMIT**

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**ATTACHMENT:**  
FORM 421

NON-COMPLIANCE NOTIFICATION FORM

**PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS**

**A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

1. **Outfall 0012 Discharge Limits** -- 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 0012, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	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.	8.5 S.U.	*****	E	GRAB	C	*****
Solids, Total Suspended 00530 1 0 0	375 lbs/day	562 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	6.2 lbs/day	9.3 lbs/day	0.5 mg/l	0.7 mg/l	*****	*****	*****	E	COMP24	C	S
Nitrogen, Ammonia Total (As N) 00610 1 0 0	18.7 lbs/day	28.1 lbs/day	1.5 mg/l	2.2 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	See Note (TP)	REPORT mg/l	*****	*****	*****	E	COMP24	C	GS
Phosphorus, Total (As P) 00665 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	C	NGS
Flow, In Conduit or Thru Treatment Plant 50050 1 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	CONTIN	A	*****
Chlorine, Total Residual (See note (5)(6)) 50060 1 0 0	*****	*****	0.01 mg/l	*****	*****	0.02 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	43.7 lbs/day	65.6 lbs/day	3.5 mg/l	5.2 mg/l	*****	*****	*****	E	COMP24	C	S
BOD, Carbonaceous 05 Day, 20C 80082 1 0 0	100 lbs/day	150 lbs/day	8.0 mg/l	12.0 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%	K	CALCTD	G	*****
Solids, Suspended Percent Removal 81011 K 0 0	*****	*****	*****	*****	*****	*****	85%	K	CALCTD	G	*****

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

\*\* Monitoring Requirements

(1) Sample Location

I - Inflow

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

(TP) From the permit effective date through June 30, 2016 - Growing season monthly average limit = 0.36 mg/L

From July 1, 2016 forward - Growing season monthly average limit = 0.066 mg/L

(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.

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

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

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

A - 7 days per week F - 2 days per month

B - 5 days per week G - 1 day per month

C - 3 days per week H - 1 day per quarter

D - 2 days per week J - Annual

E - 1 day per week Q - For Effluent Toxicity

Testing, see Provision IV.B.

NGS = Non-Growing Season (November - March)

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E.coli Summer (June - September)

ECW = E.coli Winter (October - May)

GS = Growing Season (April - October)

NGS = Non-Growing Season (November - March)

2. **Outfall 001Q Discharge Limits** – This is an administrative outfall designation. Outfall 001Q is the same physical outfall as Outfall 0012. Discharge from this outfall 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
Mercury Total Recoverable (See Note (5)) 71901 I 0 0	*****	*****	REPORT ug/l	*****	*****	REPORT ug/l	*****	E	GRAB	H	*****

\* See Part II.C.1. (Bypass); Part II.C.2. (Upset); **Part IV.G (Mercury Minimization Plan)**

\*\* 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 F - 2 days per month

B - 5 days per week G - 1 day per month

C - 3 days per week H - 1 day per quarter

D - 2 days per week J - Annual

E - 1 day per week Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E.coli Summer (June – September)

ECW = E.coli Winter (October – May)

(5) EPA Methods 1631E/1669, or alternative methods specifically approved by the Department, shall be used for the analysis of this parameter

(6) If only one sampling event occurs during a quarter, the sample result shall be reported on the quarterly DMR as both the monthly average and daily maximum value

3. **Outfall 001T Discharge Limits** – This is an administrative outfall designation. Outfall 001T is the same physical outfall as Outfall 0012. Discharge from this outfall 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)

4. **Outfall 002S Discharge Limits** – 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 in the application as storm water outfall located at the Permittee's wastewater treatment plant.. 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)(S) Sample Type	(3) Measurement Frequency	(4) Seasonal
pH	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	E	GRAB	J	*****
00400 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
Solids, Total Suspended	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
00530 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
Oil & Grease	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
00556 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
Nitrogen, Ammonia Total (As N)	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
00610 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
Nitrogen, Kjeldahl Total (As N)	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
00625 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
Nitrite Plus Nitrate Total I Det. (As N)	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
00630 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
Phosphorus, Total (As P)	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
00665 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
Flow, In Conduit or Thru Treatment Plant	*****	*****	*****	*****	*****	*****	*****	E	CALCTD	J	*****
50050 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
E. Coli	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
51040 1 0 0	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
BOD, Carbonaceous 05 Day, 20C	*****	*****	*****	*****	*****	*****	*****	E	GRAB	J	*****
80082 1 0 0	*****	*****	*****	*****	*****	*****	*****	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

(5) See Part IV.F.3

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

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

A - 7 days per week F - 2 days per month

B - 5 days per week G - 1 day per month

C - 3 days per week H - 1 day per quarter

D - 2 days per week J - Annual

E - 1 day per week Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

**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

- I. 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 28<sup>th</sup> 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.2.a. 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 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
- (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
- (10) When required by the reopener conditions in this permit;
- (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
- (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
- (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or
- (14) When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

#### 5. Termination

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

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

#### 6. Suspension

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

#### 7. Stay

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

**F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION**

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

**G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS**

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

**H. PROHIBITIONS**

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

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

### **PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS**

#### **A. CIVIL AND CRIMINAL LIABILITY**

1. Tampering

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

2. False Statements

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

3. Permit Enforcement

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

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

- (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;
- (2) An action for damages;
- (3) An action for injunctive relief; or
- (4) An action for penalties.

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

- (1) Initiate enforcement action based upon the permit which has been continued;
- (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
- (3) Reissue the new permit with appropriate conditions; or
- (4) Take other actions authorized by these rules and AWPCA.

4. Relief from Liability

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

#### **B. OIL AND HAZARDOUS SUBSTANCE LIABILITY**

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

#### **C. PROPERTY AND OTHER RIGHTS**

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

#### **D. AVAILABILITY OF REPORTS**

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

**E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES**

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

**F. COMPLIANCE WITH WATER QUALITY STANDARDS**

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

**G. GROUNDWATER**

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

**H. DEFINITIONS**

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

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

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

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

**I. SEVERABILITY**

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

## PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

### A. SLUDGE MANAGEMENT PRACTICES

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

### B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR CHRONIC TOXICITY

1. Chronic Toxicity Test
  - a. The permittee shall perform short-term chronic toxicity tests on the wastewater at Outfall 0011.
  - b. The samples shall be diluted using appropriate control water to the Instream Waste Concentration (IWC) which is **94 percent** effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 7-day, 10-year low flow period.
  - c. Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and test samples at the 95% confidence level indicates chronic toxicity and shall constitute noncompliance with this permit.
2. General Test Requirements
  - a. A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests. Samples shall be collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-013 (most current edition) or another control water selected by the Permittee and approved by the Department.
  - b. Test results shall be deemed unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period for the following:
    - (1) For testing with *P. promelas*, effluent toxicity tests with control survival of less than 80% or if dry weight per surviving control organism is less than 0.25 mg;

- (2) For testing with *C. dubia*; if the number of young per surviving control organism is less than 15 or if less than 60% of surviving control females produce three broods; or
      - (3) If the other requirements of the EPA Test Procedure are not met.
    - c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are to be reported to the Department along with an explanation of the tests performed and the test results.
    - d. Toxicity tests shall be conducted for the duration of this permit in the month of **November**. Should results from the Annual Toxicity test indicate that Outfall 001-1 exhibits chronic toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of FEBRUARY, MAY, AUGUST, and NOVEMBER.
3. Reporting Requirements
  - a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
  - b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in Sections 2 and 6 shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month that tests were performed.
4. Additional Testing Requirements
  - a. If chronic toxicity is indicated (i.e., noncompliance with permit limit), then the Permittee must perform two additional valid chronic toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall run consecutively beginning on the first calendar week following the date that the Permittee became aware of the permit noncompliance. The results of these follow-up tests shall be submitted to the Department no later than 28 days following the month the tests were performed.
  - b. After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols and guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-91-003, EPA/600/R-92/081, EPA/833/B-99/022, and/or EPA/600/6-91/005F)
5. Test Methods

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

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

  - a. Introduction
    - (1) Facility name, location and county
    - (2) Permit number
    - (3) Toxicity testing requirements of permit
    - (4) Name of receiving water body
    - (5) Contract laboratory information (if tests are performed under contract)
      - (a) Name of firm
      - (b) Telephone number
      - (c) Address
    - (6) Objective of test
  - b. Plant Operations
    - (1) Discharge Operating schedule (if other than continuous)
    - (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection dates (MGD, CFS, GPM)
    - (3) Design flow of treatment facility at time of sampling

- c. Source of Effluent and Dilution Water
  - (1) Effluent samples
    - (a) Sampling point
    - (b) Sample collection dates and times (to include composite sample start and finish times)
    - (c) Sample collection method
    - (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
    - (e) Lapsed time from sample collection to delivery
    - (f) Lapsed time from sample collection to test initiation
    - (g) Sample temperature when received at the laboratory
  - (2) Dilution Water
    - (a) Source
    - (b) Collection/preparation date(s) and time(s)
    - (c) Pretreatment (if applicable)
    - (d) Physical and chemical characteristics (water temperature, pH, alkalinity, hardness, specific conductance, etc.)
- d. Test Conditions
  - (1) Toxicity test method utilized
  - (2) End point(s) of test
  - (3) Deviations from referenced method, if any, and reason(s)
  - (4) Date and time test started
  - (5) Date and time test terminated
  - (6) Type and volume of test chambers
  - (7) Volume of solution per chamber
  - (8) Number of organisms per test chamber
  - (9) Number of replicate test chambers per treatment
  - (10) Test temperature, pH, and dissolved oxygen as recommended by the method (to include ranges)
  - (11) Specify if aeration was needed
  - (12) Feeding frequency, amount, and type of food
  - (13) Specify if (and how) pH control measures were implemented
  - (14) Light intensity (mean)
- e. Test Organisms
  - (1) Scientific name
  - (2) Life stage and age
  - (3) Source
  - (4) Disease(s) treatment (if applicable)
- f. Quality Assurance
  - (1) Reference toxicant utilized and source
  - (2) Date and time of most recent chronic reference toxicant test(s), raw data, and current control chart(s). (The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.)
  - (3) Dilution water utilized in reference toxicant test
  - (4) Results of reference toxicant test(s) (NOEC, IC25, etc.); report concentration-response relationship and evaluate test sensitivity
  - (5) Physical and chemical methods utilized
- g. Results
  - (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
  - (2) Provide table of endpoints: NOECs, IC25s, PASS/FAIL, etc. (as required in the applicable NPDES permit)
  - (3) Indicate statistical methods used to calculate endpoints
  - (4) Provide all physical and chemical data required by method
  - (5) Results of test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD) calculated for sublethal endpoints determined by hypothesis testing.
- h. Conclusions and Recommendations
  - (1) Relationship between test endpoints and permit limits

## (2) Actions to be taken

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

**C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS**

1. If chlorine is not utilized for disinfection purposes, TRC monitoring under Part I of this Permit is not required. If TRC monitoring is not required, "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.

## G. MERCURY MINIMIZATION PLAN

1. Within 180 days from the effective date of this Permit or initial discharge, whichever is later, the Permittee shall submit to the Department a Mercury Minimization Plan (MMP) prepared by an Alabama Registered Professional Engineer. The MMP shall be revised as needed to efficiently and effectively reduce mercury discharges to the maximum extent practicable. Proposed revisions to the MMP may be submitted to the Department with the annual MMP status report or as needed for Departmental review. The initial plan shall, at a minimum, include:
  - a. A program to identify and compile an inventory of potential sources of mercury which contribute to the discharge, including but not limited to, an assessment of the public water source, an assessment of the permittee's wastewater treatment chemicals containing mercury, dental offices, medical facilities, industrial or commercial users of the POTW, stormwater (including potential for atmospheric deposition within the treatment works), inflow and infiltration, school laboratories, and equipment containing mercury within the wastewater treatment works.
  - b. A monitoring plan which considers monitoring and possible seasonal variations at, but not limited to, the influent to the POTW (including the public water source and atmospheric deposition), receiving water upstream of the POTW discharge to determine surface water background values, within the collection system (including identification of specific locations), and of potential industrial and/or commercial users, dental offices, medical facilities, and school laboratories. The monitoring plan should establish the initial frequency of proposed monitoring and shall utilize EPA Method 1631/1669 E, or an alternate method approved by the Department.
  - c. Plans to develop and implement cost-effective control measures for identified sources of mercury. Examples include, but are not limited to, public education and outreach at identified sources, evaluation of chemical usage and equipment usage within the wastewater collection and treatment systems for potential replacement with materials that do not contain mercury, audits of industrial users, etc.
  - d. Plans to develop a Public Education and Outreach program. Examples include identification to the public of recycling vendors who accept items containing mercury, a collection program for materials containing mercury for residents, news releases and public outreach to inform the public and/or potential sources of mercury of the issues associated with the inappropriate disposal of mercury, informational fact sheets for distribution where mercury containing products are purchased or used, etc.

2. If at least six months have passed since the submittal of the initial MMP, the Permittee shall submit an annual MMP status report by January 31<sup>st</sup> and each subsequent January 31<sup>st</sup>. Each element of the MMP should be addressed in the annual MMP status report, including but not limited to:
  - a. Potential Sources: A list of potential mercury sources that have been previously or newly identified, including levels of mercury contribution(s) from each source, either measured or estimated/predicted, to the permittee's discharge.
  - b. Monitoring Plan: A summary of all monitoring results not already submitted to the Department, including an analysis of all mercury monitoring results (i.e., trend analysis, if adequate data are available).
  - c. Control Measures: Details of control measures designed and/or implemented since last report submittal.
  - d. Public Education and Outreach: A summary of public education and outreach developed and/or conducted since the last report submittal.
  - e. Proposed revisions to the MMP, including justification for each adjustment. Examples of adjustments could include changes in monitoring locations or frequencies based upon previous results, changes in public education and outreach methods, control measures, inventory of potential sources, etc.

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):

<b>LIST EFFLUENT VIOLATIONS (If applicable)</b>			
Outfall Number (s)	NONCOMPLIANCE PARAMETER(S)	Result Reported (Include units)	Permit Limit (Include units)
<b>LIST MONITORING / REPORTING VIOLATIONS (If applicable)</b>			
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



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: November 6, 2015

Prepared By: Nicholas Caraway

NPDES Permit No. AL0050938

**1. SYNOPSIS OF APPLICATION**

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

Applicant Name and Address:

City of Calera  
10947 Highway 25  
Calera, Alabama 35040

Facility Location:

Calera Pollution Control Plant  
2273 9th Street  
Calera, Alabama 35040

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

Municipal Wastewater Treatment Plant

For the Outfall latitude and longitude see the permit application

**c. Applicant's Receiving Waters**

Receiving Waters

Buxahatchee Creek

Classification

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



#### 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: **AL0050938** Date: November 9, 2015

Permit Applicant: City of Calera  
10947 Highway 25  
Calera, Alabama 35040

Location: Calera Pollution Control Plant  
2273 9th Street  
Calera, Alabama 35040

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

Basis for Limitations: Water Quality Model: **DO, CBOD<sub>5</sub>, NH<sub>3</sub>-N**  
Reissuance with no modification: **DO, CBOD<sub>5</sub>, NH<sub>3</sub>-N, pH, TSS, TRC, E. Coli,**  
**TSS % Removal**  
Instream calculation at 7Q10: **93.55 %**  
Toxicity based: **TRC**  
Secondary Treatment Levels: **TSS, TSS % Removal, CBOD<sub>5</sub> % Removal**  
Other (described below): **pH, TP, E. Coli**

Design Flow in Million Gallons per Day: 1.5 MGD

Major: Yes

Description of Discharge: Outfall Number 001: Effluent discharge to Buxahatchee Creek, which is classified as Fish & Wildlife.

Outfall Number 002S: Storm water run-off to Buxahatchee Creek, which is classified as a Fish & Wildlife

### Discussion:

This is a permit reissuance due to expiration. This facility is included in the 1996 Buxahatchee Creek Organic Enrichment/Dissolved Oxygen (OE/DO) Total Maximum Daily Load (TMDL). The Department's Water Quality Branch previously adjusted the limits using the current facility design flow of 1.5 MGD for Five-Day Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>), Total Ammonia-Nitrogen (NH<sub>3</sub>-N), and Dissolved Oxygen (DO) to be consistent with the requirements of the TMDL. The monthly average summer (May – November) limits are: CBOD<sub>5</sub> = 3.5 mg/L and NH<sub>3</sub>-N = 0.5 mg/L. The monthly average winter (December – April) limits are: CBOD<sub>5</sub> = 8.0 mg/L and NH<sub>3</sub>-N = 1.5 mg/L. The daily minimum DO limit is 6.0 mg/L for both seasons.

The facility is also included in the 2009 Revised Buxahatchee Creek Nutrients TMDL. For this facility, the TMDL requires a Total Phosphorus (TP) monthly average limit of 0.066 mg/L during the growing season (April – October). The facility will be required to come in compliance with this TP limit in accordance with the compliance schedule previously provided to the Department. The current monthly

average growing season limit of 0.36 mg/L will be in effect until June 30, 2016. For this facility, the final TMDL limit of 0.066 mg/L will be effective July 1, 2016.

The pH limits were developed in accordance with the water-use classification of the receiving stream. The daily minimum and daily maximum pH limits are 6.0 S.U. and 8.5 S.U., respectively. The monthly average and daily maximum Total Residual Chlorine (TRC) limits of 0.01 mg/L and 0.02 mg/L, respectively, are based on the United States Environmental Protection Agency's (EPA's) recommended water quality values and on the current Toxicity Rationale, which considers available dilution in the receiving stream. In accordance with a letter dated August 11, 1998 from EPA Headquarters and a 1991 memorandum from EPA Region 4's Environmental Services Division (ESD), due to testing and method detection limitations, a Total Residual Chlorine measurement below 0.05 mg/L shall be considered below detection for compliance purposes.

Since Buxahatchee Creek is classified as Fish & Wildlife, the limits for June – September are 126 col/100mL (monthly average) and 487 col/100mL (daily maximum), while the limits for October – May are 548 col/100mL (monthly average) and 2507 col/100mL (daily maximum).

The monthly average TSS, TSS % removal, and CBOD<sub>5</sub> % removal limits of 30 mg/l, 85%, and 85%, respectively, are based on the requirements of 40 CFR part 133.102 regarding Secondary Treatment. The previous permit did not impose a percent removal limit for CBOD<sub>5</sub>; however, limits have been included in this reissuance at the request of EPA headquarters.

This permit imposes monitoring year around for the nutrient-related parameters of Total Kjeldahl Nitrogen (TKN) and Nitrite plus Nitrate-Nitrogen (NO<sub>2</sub>+NO<sub>3</sub>-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 94 percent is required once per year during the month of November.

The Department completed a reasonable potential analysis (RPA) of the discharge based on laboratory data provided in the Permittee's application, DMR data, and background instream hardness data from Station BXHS-2. The RPA indicates whether pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream water quality standards. The RPA indicates that there is reasonable potential to cause an exceedance of the established water quality criteria for Mercury. The facility does not have any industrial dischargers (i.e., SID permits) that should be contributing to the reasonable potential caused for Mercury; therefore, the Permittee is required to continue monitoring mercury, in addition to developing a Mercury Minimization Plan in accordance with Permit Condition IV.G.

The frequency of monitoring for most parameters is three times per week. TKN and NO<sub>2</sub>+NO<sub>3</sub>-N are to be monitored monthly. Flow is to be monitored continuously. CBOD<sub>5</sub> and TSS percent removals are to be calculated monthly. Mercury is to be monitored quarterly.

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

Buxahatchee Creek is a Tier I stream in the Coosa River Basin and is not listed on the 2014 303(d) list. The permit limits are consistent with the requirements set forth in the 1996 OE/DO TMDL and 2009 Revised Nutrient TMDL.

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

Prepared by: Nicholas Caraway

## TOXICITY AND DISINFECTION RATIONALE

Facility Name:	<b>Calera Pollution Control Plant</b>	
NPDES Permit Number:	<b>AL0050938</b>	
Receiving Stream:	<b>Buxahatchee Creek</b>	
Facility Design Flow (Q <sub>w</sub> ):	<b>1.500 MGD</b>	
Receiving Stream 7Q <sub>10</sub> :	<b>0.160 cfs</b>	
Receiving Stream 1Q <sub>10</sub> :	<b>0.120 cfs</b>	
Winter Headwater Flow (WHF):	<b>0.57 cfs</b>	
Summer Temperature for CCC:	<b>30 deg. Celsius</b>	
Winter Temperature for CCC:	<b>18 deg. Celsius</b>	
Headwater Background NH <sub>3</sub> -N Level:	<b>0.11 mg/l</b>	
Receiving Stream pH:	<b>7.0 s.u.</b>	
Headwater Background FC Level (summer):	<b>N/A.</b>	<b>(Only applicable for facilities with diffusers.)</b>
(winter):	<b>N/A.</b>	

The Stream Dilution Ratio (SDR) is calculated using the 7Q<sub>10</sub> for all stream classifications.

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 93.55\%$$

### 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.

$$\text{Limiting Dilution} = \frac{Q_w}{7Q_{10} + Q_w} = 93.55\% \quad \text{Effluent-Dominated, CCC Applies}$$

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

	<u>CMC</u>	<u>CCC</u>
Allowable Summer Instream NH <sub>3</sub> -N:	<b>36.09 mg/l</b>	<b>2.18 mg/l</b>
Allowable Winter Instream NH <sub>3</sub> -N:	<b>36.09 mg/l</b>	<b>4.72 mg/l</b>

$$\text{Summer NH}_3\text{-N Toxicity Limit} = \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (7Q_{10})]}{Q_w} = 2.4 \text{ mg/l NH}_3\text{-N at } 7Q_{10}$$

$$\text{Winter NH}_3\text{-N Toxicity Limit} = \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (\text{WHF} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (\text{WHF})]}{Q_w} = 5.9 \text{ mg/l NH}_3\text{-N at Winter Flow}$$

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.

	<u>DO-based NH<sub>3</sub>-N limit</u>	<u>Toxicity-based NH<sub>3</sub>-N limit</u>
Summer	<b>0.50 mg/l NH<sub>3</sub>-N</b>	<b>2.40 mg/l NH<sub>3</sub>-N</b>
Winter	<b>1.50 mg/l NH<sub>3</sub>-N</b>	<b>5.90 mg/l NH<sub>3</sub>-N</b>

**Summer: The DO based limit of 0.50 mg/l NH<sub>3</sub>-N applies.**

**Winter: The DO based limit of 1.50 mg/l NH<sub>3</sub>-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**

$$\text{Instream Waste Concentration (IWC)} = \frac{Q_w}{7Q_{10} + Q_w} = 93.55\%$$

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)
<b><u>E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)</u></b>		
Monthly limit as monthly average (October through May):	548	<b>548</b>
Monthly limit as monthly average (June through September):	126	<b>126</b>
Daily Max (October through May):	2507	<b>2507</b>
Daily Max (June through September):	487	<b>487</b>
<b><u>Enterococci (applies to Coastal)</u></b>		
Monthly limit as geometric mean (October through May):	Not applicable	<b>Not applicable</b>
Monthly limit as geometric mean (June through September):	Not applicable	<b>Not applicable</b>
Daily Max (October through May):	Not applicable	<b>Not applicable</b>
Daily Max (June through September):	Not applicable	<b>Not applicable</b>

**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:	0.01 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	0.02 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 Caraway Date: 11/9/2015

$Q_{d1} * C_{d1} + Q_{d2} * C_{d2} + Q_{d3} * C_{d3} = Q_r * C_r$										Enter Max Daily Discharge as reported by Applicant (C <sub>max</sub> )	Enter Avg Daily Discharge as reported by Applicant (C <sub>avg</sub> )	Partition Coefficient (Stream / Lake)
ID	Pollutant	Carcinogen Yes*	Type	Background from upstream source (C <sub>d1</sub> ) Daily Avg	Background from upstream source (C <sub>d2</sub> ) Monthly Avg	Background In-stream (C <sub>d3</sub> ) Daily	Background In-stream (C <sub>r</sub> ) Monthly Avg	Enter Max Daily Discharge as reported by Applicant (C <sub>max</sub> )	Enter Avg Daily Discharge as reported by Applicant (C <sub>avg</sub> )	Partition Coefficient (Stream / Lake)		
1	Antimony		Metals	0	0	0	0	0	0	-		
2	Arsenic***	YES	Metals	0	0	0	0	0	0	0.574		
3	Beryllium		Metals	0	0	0	0	0	0	-		
4	Cadmium**		Metals	0	0	0	0	0	0	0.236		
5	Chromium / Chromium III**		Metals	0	0	0	0	0	0	0.210		
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	-		
7	Copper**		Metals	0	0	0	0	0	0	0.388		
8	Lead**		Metals	0	0	0	0	0	0	0.467		
9	Mercury**		Metals	0	0	0	0	0.0606	0.00763	0.000		
10	Nickel**		Metals	0	0	0	0	2	2	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	50	36.67	0.330		
15	Oxide		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	198000	148546	259000	256000	-		
18	Acrolein		VOC	0	0	0	0	0	0	-		
19	Acrylonitrile*	YES	VOC	0	0	0	0	0	0	-		
20	Aldrin	YES	VOC	0	0	0	0	0	0	-		
21	Benzene*	YES	VOC	0	0	0	0	0	0	-		
22	Bromoform*	YES	VOC	0	0	0	0	0	0	-		
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	0	-		
24	Chlordane	YES	VOC	0	0	0	0	0	0	-		
25	Chlorobenzene		VOC	0	0	0	0	0	0	-		
26	Chlorodibromo-Methane*	YES	VOC	0	0	0	0	0	0	-		
27	Chloroethane		VOC	0	0	0	0	0	0	-		
28	D,1-Chloro-Ethylene Ether		VOC	0	0	0	0	0	0	-		
29	Chloroform*	YES	VOC	0	0	0	0	37	12.33	-		
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	2	0.67	-		
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	1,1,1,2-Tetrachloro-Ethane*	YES	VOC	0	0	0	0	0	0	-		
46	Tetrachloro-Ethylene*	YES	VOC	0	0	0	0	0	0	-		
47	Toluene		VOC	0	0	0	0	0	0	-		
48	Toxaphene	YES	VOC	0	0	0	0	0	0	-		
49	Tributyltin (TBT)	YES	VOC	0	0	0	0	0	0	-		
50	1,1,1-Trichloroethane		VOC	0	0	0	0	0	0	-		
51	1,1,2-Trichloroethane*	YES	VOC	0	0	0	0	0	0	-		
52	Trichloroethylene*	YES	VOC	0	0	0	0	0	0	-		
53	Vinyl Chloride*	YES	VOC	0	0	0	0	0	0	-		
54	p-Chloro-m-Cresol		Acids	0	0	0	0	0	0	-		
55	2-Chlorophenol		Acids	0	0	0	0	0	0	-		
56	2,4-Dichlorophenol		Acids	0	0	0	0	0	0	-		
57	2,4-Dimethylphenol		Acids	0	0	0	0	0	0	-		
58	4,6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0	-		
59	4-Chlorophenol		Acids	0	0	0	0	0	0	-		
60	4,6-Dinitro-2-methylphenol	YES	Acids	0	0	0	0	0	0	-		
61	Dioxin (2,3,7,8-TCDD)	YES	Acids	0	0	0	0	0	0	-		
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-		
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-		
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	0	-		
65	Phenol		Acids	0	0	0	0	0	0	-		
66	1,4,6-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	Benzo(a)Anthracene*	YES	Bases	0	0	0	0	0	0	-		
71	Benzo(a)Pyrene*	YES	Bases	0	0	0	0	0	0	-		
72	Benzo(b)Fluoranthene		Bases	0	0	0	0	0	0	-		
73	3,4-Benzo-Fluoranthene		Bases	0	0	0	0	0	0	-		
74	Benzo(g)Fluoranthene		Bases	0	0	0	0	0	0	-		
75	Benzo(k)Fluoranthene		Bases	0	0	0	0	0	0	-		
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	-		
77	Bis (2-Chloroethyl)-Ether*	YES	Bases	0	0	0	0	0	0	-		
78	Bis (2-Chloroisopropyl) Ether		Bases	0	0	0	0	0	0	-		
79	Bis (2-Ethylhexyl) Phthalate*	YES	Bases	0	0	0	0	0	0	-		
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-		
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	-		
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0	-		
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-		
84	Chrysene*	YES	Bases	0	0	0	0	0	0	-		
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0	-		
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0	-		
87	Dibenzo(a,h)Anthracene*	YES	Bases	0	0	0	0	0	0	-		
88	1,2-Dichlorobenzene		Bases	0	0	0	0	0	0	-		
89	1,3-Dichlorobenzene		Bases	0	0	0	0	0	0	-		
90	1,4-Dichlorobenzene		Bases	0	0	0	0	0	0	-		
91	1,3-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	-		
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-Diphenylacetate		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	Erdrin	YES	Bases	0	0	0	0	0	0	-		
101	Erdrin Aldehyde	YES	Bases	0	0	0	0	0	0	-		
102	Fluoranthene		Bases	0	0	0	0	0	0	-		
103	Fluorene		Bases	0	0	0	0	0	0	-		
104	Heptachlor	YES	Bases	0	0	0	0	0	0	-		
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-		
106	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	0	-		
107	Hexachlorobutadiene*	YES	Bases	0	0	0	0	0	0	-		
108	Hexachlorocyclohexane (alpha)	YES	Bases	0	0	0	0	0	0	-		
109	Hexachlorocyclohexane (beta)	YES	Bases	0	0	0	0	0	0	-		
110	Hexachlorocyclohexane (gamma)	YES	Bases	0	0	0	0	0	0	-		
111	Hexachlorocyclopentadiene		Bases	0	0	0	0	0	0	-		
112	Hexachloroethane		Bases	0	0	0	0	0	0	-		
113	Indeno(1,2,3-CD)Pyrene*	YES	Bases	0	0	0	0	0	0	-		
114	Isophorone		Bases	0	0	0	0	0	0	-		
115	Naphthalene		Bases	0	0	0	0	0	0	-		
116	Nitrobenzene		Bases	0	0	0	0	0	0	-		
117	N-Nitrosodi-N-Propylamine*	YES	Bases	0	0	0	0	0	0	-		
118	N-Nitrosodi-N-Methylamine*	YES	Bases	0	0	0	0	0	0	-		
119	N-Nitrosodi-N-Phenylamine*	YES	Bases	0	0	0	0	0	0	-		
120	PCB-1016	YES	Bases	0	0	0	0	0	0	-		
121	PCB-1221	YES	Bases	0	0	0	0	0	0	-		
122	PCB-1232	YES	Bases	0	0	0	0	0	0	-		
123	PCB-1242	YES	Bases	0	0	0	0	0	0	-		
124	PCB-1248	YES	Bases	0	0	0	0	0	0	-		
125	PCB-1254	YES	Bases	0	0	0	0	0	0	-		
126	PCB-1260	YES	Bases	0	0	0	0	0	0	-		
127	Phenanthrene		Bases	0	0	0	0	0	0	-		
128	Pyrene		Bases	0	0	0	0	0	0	-		
129	1,2,4-Trichlorobenzene		Bases	0	0	0	0	0	0	-		

1.5	Enter Q <sub>d</sub> = wastewater discharge flow from facility (MGD)
2.320844	Q <sub>d</sub> = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter or estimated, Q <sub>d2</sub> = background stream flow from upstream source (cfs)
0.16	Enter TQ10, Q <sub>d</sub> = background stream flow in cfs above point of discharge
0.12	Enter or estimated, TQ10, Q <sub>d</sub> = background stream flow in cfs above point of discharge (TQ10 estimated at 75% of TQ10)
0	Enter flow from upstream discharge Q <sub>d2</sub> = background stream flow in MGD above point of discharge
12.9	Enter Mean Annual Flow, Q <sub>d</sub> = background stream flow in cfs above point of discharge
0.57	Enter TQ2, Q <sub>d</sub> = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C <sub>d</sub> = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q <sub>d</sub> + Q <sub>d2</sub> + Q <sub>d3</sub>	Q <sub>d</sub> = resultant in-stream flow, after discharge
Calculated on other	C <sub>d</sub> = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
148.5	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North)
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

December 2, 2015

Freshwater P&W classification										Freshwater Acute (µg/l) C <sub>a</sub> = 10:10										Freshwater Chronic (µg/l) C <sub>c</sub> = 70:10										Human Health Consumption Fish only (µg/d)			
ID	Pollutant	RP1	Carcinogen yes	Background from upstream source (CG2) Daily Max	Max Daily Discharge as reported by Applicant (C <sub>max</sub> )	Water Quality Criteria (C <sub>1</sub> )	Draft Permit Limit (C <sub>max</sub> )	20% of Draft Permit Limit	RP2	Background from upstream source (CG2) Monthly Ave	Avg Daily Discharge as reported by Applicant (C <sub>max</sub> )	Water Quality Criteria (C <sub>1</sub> )	Draft Permit Limit (C <sub>max</sub> )	20% of Draft Permit Limit	RP2	Carcinogen C <sub>a</sub> = Annual Average Non-Carcinogen C <sub>c</sub> = 70:10																	
																Water Quality Criteria (C <sub>1</sub> )	Draft Permit Limit (C <sub>max</sub> )	20% of Draft Permit Limit	RP1	Water Quality Criteria (C <sub>1</sub> )	Draft Permit Limit (C <sub>max</sub> )	20% of Draft Permit Limit	RP1										
1	Antimony			0	0	-	-	-	0	0	-	-	-	-	-	3.73E+02	3.99E+02	7.98E+01	No														
2	Arsenic		YES	0	0	592.334	622.961	124.502	No	0	0	261.324	279.340	55.868	No	3.03E-01	1.99E+00	3.97E-01	No														
3	Barium			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
4	Cadmium			0	0	12.531	13.179	2.636	No	0	0	1.372	1.466	0.293	No	-	-	-	-														
5	Chromium/ Chromium III			0	0	3750.760	3944.894	788.989	No	0	0	407.897	521.533	104.307	No	-	-	-	-														
6	Chromium/ Chromium VI			0	0	16.000	16.827	3.365	No	0	0	11.000	11.758	2.352	No	-	-	-	-														
7	Copper			0	0	50.274	52.873	10.575	No	0	0	32.360	34.591	6.918	No	1.30E+03	1.39E+03	2.78E+02	No														
8	Lead			0	0	212.106	223.073	44.615	No	0	0	8.265	8.835	1.767	No	-	-	-	-														
9	Mercury		YES	0	0.006	2.400	2.524	0.505	No	0	0.00763	0.012	0.013	0.003	Yes	4.24E-02	4.53E-02	9.07E-03	No														
10	Nickel			0	2	1295.549	1362.536	272.507	No	0	2	143.895	153.816	30.763	No	9.93E+02	1.06E+03	2.12E+02	No														
11	Selenium			0	0	20.000	21.034	4.207	No	0	0	5.000	5.345	1.069	No	2.43E+03	2.60E+03	5.20E+02	No														
12	Silver			0	0	8.350	8.679	1.336	No	0	0	-	-	-	-	-	-	-	-														
13	Thallium			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
14	Zinc			90	90	496.415	522.083	104.417	No	0	36.67	500.476	534.979	106.996	No	1.49E+04	1.56E+04	3.18E+03	No														
15	Cyanide			0	0	22.000	23.138	4.628	No	0	0	5.200	5.558	1.112	No	9.33E+03	9.98E+03	2.00E+03	No														
16	Total Phenolic Compounds			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
17	Hardness (As CaCO3)			0	250000	-	-	-	-	-	250000	-	-	-	-	-	-	-	-														
18	Acrolein			0	0	-	-	-	-	-	-	-	-	-	-	5.43E+00	5.80E+00	1.16E+00	No														
19	Acrylonitrile		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.44E-01	9.45E-01	1.89E-01	No														
20	Aldrin		YES	0	0	3.000	3.195	0.631	No	0	0	1.300	1.390	0.278	No	2.94E-05	1.93E-04	3.86E-05	No														
21	Benzene		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.95E+01	1.01E+02	2.03E+01	No														
22	Bromoform		YES	0	0	-	-	-	-	-	-	-	-	-	-	7.88E+01	5.17E+02	1.03E+02	No														
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	-	-	-	-	-	-	9.57E-01	6.28E+00	1.26E+00	No														
24	Chlordane		YES	0	0	2.400	2.524	0.505	No	0	0	0.004	0.005	0.001	No	4.73E-04	3.10E-03	6.20E-04	No														
25	Chlorobenzene			0	0	-	-	-	-	-	-	-	-	-	-	9.08E+02	9.69E+02	1.94E+02	No														
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	-	-	-	-	-	-	7.41E+00	4.86E+01	9.72E+00	No														
27	Chloroethane			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
28	2-Chloro-Ethyl-Vinyl Ether			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
29	Chloroform		YES	0	37	-	-	-	-	12.33	-	-	-	-	-	1.02E+02	6.69E+02	1.34E+02	No														
30	4,4'-DDD		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.91E-04	9.95E-03	2.39E-04	No														
31	4,4'-DDE		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.28E-04	8.40E-04	1.68E-04	No														
32	4,4'-DDE		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.28E-04	8.40E-04	1.68E-04	No														
33	4,4'-DDT		YES	0	2	-	-	-	-	-	-	-	-	-	-	1.00E+01	6.56E+01	1.32E+01	No														
34	1,1-Dichloroethane			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
35	1,2-Dichloroethane		YES	0	0	-	-	-	-	-	-	-	-	-	-	2.14E+01	1.40E+02	2.80E+01	No														
36	Trans-1,2-Dichloro-Ethylene			0	0	-	-	-	-	-	-	-	-	-	-	5.91E+03	6.31E+03	1.26E+03	No														
37	1,1-Dichloroethylene		YES	0	0	-	-	-	-	-	-	-	-	-	-	4.17E+03	2.73E+04	5.47E+03	No														
38	1,2-Dichloropropane			0	0	-	-	-	-	-	-	-	-	-	-	6.48E+00	9.98E+00	1.92E+00	No														
39	1,3-Dichloro-Propane			0	0	-	-	-	-	-	-	-	-	-	-	1.23E+01	1.31E+01	2.63E+00	No														
40	Dieldrin		YES	0	0	0.240	0.252	0.050	No	0	0.056	0.060	0.012	No	3.12E-05	2.05E-04	4.10E-05	No															
41	Ethylbenzene			0	0	-	-	-	-	-	-	-	-	-	-	1.24E+03	1.33E+03	2.66E+02	No														
42	Methyl Bromide			0	0	-	-	-	-	-	-	-	-	-	-	8.71E+02	9.31E+02	1.86E+02	No														
43	Methyl Chloride			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
44	Methylene Chloride		YES	0	0	-	-	-	-	-	-	-	-	-	-	3.46E+02	2.27E+03	4.53E+02	No														
45	1,1,2,2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	-	-	-	-	-	-	2.33E+00	1.53E+01	3.06E+00	No														
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.92E+00	1.26E+01	2.51E+00	No														
47	Toluene			0	0	-	-	-	-	-	-	-	-	-	-	8.72E+03	9.32E+03	1.86E+03	No														
48	Toxaphene		YES	0	0	0.730	0.768	0.154	No	0	0.0002	0.000	0.000	No	1.62E-04	1.06E-03	2.12E-04	No															
49	Tributyltin (TBT)		YES	0	0	0.460	0.484	0.097	No	0	0.072	0.077	0.015	No	-	-	-	-															
50	1,1,1-Trichloroethane			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
51	1,1,2-Trichloroethane		YES	0	0	-	-	-	-	-	-	-	-	-	-	9.10E+00	5.97E+01	1.19E+01	No														
52	Trichloroethylene		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.75E+01	1.15E+02	2.29E+01	No														
53	Vinyl Chloride		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.42E+00	9.34E+00	1.87E+00	No														
54	p-Chloro-m-Cresol			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
55	2-Chlorophenol			0	0	-	-	-	-	-	-	-	-	-	-	6.71E+01	9.31E+01	1.86E+01	No														
56	2,4-Dichlorophenol			0	0	-	-	-	-	-	-	-	-	-	-	1.72E+02	1.84E+02	3.68E+01	No														
57	2,4-Dimethylphenol			0	0	-	-	-	-	-	-	-	-	-	-	4.98E+02	5.32E+02	1.06E+02	No														
58	4,6-Dinitro-O-Cresol			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
59	2,4-Dinitrophenol			0	0	-	-	-	-	-	-	-	-	-	-	3.11E+03	3.33E+03	6.65E+02	No														
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.85E+02	1.09E+03	2.17E+02	No														
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	-	-	-	-	-	-	2.67E-08	1.75E-07	3.50E-08	No														
62	2-Nitrophenol			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
63	4-Nitrophenol			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
64	Pentachlorophenol		YES	0	0	8.723	9.174	1.835	No	0	8.693	7.154	1.431	No	1.77E+00	1.16E+01	2.32E+00	No															
65	Phenol			0	0	-	-	-	-	-	-	-	-	-	-	5.00E+05	5.34E+05	1.07E+05	No														
66	2,4,6-Trichlorophenol		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.41E+00	9.27E+00	1.85E+00	No														
67	Acenaphthene			0	0	-	-	-	-	-	-	-	-	-	-	5.79E+02	6.18E+02	1.24E+02	No														
68	Acenaphthylene			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
69	Anthracene			0	0	-	-	-	-	-	-	-	-	-	-	2.33E+04	2.49E+04	4.99E+03	No														
70	Benidine			0	0	-	-	-	-	-	-	-	-	-	-	1.16E-04	1.24E-04	2.48E-05	No														
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.07E-02	8.99E-02	1.40E-02	No														
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.07E-02	8.99E-02	1.40E-02	No														
73	3,4-Benzo-Fluoranthene			0	0	-	-	-	-	-	-	-	-	-	-	1.07E-02	1.14E-02	2.28E-03	No														
74	Benzo(GH)Perylene			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	-	-	-	-	-	-	1.07E-02	1.14E-02	2.28E-03	No														
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	-	-	-	-	-	-	3.07E-01	2.02E+00	4.03E-01	No														
78	Bis (2-Chloroisopropyl) Ether			0	0	-	-	-	-	-	-	-	-	-	-	3.78E+04	4.04E+04	8.08E+03	No														
79	Bis (2-Ethylhexyl) Phthalate		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.28E+00	8.41E+00	1.68E+00	No														
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
81	Isopropyl Phenyl Phthalate			0	0	-	-	-	-	-	-	-	-	-	-	1.13E+03	1.20E+03	2.41E+02	No														
82	2-Chloronaphthalene			0	0	-	-	-	-	-	-	-	-	-	-	9.24E+02	9.88E+02	1.98E+02	No														
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
84	Chrysene		YES	0	0	-	-	-	-	-	-	-	-	-	-	1.07E-02	6.99E-02	1.40E-02	No														
85	Di-N-Butyl Phthalate																																

Calera Pollution Control Plant  
 NPDES Permit No. AL0050938  
 Effluent DMR and Application Data

Mercury DMR Data	
Monitoring Period	Result(ug/L)
January - March 2011	0.0606
April - June 2011	0.0029
July - September 2011	0.00741
October - December 2011	0.001
January - March 2012	0.002
April - June 2012	0.001
July - September 2012	0.009
October - December 2012	0.005
January - March 2013	0.003
April - June 2013	0.003
July - September 2013	0.007
October - December 2013	0.008
January - March 2014	0.004
April - June 2014	0.004
July - September 2014	0.0031
October - December 2014	0.013
January - March 2015	0.003
April - June 2015	0.003
July - September 2015	0.005

<b>Max(ug/L)</b>	<b>0.0606</b>
<b>Average(ug/L)</b>	<b>0.00763</b>

Bromodichloromethane App Data	
Sample Date	Result(ug/L)
5/6/2015	0
8/3/2015	2
8/19/2015	0
<b>Avg (ug/L)</b>	<b>0.67</b>
<b>Max (ug/L)</b>	<b>2</b>

Hardness Application Data	
Sample Date	Result(ug/L)
5/6/2015	256000
8/3/2015	253000
8/19/2015	259000
<b>Avg (ug/L)</b>	<b>256000</b>
<b>Max (ug/L)</b>	<b>259000</b>

Nickel Application Data	
Sample Date	Result(ug/L)
5/6/2015	2
8/3/2015	2
8/19/2015	2
<b>Avg (ug/L)</b>	<b>2</b>
<b>Max (ug/L)</b>	<b>2</b>

Zinc Application Data	
Sample Date	Result(ug/L)
5/6/2015	50
8/3/2015	30
8/19/2015	30
<b>Avg (ug/L)</b>	<b>36.67</b>
<b>Max (ug/L)</b>	<b>50</b>

Chloroform App Data	
Sample Date	Result(ug/L)
5/6/2015	0
8/3/2015	37
8/19/2015	0
<b>Avg (ug/L)</b>	<b>12.33</b>
<b>Max (ug/L)</b>	<b>37</b>

# Waste Load Allocation Summary

Page 1

## REQUEST INFORMATION

request number: 1959

From:		In Branch/Section	
Date Submitted	12/30/1899	Date Required	12/30/1899
FUND Code			
Receiving Waterbody	Buxahatchee Creek	Date Permit application received by NPDES program	
Previous Stream Name			
Facility Name	Calera WWTP	(Name of Discharger-WQ will use to file)	
		Previous Discharger Name	
River Basin	Coosa	Outfall Latitude	33.0941 (decimal degrees)
*County	Shelby	Outfall Longitude	-86.7444 (decimal degrees)
Permit Number	AL0050938	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.

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

DWT

Year File Was Created 1996

Lat/Long Method Arcview

12 Digit HUC Code 031501070502

Use Classification F&W

Site Visit Completed?  Yes  No

Date of Site Visit

Waterbody Impaired?  Yes  No

Date of WLA Response 3/19/2002

Antidegradation  Yes  No

Approved TMDL?

Yes  No

Waterbody Tier Level Tier I

Use Support Category 5

Approval Date of TMDL 3/4/2009

## Waste Load Allocation Information

Modeled Reach Length Miles Date of Allocation 3/19/2002

Name of Model Used Mass balance Allocation Type 2 Seasons

Model Completed by Paul Vaccaro Type of Model Used mass balance

Allocation Developed by Water Quality Branch

# Waste Load Allocation Summary

Annual Effluent Limits	Conventional Parameters				Other Parameters						
	Qw	1.5	MGD	Qw	1.5	MGD	Qw	MGD	Qw	MGD	
Season	Summer		Season	Winter		Season			Season		
From	May		From	Dec		From			From		
Through	Nov		Through	Apr		Through			Through		
CBOD5			CBOD5	3.5	mg/L	CBOD5	8	mg/L	TP		
NH3-N			NH3-N	0.5	mg/L	NH3-N	1.5	mg/L	TN		
TKN			TKN			TKN			TSS		
D.O.			D.O.	6	mg/L	D.O.	6	mg/L			

"Monitor Only" Parameters for Effluent:		Parameter	Frequency	Parameter	Frequency

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

### Hydrology at Discharge Location

Drainage Area Qualifier	Drainage Area	8.5	sq mi	Method Used to Calculate	
	Stream 7Q10	0.16	cfs	Bingham Equation	
	Stream 1Q10	0.12	cfs	75% of 7Q10	
	Stream 7Q2	0.57	cfs	Bingham Equation	
	Annual Average	12.9	cfs	ADEM Estimate w/USGS Gage Data	

Comments and/or Notations: Check file for details.

FORM <b>1</b> GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY <b>GENERAL INFORMATION</b> <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	I. EPA I.D. NUMBER
			3 F
			T/A C D
			1 2 13 14 15

LABEL ITEMS	PLEASE PLACE LABEL IN THIS SPACE	<p style="text-align: center;">GENERAL INSTRUCTIONS</p> <p>If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.</p>
I. EPA I.D. NUMBER		
III. FACILITY NAME		
V. FACILITY MAILING ADDRESS		
VI. FACILITY LOCATION		

**II. POLLUTANT CHARACTERISTICS**

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

SPECIFIC QUESTIONS	Mark "X"			SPECIFIC QUESTIONS	Mark "X"		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a <b>publicly owned treatment works</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2A)	X			B. Does or will this facility (either existing or proposed) include a <b>concentrated animal feeding operation</b> or <b>aquatic animal production facility</b> which results in a <b>discharge to waters of the U.S.</b> ? (FORM 2B)		X	
C. Is this a facility which currently results in <b>discharges to waters of the U.S.</b> other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility (other than those described in A or B above) which will result in a <b>discharge to waters of the U.S.</b> ? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of <b>hazardous wastes</b> ? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the <b>lowermost stratum</b> containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed <b>stationary source</b> which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed <b>stationary source</b> which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

**III. NAME OF FACILITY**

c	1	SKIP	CITY OF CALERA BUXAHATCHEE	80
	15	16 - 29	30	

**IV. FACILITY CONTACT**

A. NAME & TITLE (last, first, & title)		B. PHONE (area code & no.)	
c	2	SMEOLEY DOUG DIRECTOR	2056683880
	15 16	45 46 48 49 51 52	55

**V. FACILITY MAILING ADDRESS**

A. STREET OR P.O. BOX				
c	3	10947 HIGHWAY 25		
	15 16	45		
B. CITY OR TOWN		C. STATE	D. ZIP CODE	
c	4	CALERA	AL	35040
	15 16	40 41 42	47	51

**VI. FACILITY LOCATION**

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER						
c	5	2273 NINTH STREET				<div style="border: 2px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center; margin: 0;">RECEIVED</p> <p style="text-align: center; margin: 0;">MAY 28 2015</p> <p style="text-align: center; margin: 0;">IND / MUN BRANCH</p> </div>
	15 16					
B. COUNTY NAME						
c	6	SHELBY				
	15 16	46				
C. CITY OR TOWN		D. STATE	E. ZIP CODE		F. COUNTY CODE (if known)	
c	6	CALERA	AL	35040		
	15 16	40 41 42	47	51	52 -54	

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)									
A. FIRST					B. SECOND				
C	7				C	7			
(specify)					(specify)				
15	16	17	18	19	15	16	17	18	19
C. THIRD					D. FOURTH				
C	7				C	7			
(specify)					(specify)				
15	16	17	18	19	15	16	17	18	19

VIII. OPERATOR INFORMATION									
A. NAME									
C	CITY OF CALERA								
15	16	17	18	19	20	21	22	23	24
B. Is the name listed in Item VIII-A also the owner? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO									
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)					D. PHONE (area code & no.)				
F = FEDERAL	M = PUBLIC (other than federal or state)	M			205 668 3880				
S = STATE	O = OTHER (specify)								
P = PRIVATE									
15	16	17	18	19	20	21	22	23	24

E. STREET OR P.O. BOX									
10947 HIGHWAY 25									
26	27	28	29	30	31	32	33	34	35

F. CITY OR TOWN					G. STATE	H. ZIP CODE	IX. INDIAN LAND		
C	CALERA				AL	35040	Is the facility located on Indian lands?		
15	16	17	18	19	40	41	42	43	44
							<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		

X. EXISTING ENVIRONMENTAL PERMITS									
A. NPDES (Discharges to Surface Water)					D. PSD (Air Emissions from Proposed Sources)				
C	T	I	AL0050938		C	T	I		
9	N				9	P			
15	16	17	18	19	15	16	17	18	19
B. UIC (Underground Injection of Fluids)					E. OTHER (specify)				
C	T	I			C	T	I		
9	U				9				
15	16	17	18	19	15	16	17	18	19
C. RCRA (Hazardous Wastes)					E. OTHER (specify)				
C	T	I			C	T	I		
9	R				9				
15	16	17	18	19	15	16	17	18	19

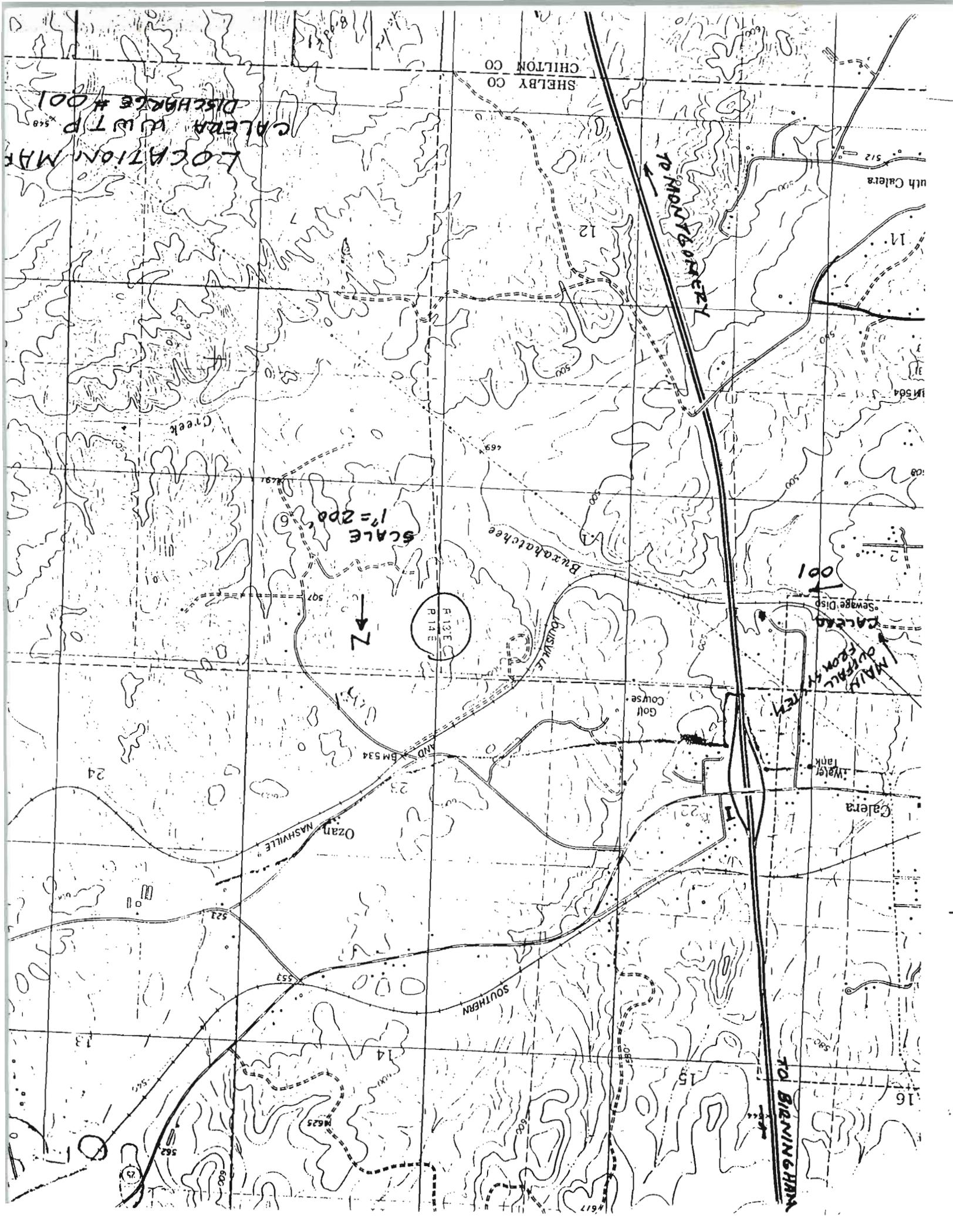
XI. MAP  
 Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage,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

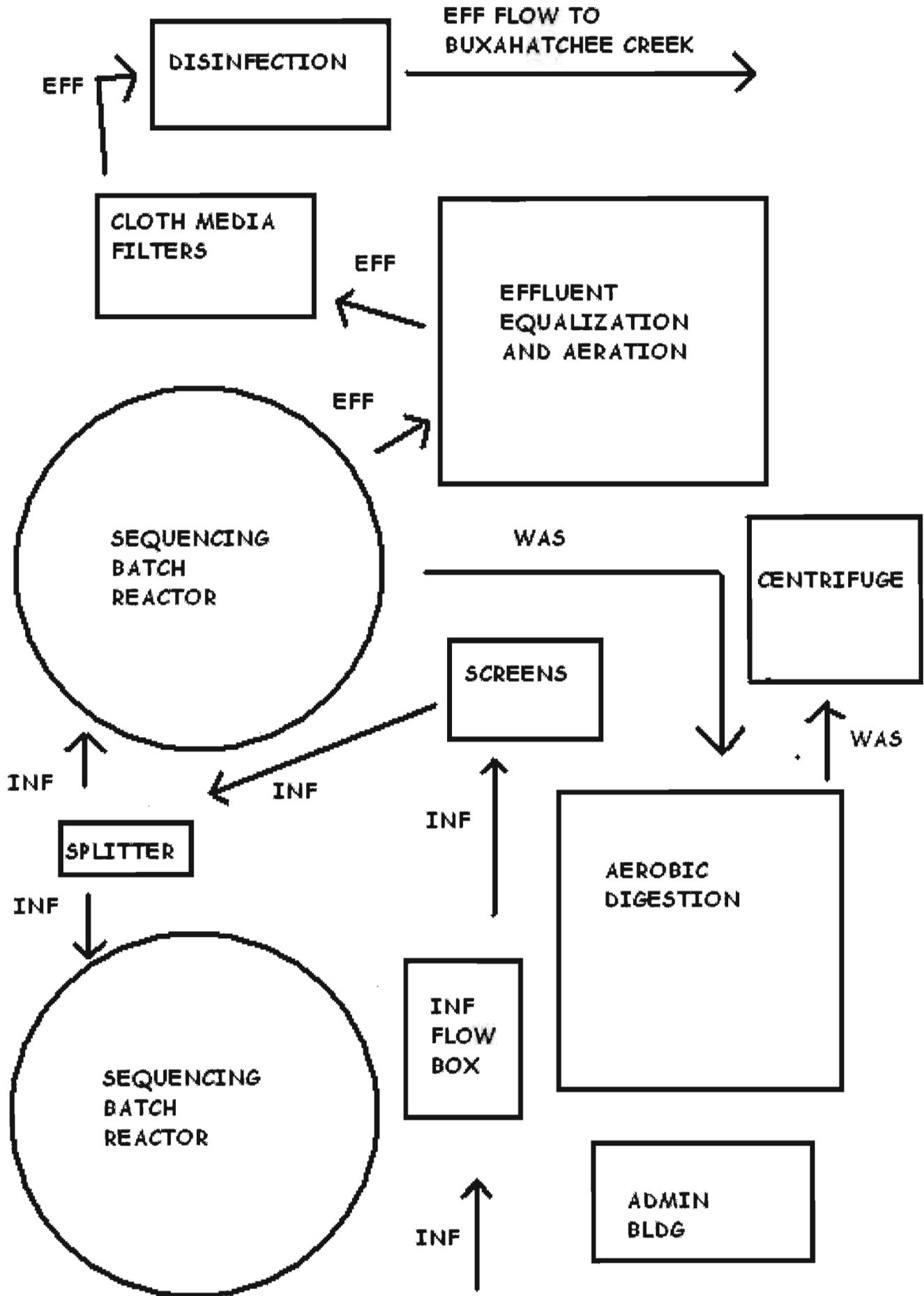
XIII. CERTIFICATION (see instructions)  
 I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained 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
Sen Graham, Mayor	John Graham	5-27-2015

COMMENTS FOR OFFICIAL USE ONLY									
C									
15	16	17	18	19	20	21	22	23	24



# CALERA POLLUTION CONTROL PLANT



FACILITY NAME AND PERMIT NUMBER:

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

Calera Pollution Control Plant AL0050938

**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 Calera Pollution Control Plant

Mailing Address 10947 HIGHWAY 25  
CALERA AL 35040

Contact person Jon Graham

Title MAYOR

Telephone number (205) 668-3500

Facility Address 2273 9th Street  
(not P.O. Box) Calera AL 35040

**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).

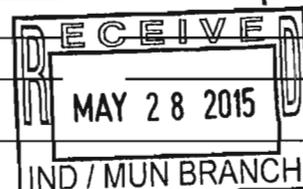
NPDES AL0050938 PSD \_\_\_\_\_

UIC \_\_\_\_\_ Other \_\_\_\_\_

RCRA \_\_\_\_\_ Other \_\_\_\_\_

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

Name	Population Served	Type of Collection System	Ownership
<u>City of Calera</u>	_____	<u>Separate</u>	<u>Municipal</u>
_____	_____	_____	_____
_____	_____	_____	_____
Total population served _____			



FACILITY NAME AND PERMIT NUMBER:

Caleva Pollution Control Plant AL 0050938

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

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 1.50 mgd

	<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>	
b. Annual average daily flow rate	_____	<u>0.753</u>	_____	mgd

c. Maximum daily flow rate	_____	<u>1.419</u>	_____	mgd
----------------------------	-------	--------------	-------	-----

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

Separate sanitary sewer 100 %  
 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	<u>1</u>
ii. Discharges of untreated or partially treated effluent	<u>0</u>
iii. Combined sewer overflow points	<u>0</u>
iv. Constructed emergency overflows (prior to the headworks)	<u>0</u>
v. Other _____	<u>0</u>

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

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_

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

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

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

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

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

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

FACILITY NAME AND PERMIT NUMBER:

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

Calera Pollution Control Plant AL0050938

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

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

Transporter name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

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

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

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

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

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

If yes, provide the following for each disposal method:

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

Annual daily volume disposed of by this method: \_\_\_\_\_

Is disposal through this method \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

FACILITY NAME AND PERMIT NUMBER:

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

Calera Pollution Control Plant AL0050938

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

b. Location

CALERA

35040

(City or town, if applicable)

(Zip Code)

SHELBY

ALABAMA

(County)

(State)

33.094100

-86.744400

(Latitude)

(Longitude)

c. Distance from shore (if applicable)

\_\_\_\_\_ ft.

d. Depth below surface (if applicable)

\_\_\_\_\_ ft.

e. Average daily flow rate

0.753 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

Buxahatchee Creek

b. Name of watershed (if known)

\_\_\_\_\_

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

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<sub>3</sub>

FACILITY NAME AND PERMIT NUMBER:

Calera Pollution Control Plant 12005032

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

**A.11. Description of Treatment.**

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

Primary       Secondary  
 Advanced       Other. Describe: \_\_\_\_\_

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

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal      98 %  
Design SS removal      95 %  
Design P removal      95 %  
Design N removal      9.5 %  
Other \_\_\_\_\_ %

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

ultraviolet, chlorination

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

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	<u>6.78</u>	s.u.			
pH (Maximum)	<u>8.00</u>	s.u.			
Flow Rate	<u>1.419</u>	<u>mgd</u>	<u>0.753</u>	<u>mgd</u>	<u>365</u>
Temperature (Winter)	<u>20.0</u>	<u>°c</u>	<u>16.5</u>	<u>°c</u>	<u>78</u>
Temperature (Summer)	<u>25.5</u>	<u>°c</u>	<u>23.5</u>	<u>°c</u>	<u>78</u>

\* 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						
		<u>15.29</u>	<u>LBS</u>	<u>4.23</u>	<u>LBS</u>	<u>78</u>	<u>5210.B.</u>
	CBOD-5	<u>20</u>	<u>#/100ml</u>	<u>23</u>	<u>#/100ml</u>	<u>78</u>	<u>922.A.</u>
FECAL COLIFORM							
TOTAL SUSPENDED SOLIDS (TSS)		<u>11.91</u>	<u>LBS</u>	<u>2.28</u>	<u>LBS</u>	<u>78</u>	<u>254a.D.</u>

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

FACILITY NAME AND PERMIT NUMBER:

Calera Pollution Control Plant AL0050930

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

**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  $\geq$  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.  
\_\_\_\_\_ gpd

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

completing a Flow Study to locate sources of I&I  
Repair or replace as needed

**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.

\_\_\_\_\_

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

Yes  No

FACILITY NAME AND PERMIT NUMBER:

Calera Pollution Control Plant AL050938

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

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

\_\_\_\_\_

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

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

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

Describe briefly: \_\_\_\_\_  
\_\_\_\_\_

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

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

Outfall Number: \_\_\_\_\_

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
<b>CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.</b>							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)	0.01	mg/L	0.01	mg/L	78		
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE	N/A	N/A	N/A	N/A	N/A		
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)	N/A	N/A	N/A	N/A	N/A		
OTHER	N/A	N/A	N/A	N/A	N/A		

**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:

Calera Pollution Control Plant AL0050930

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 Jon Graham, Mayor

Signature Jon Graham

Telephone number (205) 668-3500

Date signed 5-27-2015

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:**

FACILITY NAME AND PERMIT NUMBER:

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

Calera Pollution Control Plant DC0050938

**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: \_\_\_\_\_ (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			
<b>METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.</b>												
ANTIMONY	<0.001	mg/L			<0.001	mg/L				3	200-8	
ARSENIC	<0.001	mg/L			<0.001	mg/L				3	200-8	
BERYLLIUM	<0.001	mg/L			<0.001	mg/L				3	200-8	
CADMIUM	<0.002	mg/L			<0.002	mg/L				3	200-7	
CHROMIUM	<0.002	mg/L			<0.002	mg/L				3	200-7	
COPPER	<0.002	mg/L			<0.002	mg/L				3	200-7	
LEAD	<0.001	mg/L			<0.001	mg/L				3	200-8	
MERCURY	<0.001	mg/L			<0.001	mg/L				3	245-7	
NICKEL	<0.002	mg/L			<0.002	mg/L				3	200-8	
SELENIUM	<0.001	mg/L			<0.001	mg/L				3	200-8	
SILVER	<0.001	mg/L			<0.001	mg/L				3	200-8	
THALLIUM	<0.001	mg/L			<0.001	mg/L				3	200-8	
ZINC	0.05	mg/L			0.03	mg/L				3	200-7	
CYANIDE	<0.02	mg/L			<0.02	mg/L				3	335.4	
TOTAL PHENOLIC COMPOUNDS										3		
HARDNESS (AS CaCO <sub>3</sub> )	259	mg/L			256	mg/L				3	200-7	
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.												

RECEIVED  
 OCT 27 2015  
 ADEM

FACILITY NAME AND PERMIT NUMBER:

Coleen Pollution Control Plant AL0050938

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

Outfall number: 001 (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	220	ug/L			220	ug/L			3	624	
ACRYLONITRILE	220	ug/L			220	ug/L			3	624	
BENZENE	22.0	ug/L			22.0	ug/L			3	624	
BROMOFORM	22.0	ug/L			22.0	ug/L			3	624	
CARBON TETRACHLORIDE	22.0	ug/L			22.0	ug/L			3	624	
CLOROBENZENE	22.0	ug/L			22.0	ug/L			3	624	
CHLORODIBROMO-METHANE	22.0	ug/L			22.0	ug/L			3	624	
CHLOROETHANE	22.0	ug/L			22.0	ug/L			3	624	
2-CHLORO-ETHYL VINYL ETHER	22.0	ug/L			22.0	ug/L			3	624	
CHLOROFORM	37	ug/L			13.66	ug/L			3	624	
DICHLOROBROMO-METHANE	22.0	ug/L			22.0	ug/L			3	624	
1,1-DICHLOROETHANE	22.0	ug/L			22.0	ug/L			3	624	
1,2-DICHLOROETHANE	22.0	ug/L			22.0	ug/L			3	624	
TRANS-1,2-DICHLORO-ETHYLENE	22.0	ug/L			22.0	ug/L			3	624	
1,1-DICHLOROETHYLENE	22.0	ug/L			22.0	ug/L			3	624	
1,2-DICHLOROPROPANE	22.0	ug/L			22.0	ug/L			3	624	
1,3-DICHLORO-PROPYLENE	22.0	ug/L			22.0	ug/L			3	624	
ETHYLBENZENE	22.0	ug/L			22.0	ug/L			3	624	
METHYL BROMIDE	22.0	ug/L			22.0	ug/L			3	624	
METHYL CHLORIDE	22.0	ug/L			22.0	ug/L			3	624	
METHYLENE CHLORIDE	22.0	ug/L			22.0	ug/L			3	624	
1,1,2,2-TETRACHLORO-ETHANE	22.0	ug/L			22.0	ug/L			3	624	
TETRACHLORO-ETHYLENE	22.0	ug/L			22.0	ug/L			3	624	
TOLUENE	22.0	ug/L			22.0	ug/L			3	624	

FACILITY NAME AND PERMIT NUMBER:

Calera Pollution Control Plant AL050938

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

Outfall number: 001 (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	2.0	ug/L			2.0	ug/L			3	624	
1,1,2-TRICHLOROETHANE	2.0	ug/L			2.0	ug/L			3	624	
TRICHLOROETHYLENE	2.0	ug/L			2.0	ug/L			3	624	
VINYL CHLORIDE	2.0	ug/L			2.0	ug/L			3	624	

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	5.0	ug/L			5.0	ug/L			3	625	
2-CHLOROPHENOL	5.0	ug/L			5.0	ug/L			3	625	
2,4-DICHLOROPHENOL	5.0	ug/L			5.0	ug/L			3	625	
2,4-DIMETHYLPHENOL	5.0	ug/L			5.0	ug/L			3	625	
4,6-DINITRO-O-CRESOL	5.0	ug/L			5.0	ug/L			3	625	
2,4-DINITROPHENOL	5.0	ug/L			5.0	ug/L			3	625	
2-NITROPHENOL	5.0	ug/L			5.0	ug/L			3	625	
4-NITROPHENOL	5.0	ug/L			5.0	ug/L			3	625	
PENTACHLOROPHENOL	5.0	ug/L			5.0	ug/L			3	625	
PHENOL	5.0	ug/L			5.0	ug/L			3	625	
2,4,6-TRICHLOROPHENOL	5.0	ug/L			5.0	ug/L			3	625	

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

BASE-NEUTRAL COMPOUNDS

ACENAPHTHENE	5.0	ug/L			5.0	ug/L			3	625	
ACENAPHTHYLENE	5.0	ug/L			5.0	ug/L			3	625	
ANTHRACENE	5.0	ug/L			5.0	ug/L			3	625	
BENZIDINE	10.0	ug/L			10.0	ug/L			3	625	
BENZO(A)ANTHRACENE	5.0	ug/L			5.0	ug/L			3	625	
BENZO(A)PYRENE	5.0	ug/L			5.0	ug/L			3	625	

FACILITY NAME AND PERMIT NUMBER:

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

Caleva Pollution Control Plant AL00509300

Outfall number: 001 (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	<5.0	ug/L			25.0	ug/L			3	625	
BENZO(GHI)PERYLENE	<5.0	ug/L			25.0	ug/L			3	625	
BENZO(K)FLUORANTHENE	<5.0	ug/L			25.0	ug/L			3	625	
BIS (2-CHLOROETHOXY) METHANE	<5.0	ug/L			25.0	ug/L			3	625	
BIS (2-CHLOROETHYL)-ETHER	<5.0	ug/L			25.0	ug/L			3	625	
BIS (2-CHLOROISO-PROPYL) ETHER	<5.0	ug/L			25.0	ug/L			3	625	
BIS (2-ETHYLHEXYL) PHTHALATE	<5.0	ug/L			25.0	ug/L			3	625	
4-BROMOPHENYL PHENYL ETHER	<5.0	ug/L			25.0	ug/L			3	625	
BUTYL BENZYL PHTHALATE	<5.0	ug/L			25.0	ug/L			3	625	
2-CHLORONAPHTHALENE	<5.0	ug/L			25.0	ug/L			3	625	
4-CHLORPHENYL PHENYL ETHER	<5.0	ug/L			25.0	ug/L			3	625	
CHRYSENE	<5.0	ug/L			25.0	ug/L			3	625	
DI-N-BUTYL PHTHALATE	<5.0	ug/L			25.0	ug/L			3	625	
DI-N-OCTYL PHTHALATE	<5.0	ug/L			25.0	ug/L			3	625	
DIBENZO(A,H) ANTHRACENE	<5.0	ug/L			25.0	ug/L			3	625	
1,2-DICHLOROBENZENE	<5.0	ug/L			25.0	ug/L			3	625	
1,3-DICHLOROBENZENE	<5.0	ug/L			25.0	ug/L			3	625	
1,4-DICHLOROBENZENE	<5.0	ug/L			25.0	ug/L			3	625	
3,3-DICHLOROBENZIDINE	<5.0	ug/L			25.0	ug/L			3	625	
DIETHYL PHTHALATE	<5.0	ug/L			25.0	ug/L			3	625	
DIMETHYL PHTHALATE	<5.0	ug/L			25.0	ug/L			3	625	
2,4-DINITROTOLUENE	<5.0	ug/L			25.0	ug/L			3	625	
2,6-DINITROTOLUENE	<5.0	ug/L			25.0	ug/L			3	625	
1,2-DIPHENYLHYDRAZINE	<5.0	ug/L			25.0	ug/L			3	625	

FACILITY NAME AND PERMIT NUMBER:

*Calera Pollution Control Plant AL005 0938*

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

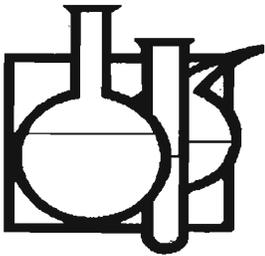
Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc	Units	Mass	Units	Conc	Units	Mass	Units	Number of Samples		
FLUORANTHENE	25.0	ug/L			25.0	ug/L			3	625	
FLUORENE	25.0	ug/L			25.0	ug/L			3	625	
HEXACHLOROBENZENE	25.0	ug/L			25.0	ug/L			3	625	
HEXACHLOROBUTADIENE	25.0	ug/L			25.0	ug/L			3	625	
HEXACHLOROCYCLO-PENTADIENE	25.0	ug/L			25.0	ug/L			3	625	
HEXACHLOROETHANE	25.0	ug/L			25.0	ug/L			3	625	
INDENO(1,2,3-CD)PYRENE	25.0	ug/L			25.0	ug/L			3	625	
ISOPHORONE	25.0	ug/L			25.0	ug/L			3	625	
NAPHTHALENE	25.0	ug/L			25.0	ug/L			3	625	
NITROBENZENE	25.0	ug/L			25.0	ug/L			3	625	
N-NITROSODI-N-PROPYLAMINE	25.0	ug/L			25.0	ug/L			3	625	
N-NITROSODI- METHYLAMINE	25.0	ug/L			25.0	ug/L			3	625	
N-NITROSODI-PHENYLAMINE	25.0	ug/L			25.0	ug/L			3	625	
PHENANTHRENE	25.0	ug/L			25.0	ug/L			3	625	
PYRENE	25.0	ug/L			25.0	ug/L			3	625	
1,2,4-TRICHLOROBENZENE	25.0	ug/L			25.0	ug/L			3	625	

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



# GUARDIAN SYSTEMS, INC.

1108 Ashville Road  
P.O. Box 190  
Leeds, Alabama 35094

Telephone (205) 699-6647  
Toll Free (866) 729-7211  
Fax (205) 699-3882

Page 1 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 05/18/2015  
Receive Date: 05/06/2015  
Receive Time: 9:10

Attention: Mr. Doug Smedley

Control No : 1505-00076 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 05/06/2015  
Sample Time: 7:00

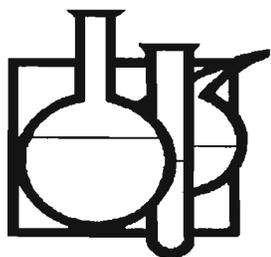
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Cyanide (Total)	<0.02	mg/L	TLB	05/06/2015	16:14	335.4	(1)
Phenolics(4AAP)	<0.04	mg/L	MJN	05/14/2015	11:40	420.1	(1)
Hardness, Total	256.	mg/L	DRH	05/11/2015	10:00	200.7	
Calcium	69.0	mg/L	DRH	05/11/2015	10:00	200.7	(1)
Magnesium	20.3	mg/L	DRH	05/11/2015	10:00	200.7	(1)
Mercury, Total	<0.001	mg/L	CFS	05/12/2015	16:15	245.7	
Cadmium	<0.02	mg/L	DRH	05/08/2015	12:30	200.7	(1)
Chromium	<0.02	mg/L	DRH	05/08/2015	12:30	200.7	(1)
Copper	<0.02	mg/L	DRH	05/08/2015	12:30	200.7	(1)
Nickel	0.002	mg/L	DRH	05/08/2015	13:00	200.8	
Silver, Total	<0.001	mg/L	DRH	05/08/2015	13:00	200.8	
Zinc	0.05	mg/L	DRH	05/08/2015	12:30	200.7	(1)
Antimony, Low Level	<0.001	mg/L	DRH	05/11/2015	10:00	200.8	
Arsenic	<0.001	mg/L	DRH	05/08/2015	13:00	200.8	
Beryllium, Low Level mg/L	<0.001	mg/L	DRH	05/11/2015	10:00	200.8	
Lead - mg/L	<0.001	mg/L	DRH	05/08/2015	13:00	200.8	
Selenium, Total	<0.001	mg/L	DRH	05/08/2015	13:00	200.8	
Thallium	<0.001	mg/L	DRH	05/11/2015	10:00	200.8	

This Certificate is Continued On Next Page.

### METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, and 22<sup>nd</sup> Edition, 2012
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# GUARDIAN SYSTEMS, INC.

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Fax (205) 699-3882

Page 2 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 05/18/2015  
Receive Date: 05/06/2015  
Receive Time: 9:10

Attention: Mr. Doug Smedley

Control No : 1505-00076    Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 05/06/2015  
Sample Time: 7:00

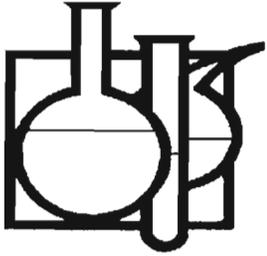
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
<b>624 VOLATILES -ug/L REGULAR</b>			CFS	05/08/2015	15:02		
Acrolein	<20.	ug/L	CFS	05/08/2015	15:02	624	(1)
Acrylonitrile	<20.	ug/L	CFS	05/08/2015	15:02	624	(1)
Benzene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Bromodichloromethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Bromoform	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Bromomethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Carbon tetrachloride	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Chlorobenzene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Chloroethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
2-Chloroethyl vinyl ether	<20.	ug/L	CFS	05/08/2015	15:02	624	(1)
Chloroform	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Chloromethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Dibromochloromethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,2-Dichlorobenzene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,3-Dichlorobenzene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,4-Dichlorobenzene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,1-Dichloroethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)

This Certificate is Continued On Next Page.

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Page 3 of 7

Calera, City of  
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Calera, AL 35040-

Report Date: 05/18/2015  
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Control No : 1505-00076 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 05/06/2015  
Sample Time: 7:00

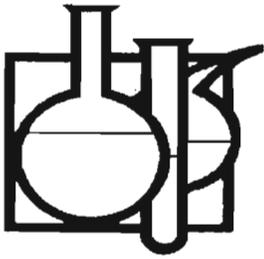
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
1,2-Dichloroethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,1-Dichloroethene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
trans-1,2-Dichloroethene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,2-Dichloropropane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
cis-1,3-Dichloropropene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
trans-1,3-Dichloropropene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Ethylbenzene(624)	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Methylene chloride	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,1,2,2-Tetrachloroethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Tetrachloroethene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Toluene(624)	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,1,1-Trichloroethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
1,1,2-Trichloroethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Trichloroethene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Trichlorofluoromethane	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
Vinyl chloride	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
o-Xylene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
m,p-Xylene	<2.0	ug/L	CFS	05/08/2015	15:02	624	(1)
<b>625 SEMI-VOL ug/L REGULAR</b>			<b>SGC</b>	<b>05/07/2015</b>	<b>13:19</b>		

This Certificate is Continued On Next Page.

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Page 4 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 05/18/2015  
Receive Date: 05/06/2015  
Receive Time: 9:10

Attention: Mr. Doug Smedley

Control No : 1505-00076 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 05/06/2015  
Sample Time: 7:00

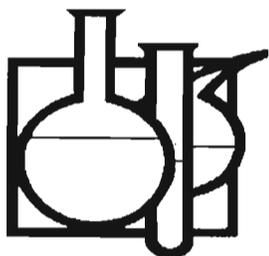
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Acenaphthene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Acenaphthylene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Anthracene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Benzo(a)anthracene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Benzo(b)fluoranthene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Benzo(k)fluoranthene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Benzo(ghi)perylene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Benzo(a)pyrene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Bis(2-chloroethoxy)methane	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Bis(2-chloroethyl)ether	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Bis(2-chloroisopropyl)ether	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Bis(2-ethylhexyl) phthalate	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
4-Bromophenyl phenyl ether	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Benzyl butyl phthalate	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
4-Chloro-3-methylphenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2-Chloronaphthalene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2-Chlorophenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
4-Chlorophenyl phenyl ether	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Chrysene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)

This Certificate is Continued On Next Page.

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Page 5 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 05/18/2015  
Receive Date: 05/06/2015  
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Attention: Mr. Doug Smedley

Control No : 1505-00076 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 05/06/2015  
Sample Time: 7:00

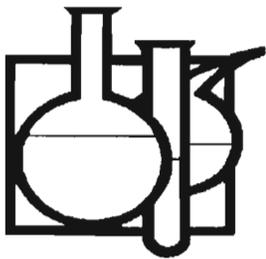
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Dibenzo(a,h)anthracene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Di-n-butyl phthalate	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
1,2-Dichlorobenzene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
1,3-Dichlorobenzene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
1,4-Dichlorobenzene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2,4-Dichlorophenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2,4-Dimethylphenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Diethyl phthalate	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Dimethyl phthalate	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
4,6-Dinitro-o-cresol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2,4-Dinitrophenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2,4-Dinitrotoluene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2,6-Dinitrotoluene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Di-n-octyl phthalate	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Fluoranthene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Fluorene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Hexachlorobenzene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Hexachlorobutadiene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Hexachlorocyclopentadiene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)

This Certificate is Continued On Next Page.

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Page 6 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 05/18/2015  
Receive Date: 05/06/2015  
Receive Time: 9:10

Attention: Mr. Doug Smedley

Control No : 1505-00076 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 05/06/2015  
Sample Time: 7:00

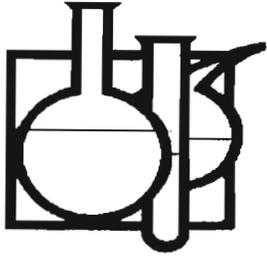
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Hexachloroethane	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Indeno(1,2,3-cd)pyrene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Isophorone	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Naphthalene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Nitrobenzene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2-Nitrophenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
4-Nitrophenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
N-Nitrosodimethylamine	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
N-Nitrosodiphenylamine	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
N-Nitrosodi-n-propylamine	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Pentachlorophenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Phenanthrene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Phenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Pyrene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
1,2,4-Trichlorobenzene	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
2,4,6-Trichlorophenol	<5.0	ug/L	SGC	05/07/2015	13:19	625	(1)
Benzidine	<10.	ug/L	SGC	05/07/2015	13:19	625	(1)

This Certificate is Continued On Next Page.

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Page 7 of 7

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10947 Hwy 25  
Calera, AL 35040-

Report Date: 05/18/2015  
Receive Date: 05/06/2015  
Receive Time: 9:10

Attention: Mr. Doug Smedley

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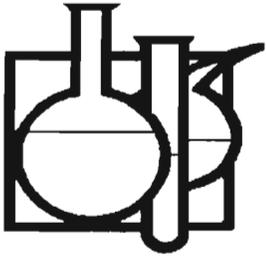
Approved By: \_\_\_\_\_

*[Handwritten Signature]*  
*[Handwritten Initials]*

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Page 1 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/14/2015  
Receive Date: 08/03/2015  
Receive Time: 12:25

Attention: Mr. Doug Smedley

Control No : 1508-00019    Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/03/2015  
Sample Time: 11:00

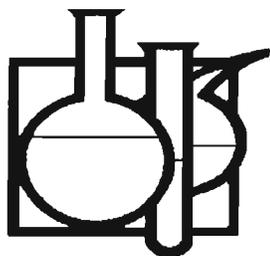
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Cyanide (Total)	<0.02	mg/L	TLB	08/06/2015	18:56	335.4	(1)
Phenolics(4AAP)	<0.04	mg/L	MJN	08/13/2015	11:15	420.1	(1)
Hardness, Total	253.	mg/L	DRH	08/04/2015	10:00	200.7	
Calcium	63.7	mg/L	DRH	08/04/2015	10:00	200.7	(1)
Magnesium	22.8	mg/L	DRH	08/04/2015	10:00	200.7	(1)
Mercury, Total	<0.001	mg/L	CFS	08/07/2015	15:45	245.7	
Cadmium	<0.02	mg/L	DRH	08/05/2015	10:00	200.7	(1)
Chromium	<0.02	mg/L	DRH	08/05/2015	10:00	200.7	(1)
Copper	<0.02	mg/L	DRH	08/05/2015	10:00	200.7	(1)
Nickel	0.002	mg/L	DRH	08/05/2015	10:00	200.8	
Silver, Total	<0.001	mg/L	DRH	08/05/2015	10:00	200.8	
Zinc	0.03	mg/L	DRH	08/05/2015	10:00	200.7	(1)
Antimony, Low Level	<0.001	mg/L	DRH	08/05/2015	10:00	200.8	
Arsenic	<0.001	mg/L	DRH	08/05/2015	10:00	200.8	
Beryllium, Low Level mg/L	<0.001	mg/L	DRH	08/05/2015	10:00	200.8	
Lead - mg/L	<0.001	mg/L	DRH	08/05/2015	10:00	200.8	
Selenium, Total	<0.001	mg/L	DRH	08/05/2015	10:00	200.8	
Thallium	<0.001	mg/L	DRH	08/05/2015	10:00	200.8	

This Certificate is Continued On Next Page.

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Page 2 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/14/2015  
Receive Date: 08/03/2015  
Receive Time: 12:25

Attention: Mr. Doug Smedley

Control No : 1508-00019 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/03/2015  
Sample Time: 11:00

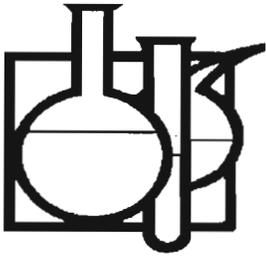
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
<b>624 VOLATILES -ug/L REGULAR</b>			CFS	08/07/2015	20:21		
Acrolein	<20.	ug/L	CFS	08/07/2015	20:21	624	(1)
Acrylonitrile	<20.	ug/L	CFS	08/07/2015	20:21	624	(1)
Benzene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Bromodichloromethane	2.	ug/L	CFS	08/07/2015	20:21	624	(1)
Bromoform	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Bromomethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Carbon tetrachloride	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Chlorobenzene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Chloroethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
2-Chloroethyl vinyl ether	<20.	ug/L	CFS	08/07/2015	20:21	624	(1)
Chloroform	37.	ug/L	CFS	08/07/2015	20:21	624	(1)
Chloromethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Dibromochloromethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,2-Dichlorobenzene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,3-Dichlorobenzene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,4-Dichlorobenzene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,1-Dichloroethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)

This Certificate is Continued On Next Page.

### METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, and 22<sup>nd</sup> Edition, 2012
3. Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3<sup>rd</sup> Edition, Updated IV December 1996
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Page 3 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/14/2015  
Receive Date: 08/03/2015  
Receive Time: 12:25

Attention: Mr. Doug Smedley

Control No : 1508-00019 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/03/2015  
Sample Time: 11:00

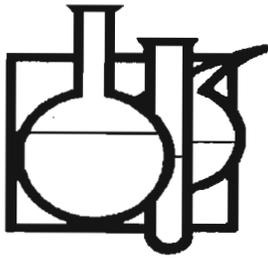
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
1,2-Dichloroethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,1-Dichloroethene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
trans-1,2-Dichloroethene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,2-Dichloropropane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
cis-1,3-Dichloropropene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
trans-1,3-Dichloropropene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Ethylbenzene(624)	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Methylene chloride	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,1,2,2-Tetrachloroethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Tetrachloroethene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Toluene(624)	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,1,1-Trichloroethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
1,1,2-Trichloroethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Trichloroethene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Trichlorofluoromethane	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
Vinyl chloride	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
o-Xylene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
m,p-Xylene	<2.0	ug/L	CFS	08/07/2015	20:21	624	(1)
<b>625 SEMI-VOL ug/L REGULAR</b>		ug/L	SGC	08/12/2015	21:25		

This Certificate is Continued On Next Page.

### METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
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Page 4 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/14/2015  
Receive Date: 08/03/2015  
Receive Time: 12:25

Attention: Mr. Doug Smedley

Control No : 1508-00019 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/03/2015  
Sample Time: 11:00

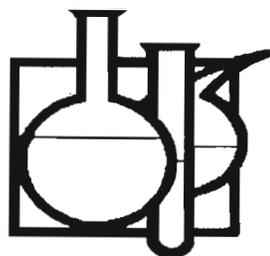
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Acenaphthene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Acenaphthylene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Anthracene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Benzo(a)anthracene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Benzo(b)fluoranthene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Benzo(k)fluoranthene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Benzo(ghi)perylene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Benzo(a)pyrene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Bis(2-chloroethoxy)methane	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Bis(2-chloroethyl)ether	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Bis(2-chloroisopropyl)ether	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Bis(2-ethylhexyl) phthalate	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
4-Bromophenyl phenyl ether	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Benzyl butyl phthalate	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
4-Chloro-3-methylphenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2-Chloronaphthalene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2-Chlorophenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
4-Chlorophenyl phenyl ether	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Chrysene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)

This Certificate is Continued On Next Page.

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Page 5 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/14/2015  
Receive Date: 08/03/2015  
Receive Time: 12:25

Attention: Mr. Doug Smedley

Control No : 1508-00019    Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/03/2015  
Sample Time: 11:00

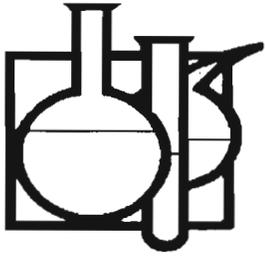
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Dibenzo(a,h)anthracene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Di-n-butyl phthalate	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
1,2-Dichlorobenzene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
1,3-Dichlorobenzene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
1,4-Dichlorobenzene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2,4-Dichlorophenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2,4-Dimethylphenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Diethyl phthalate	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Dimethyl phthalate	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
4,6-Dinitro-o-cresol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2,4-Dinitrophenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2,4-Dinitrotoluene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2,6-Dinitrotoluene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Di-n-octyl phthalate	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Fluoranthene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Fluorene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Hexachlorobenzene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Hexachlorobutadiene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Hexachlorocyclopentadiene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)

This Certificate is Continued On Next Page.

### METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, and 22<sup>nd</sup> Edition, 2012
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Page 6 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/14/2015  
Receive Date: 08/03/2015  
Receive Time: 12:25

Attention: Mr. Doug Smedley

Control No : 1508-00019 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/03/2015  
Sample Time: 11:00

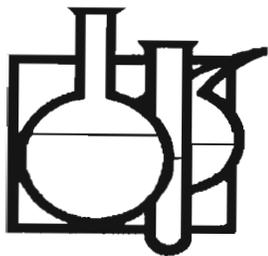
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Hexachloroethane	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Indeno(1,2,3-cd)pyrene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Isophorone	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Naphthalene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Nitrobenzene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2-Nitrophenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
4-Nitrophenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
N-Nitrosodimethylamine	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
N-Nitrosodiphenylamine	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
N-Nitrosodi-n-propylamine	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Pentachlorophenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Phenanthrene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Phenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Pyrene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
1,2,4-Trichlorobenzene	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
2,4,6-Trichlorophenol	<5.0	ug/L	SGC	08/12/2015	21:25	625	(1)
Benzidine	<10.	ug/L	SGC	08/12/2015	21:25	625	(1)

This Certificate is Continued On Next Page.

### METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
2. Standard Methods for the Examination of Water and Waste Water, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, and 22<sup>nd</sup> Edition, 2012
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Page 7 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/14/2015  
Receive Date: 08/03/2015  
Receive Time: 12:25

Attention: Mr. Doug Smedley

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Approved By: \_\_\_\_\_

*[Handwritten Signature]*  
*TMB*

#### METHOD REFERENCES

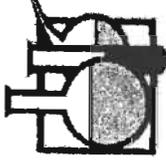
1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
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Guardian Systems, Inc.

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 email: lbrymer@gsilab.com

Chain of Custody Record/ Analysis Report

(205) 699-3882 Fax  
 www.gsilab.com



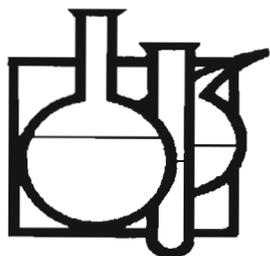
Contact: Dave Smedley Phone: (205) 965-6804  
 Company: City of Calera Fax:  
 Address: 10947 Hwy 25 P.O.#:  
 Address: Calera AL 35040 Email Address: DSmedley@calera.org  
 Project: Buxanathel AL

Sample ID	Sample Description	Sample Date	Sample Time	Sample			Sample Preservative				Analysis Requested						
				Comp.	Grab	Glass	Plastic	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Cool 4°C	Other **	CN	PRIMAL	TR CA VM	VOY YOC
1	EFF	8-3-15	1100	X	X												
2	EFF	8-3-15	1100	X	X												
3	EFF	8-3-15	1100	X	X												
4	EFF	8-3-15	1100	X	X												
5	EFF	8-3-15	1100	X	X												
6	EFF X 3	8-3-15	1100	X	X												

Sampled by: Dave Smedley Relinquished by: Dave Smedley Date: 8-3-15 Time: 11:11  
 Received by: Dave Smedley Date: 03 Aug 15 Time: 11:11 Relinquished by: Dave Smedley Date: 03 Aug 15 Time: 12:05  
 Received by: Dave Smedley Date: 03 Aug 15 Time: 11:11 Relinquished by: Dave Smedley Date: 03 Aug 15 Time: 12:05  
 Received for Laboratory by: Dave Smedley Date: 03 Aug 15 Time: 11:11  
 Was Shipped Container intact when received? Yes  No  Seals intact? Yes  No   
 Were all samples properly preserved? Yes  No  Sample temp. 4 °C

Time On Site -  
 Time Off Site -  
 Comments: MEALS: Hg, Cd, Cr, Cu, Ni, Ag, Zn, Pb, As, Bx, Po, Se, Tl

Put an "X" in the appropriate column for sample type and sample preservative. Write in analysis requested.  
 \* For composite samples include start and stop date and time in comments section \*\*Write in preservative used in comments



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Page 1 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/26/2015  
Receive Date: 08/19/2015  
Receive Time: 9:59

Attention: Mr. Doug Smedley

Control No : 1508-00243 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/19/2015  
Sample Time: 8:00

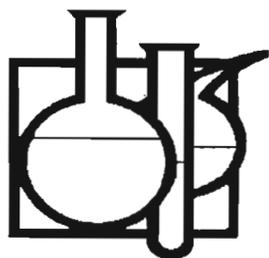
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Cyanide (Total)	<0.02	mg/L	TLB	08/23/2015	19:18	335.4	(1)
Phenolics(4AAP)	<0.04	mg/L	MJN	08/24/2015	14:15	420.1	(1)
Hardness, Total	259.	mg/L	DRH	08/20/2015	11:00	200.7	
Calcium	66.0	mg/L	DRH	08/20/2015	11:00	200.7	(1)
Magnesium	23.	mg/L	DRH	08/20/2015	11:00	200.7	(1)
Mercury, Total	<0.001	mg/L	CFS	08/21/2015	12:45	245.7	
Cadmium	<0.02	mg/L	DRH	08/21/2015	14:00	200.7	(1)
Chromium	<0.02	mg/L	DRH	08/21/2015	14:00	200.7	(1)
Copper	<0.02	mg/L	DRH	08/21/2015	14:00	200.7	(1)
Nickel	0.002	mg/L	DRH	08/21/2015	13:00	200.8	
Silver, Total	<0.001	mg/L	DRH	08/21/2015	13:00	200.8	
Zinc	0.03	mg/L	DRH	08/21/2015	14:00	200.7	(1)
Antimony, Low Level	<0.001	mg/L	DRH	08/21/2015	13:00	200.8	
Arsenic	<0.001	mg/L	DRH	08/21/2015	13:00	200.8	
Beryllium, Low Level mg/L	<0.001	mg/L	DRH	08/21/2015	13:00	200.8	
Lead - mg/L	<0.001	mg/L	DRH	08/21/2015	13:00	200.8	
Selenium, Total	<0.001	mg/L	DRH	08/21/2015	13:00	200.8	
Thallium	<0.001	mg/L	DRH	08/21/2015	13:00	200.8	

This Certificate is Continued On Next Page.

### METHOD REFERENCES

1. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993 May 1994
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5. Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
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Toll Free (866) 729-7211  
Fax (205) 699-3882

Page 2 of 7

Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

Report Date: 08/26/2015  
Receive Date: 08/19/2015  
Receive Time: 9:59

Attention: Mr. Doug Smedley

Control No : 1508-00243 Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/19/2015  
Sample Time: 8:00

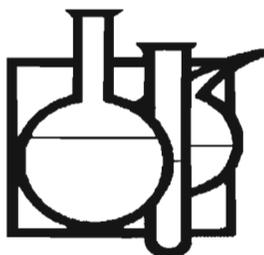
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
<b>624 VOLATILES -ug/L REGULAR</b>			CFS	08/23/2015	22:07		
Acrolein	<20.	ug/L	CFS	08/23/2015	22:07	624	(1)
Acrylonitrile	<20.	ug/L	CFS	08/23/2015	22:07	624	(1)
Benzene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Bromodichloromethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Bromoform	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Bromomethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Carbon tetrachloride	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Chlorobenzene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Chloroethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
2-Chloroethyl vinyl ether	<20.	ug/L	CFS	08/23/2015	22:07	624	(1)
Chloroform	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Chloromethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Dibromochloromethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,2-Dichlorobenzene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,3-Dichlorobenzene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,4-Dichlorobenzene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,1-Dichloroethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)

This Certificate is Continued On Next Page.

### METHOD REFERENCES

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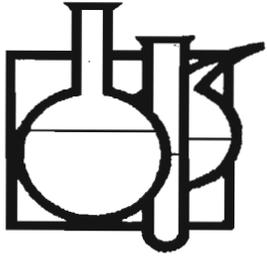
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
1,2-Dichloroethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,1-Dichloroethene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
trans-1,2-Dichloroethene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,2-Dichloropropane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
cis-1,3-Dichloropropene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
trans-1,3-Dichloropropene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Ethylbenzene(624)	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Methylene chloride	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,1,2,2-Tetrachloroethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Tetrachloroethene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Toluene(624)	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,1,1-Trichloroethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
1,1,2-Trichloroethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Trichloroethene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Trichlorofluoromethane	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
Vinyl chloride	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
o-Xylene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
m,p-Xylene	<2.0	ug/L	CFS	08/23/2015	22:07	624	(1)
<b>625 SEMI-VOL ug/L REGULAR</b>		ug/L	SGC	08/21/2015	15:01		

This Certificate is Continued On Next Page.

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Calera, AL 35040-

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Control No : 1508-00243    Sample # 001  
Sampler : DS  
Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/19/2015  
Sample Time: 8:00

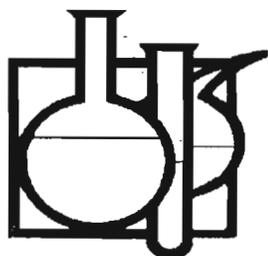
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Acenaphthene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Acenaphthylene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Anthracene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Benzo(a)anthracene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Benzo(b)fluoranthene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Benzo(k)fluoranthene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Benzo(ghi)perylene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Benzo(a)pyrene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Bis(2-chloroethoxy)methane	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Bis(2-chloroethyl)ether	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Bis(2-chloroisopropyl)ether	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Bis(2-ethylhexyl) phthalate	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
4-Bromophenyl phenyl ether	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Benzyl butyl phthalate	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
4-Chloro-3-methylphenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2-Chloronaphthalene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2-Chlorophenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
4-Chlorophenyl phenyl ether	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Chrysene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)

This Certificate is Continued On Next Page.

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Calera, City of  
10947 Hwy 25  
Calera, AL 35040-

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Control No : 1508-00243 Sample # 001  
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Sample ID: Buxahatchee Permit Renewal

Sample Date: 08/19/2015  
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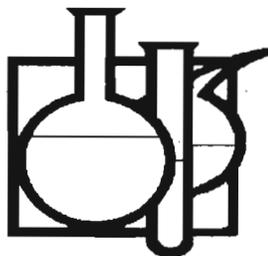
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Dibenzo(a,h)anthracene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Di-n-butyl phthalate	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
1,2-Dichlorobenzene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
1,3-Dichlorobenzene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
1,4-Dichlorobenzene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2,4-Dichlorophenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2,4-Dimethylphenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Diethyl phthalate	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Dimethyl phthalate	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
4,6-Dinitro-o-cresol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2,4-Dinitrophenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2,4-Dinitrotoluene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2,6-Dinitrotoluene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Di-n-octyl phthalate	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Fluoranthene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Fluorene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Hexachlorobenzene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Hexachlorobutadiene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Hexachlorocyclopentadiene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)

This Certificate is Continued On Next Page.

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10947 Hwy 25  
Calera, AL 35040-

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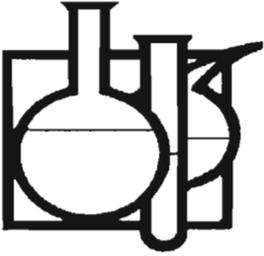
## Laboratory Certificate

PARAMETER	RESULTS	UNITS	ANALYST	DATE	TIME	METHOD	REF
Hexachloroethane	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Indeno(1,2,3-cd)pyrene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Isophorone	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Naphthalene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Nitrobenzene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2-Nitrophenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
4-Nitrophenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
N-Nitrosodimethylamine	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
N-Nitrosodiphenylamine	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
N-Nitrosodi-n-propylamine	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Pentachlorophenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Phenanthrene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Phenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Pyrene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
1,2,4-Trichlorobenzene	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
2,4,6-Trichlorophenol	<5.0	ug/L	SGC	08/21/2015	15:01	625	(1)
Benzidine	<10.	ug/L	SGC	08/21/2015	15:01	625	(1)

This Certificate is Continued On Next Page.

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Approved By: \_\_\_\_\_

TMS

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# Chain of Custody Record/ Analysis Report



Client: David J. Bradley, III  
City of Calera, Alabama

Phone: (205) 668-3860  
 Fax:

P.O.#:

Email Address: Dmedley@calera.org  
 Project: Dixie Watcher Format Renewal

Sample ID	Sample Description	Sample Date	Sample Time	Sample			Bottle				Sample Preservative				Analysis Requested				
				Comp	Cap	Seal	Plastic	Glass	HCl	H <sub>2</sub> O <sub>2</sub>	H <sub>2</sub> O	NH <sub>4</sub>	Color	Other	625	624	623	622	621
1	EFF	8-19-15	08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	EFF	8-19-15	08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	EFF	8-19-15	08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	EFF	8-19-15	08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	EFF	8-19-15	08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Received by: David Bradley Date: 8-19-15 Time: 08:00  
 Relinquished by: Lori Brymer Date: 8-19-15 Time: 08:55  
 Reiminished by: David Bradley Date: 8-19-15 Time: 08:55  
 Relinquished by: Lori Brymer Date: 8-19-15 Time: 08:55

Received for Laboratory by: Lori Brymer Date: 8-19-15 Time: 08:55  
 Has Shipped Container Intact when received? Yes  No   
 Were all samples properly preserved? Yes  No   
 Initials: LB Sample temp. 4 °C

Comments:  
 Time On Site: \_\_\_\_\_  
 Time Off Site: \_\_\_\_\_

Print an "X" in the appropriate column for sample type and sample preservative. Write in analysis requested.  
 For composite samples include start and stop date and time in comments section. \*\*Write in preservative used in comments.

Clara Pollution Control Plant AL0050938

**SUPPLEMENTAL APPLICATION INFORMATION**

**PART E. TOXICITY TESTING DATA**

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

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

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

**E.1. Required Tests.**

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

5 chronic      5 acute

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

Test number: 1      Test number: 2      Test number: 3

a. Test information.

Test species & test method number	<u>Ceriodaphnia dubia Pimephales promelas</u>	<u>Ceriodaphnia dubia Pimephales promelas</u>	<u>Ceriodaphnia dubia Pimephales promelas</u>
Age at initiation of test	<u>24 HOURS</u>	<u>24 HRS</u>	<u>24 HRS</u>
Outfall number	<u>001</u>	<u>001</u>	<u>001</u>
Dates sample collected	<u>11-9-10</u>	<u>11-13-11</u>	<u>11-6-12</u>
Date test started	<u>11-10-10</u>	<u>11-14-11</u>	<u>11-7-12</u>
Duration	<u>5 DAYS</u>	<u>5 DAYS</u>	<u>5 DAYS</u>

b. Give toxicity test methods followed.

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

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

24-Hour composite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Grab			

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

Before disinfection			
After disinfection			
After dechlorination	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

FACILITY NAME AND PERMIT NUMBER:

Cakra Pollution Control Plant AL0050938

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

Test number: 1

Test number: 2

Test number: 3

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

Sample was collected:	EFFLUENT AFTER DECHLORINATION	EFFLUENT AFTER DECHLORINATION	EFFLUENT AFTER DECHLORINATION
-----------------------	-------------------------------	-------------------------------	-------------------------------

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

Chronic toxicity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Acute toxicity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Receiving water			

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

Fresh water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Salt water			

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

	88 %	88 %	88 %

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 <sub>50</sub>	7.34	6.89	7.45
95% C.I.	6.99 %	6.56 %	7.10 %
Control percent survival			
Other (describe)			

FACILITY NAME AND PERMIT NUMBER:

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

Celera Pollution Control Plant AL0050938

Chronic:

NOEC	%	%	%
IC <sub>25</sub>	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

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

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

Yes  No  If yes, describe: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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

Date submitted: \_\_\_\_\_ (MM/DD/YYYY)

Summary of results: (see instructions)  
 \_\_\_\_\_  
 \_\_\_\_\_

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

**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 PERMIT SECTION  
POST OFFICE BOX 301463  
MONTGOMERY, ALABAMA 36130-1463

**INSTRUCTIONS:** APPLICATIONS SHOULD BE TYPED OR PRINTED IN INK AND SUBMITTED TO THE DEPARTMENT. 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**

- |  |   |
|--|---|
| <input type="checkbox"/> INITIAL PERMIT APPLICATION FOR NEW FACILITY | <input type="checkbox"/> INITIAL PERMIT APPLICATION FOR EXISTING FACILITY |
| <input type="checkbox"/> MODIFICATION OF EXISTING PERMIT             | <input checked="" type="checkbox"/> REISSUANCE OF EXISTING PERMIT         |
| <input type="checkbox"/> REVOCATION & REISSUANCE OF EXISTING PERMIT  |   |

**SECTION A – GENERAL INFORMATION**

1. Facility Name: Buxahatchee Pollution Control Plant
- a. Operator Name: City of Calera, Alabama
- b. Is the operator identified in 1.a, the owner of the facility?      Yes       No   
If no, provide name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.
- c. Name of Permittee\* if different than Operator: \_\_\_\_\_  
*\*Permittee will be responsible for compliance with the conditions of the permit*
2. NPDES Permit Number: AL 0050938 (Not applicable if initial permit application)
3. Facility Location: (Attach a map with location marked; street, route no. or other specific identifier)
- Street: 2273 9th Street
- City: Calera      County: Shelby      State: AL      Zip: 35040
- Facility (Front Gate) Location: Latitude (Deg Min Sec): 33 05 27      Longitude (Deg. Min Sec): 86 44 47
4. Facility Mailing Address (Street or Post Office Box): 10947 HWY 25
- City: Calera      County: Shelby      State: AL      Zip: 35040
5. Responsible Official (as described on page 6 of this application):
- Name and Title: Jon Graham, Mayor
- Address: 10947 Hwy 25
- City: Calera      State: AL      Zip: 35040
- Phone Number: (205) 668-3500
- Email Address: (Optional): \_\_\_\_\_

6. Designated Facility/DMR Contact:

Name and Title: Don Smedley Jr, Director

Phone Number: (205) 668-3880

DMR Email Address (Optional - for receipt of blank DMR Forms): DSmedley@Calera.org

7. Designated Emergency Contact:

Name and Title: Don Smedley Jr, Director

Phone Number: (205) 668-3880

Email Address (Required): DSmedley@Calera.org

8. 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: \_\_\_\_\_

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

Permit Name	Permit Number	Held by
<u>Camp Branch WRF</u>	<u>AL0074608</u>	<u>City of Calera</u>
_____	_____	_____
_____	_____	_____

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

Facility Name	Permit Number	Type of Action	Date of Action
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**SECTION B – WASTEWATER DISCHARGE INFORMATION**

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

Outfall Number	Highest in Last 12 Months MGD	Highest Daily Flow MGD	Average Flow MGD
001	1.419	3.567	0.988

2. Attach 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
	Sampling Equipment	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Planned:	Flow Metering	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
	Sampling Equipment	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>

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:

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

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

installing either membranes or advanced filtration to achieve required phosphorus removal rates

**SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION**

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

Description of Waste	Description of Storage Location
None	None

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*
Biosolids	1,800 lbs/day	off site, Shelby County Land Fill

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

**SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS**

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
NONE	NONE	NONE		NONE

2. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance? Yes  No   
If so, please attach a copy of the ordinance.

**SECTION E – COASTAL ZONE INFORMATION**

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County?  
Yes  No  If yes, then complete items A through M below:

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

**SECTION F – ANTI-DEGRADATION EVALUATION**

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

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

If "no" and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete questions A through F below, ADEM Form 311-Alternatives Analysis, and either ADEM Form 312 or ADEM Form 313-Calculation of Total Annualized Project Costs (Public-Sector or Private-Sector Projects, whichever is applicable). ADEM Form 312 or ADEM Form 313, whichever is applicable, must be provided for each treatment discharge alternative considered technically viable. ADEM forms can be found on the Department's website at [www.adem.alabama.gov/DeptForms](http://www.adem.alabama.gov/DeptForms). 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 G – 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 [www.adem.alabama.gov/programs/water](http://www.adem.alabama.gov/programs/water). The required ADEM and EPA forms are summarized in Attachment 1.

**SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS**

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

**SECTION I– RECEIVING WATERS**

Receiving Water(s)	303(d) Segment? (Y / N)	Included in TMDL?*
Buxahatchee Creek	N	N

\*If a TMDL Compliance Schedule is requested the following should be attached as supporting documentation: (1) Justification for the proposed Compliance Schedule (e.g. time for design and installation of control equipment, etc.); (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be reported as available); (3) Requested interim limitations, if applicable; (4) Date of final compliance with the TMDL limitations; and (5) Any other additional information available to support the requested compliance schedule.

**SECTION J – APPLICATION CERTIFICATION**

THE INFORMATION CONTAINED IN THIS FORM MUST BE CERTIFIED BY A RESPONSIBLE OFFICIAL AS DEFINED IN ADEM ADMINISTRATIVE 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 RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

"I 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: Jon Graham DATE SIGNED: 11.24.2015

(TYPE OR PRINT)

NAME OF RESPONSIBLE OFFICIAL: Jon Graham

OFFICIAL TITLE OF RESPONSIBLE OFFICIAL: Mayor

MAILING ADDRESS: 10947 Hwy 25 Calera AL 35040

AREA CODE & PHONE NUMBER: (205) 668-3500

**SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS**

Responsible official is defined as follows:

1. In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility
2. In the case of a partnership, by a general partner
3. In the case of a sole proprietorship, by the proprietor, or
4. In the case of a municipal, state, federal, or other public facility, by either a principal executive officer, or a ranking elected official.
5. 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.

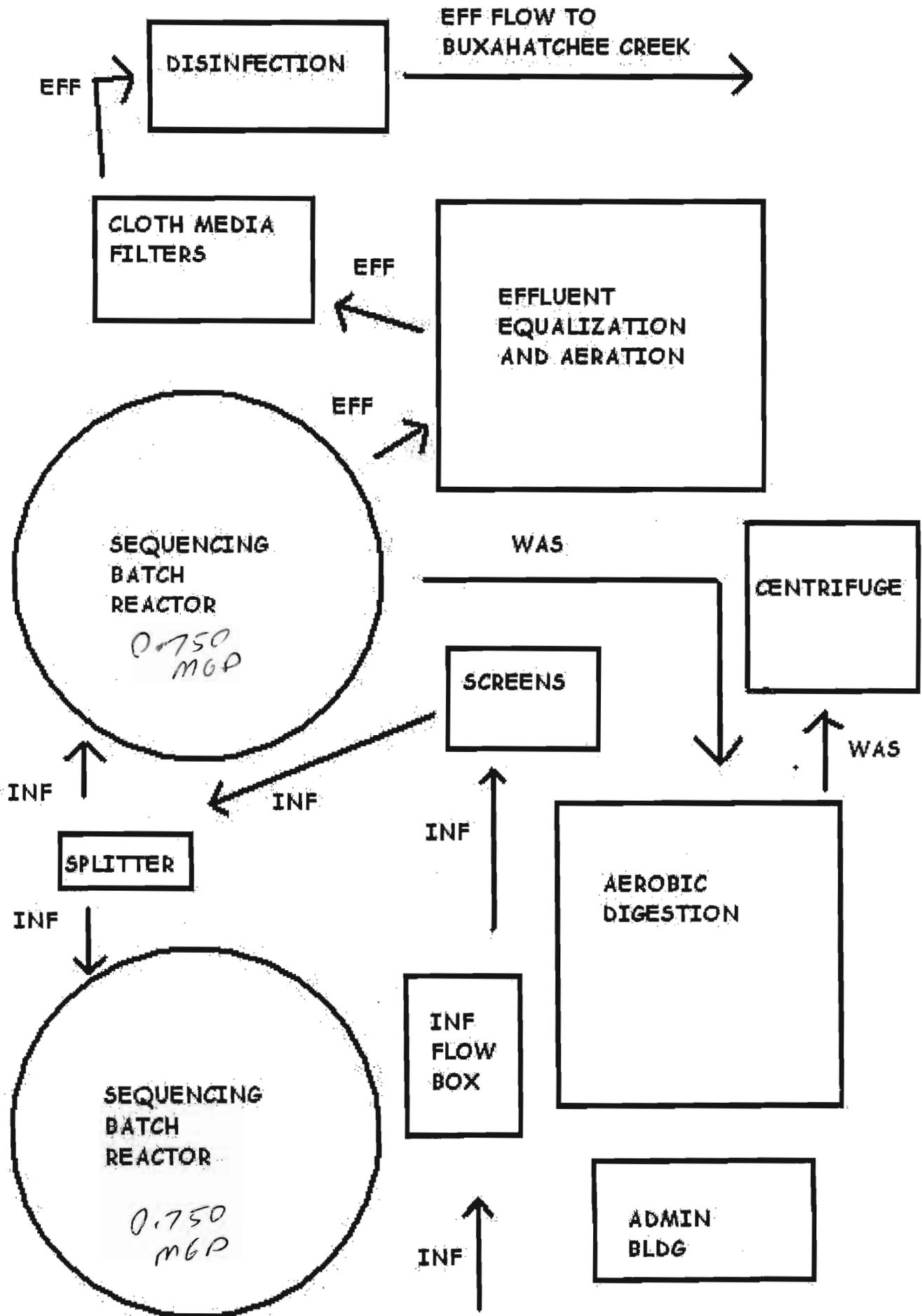
# Attachment 1 to Supplementary Information Form

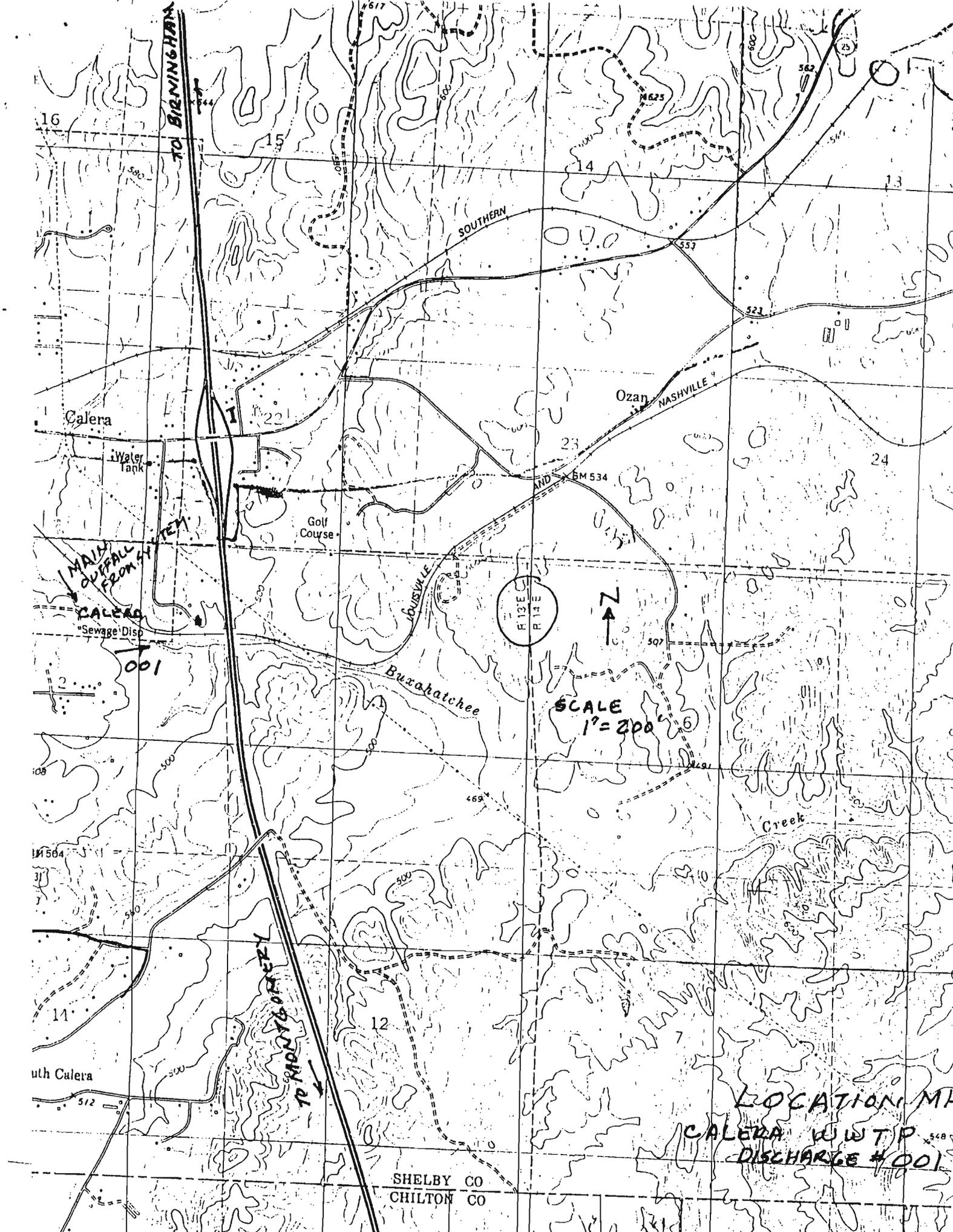
**NPDES PROGRAM  
PERMIT APPLICATION FORMS  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

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 and privately owned domestic treatment works should 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, 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 (Industrial)	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, 2A, and 2F

Testing requirements: Test procedures for all analyses shall conform to 40 CFR Part 136 or an alternate method specifically approved by the Department. If more than one method of analysis is approved, then the method having the lowest detection level shall be used.

# CALERA POLLUTION CONTROL PLANT





Calera

Water Tank

Golf Course

CALERA Sewage Disp

001

2

IN 504

11

uth Calera

512

TO BIRMINGHAM

TO MONTGOMERY

SOUTHERN

Ozark

NASHVILLE

LOUISVILLE

Burbachtee

Creek

RICE POND

SCALE 1" = 200'

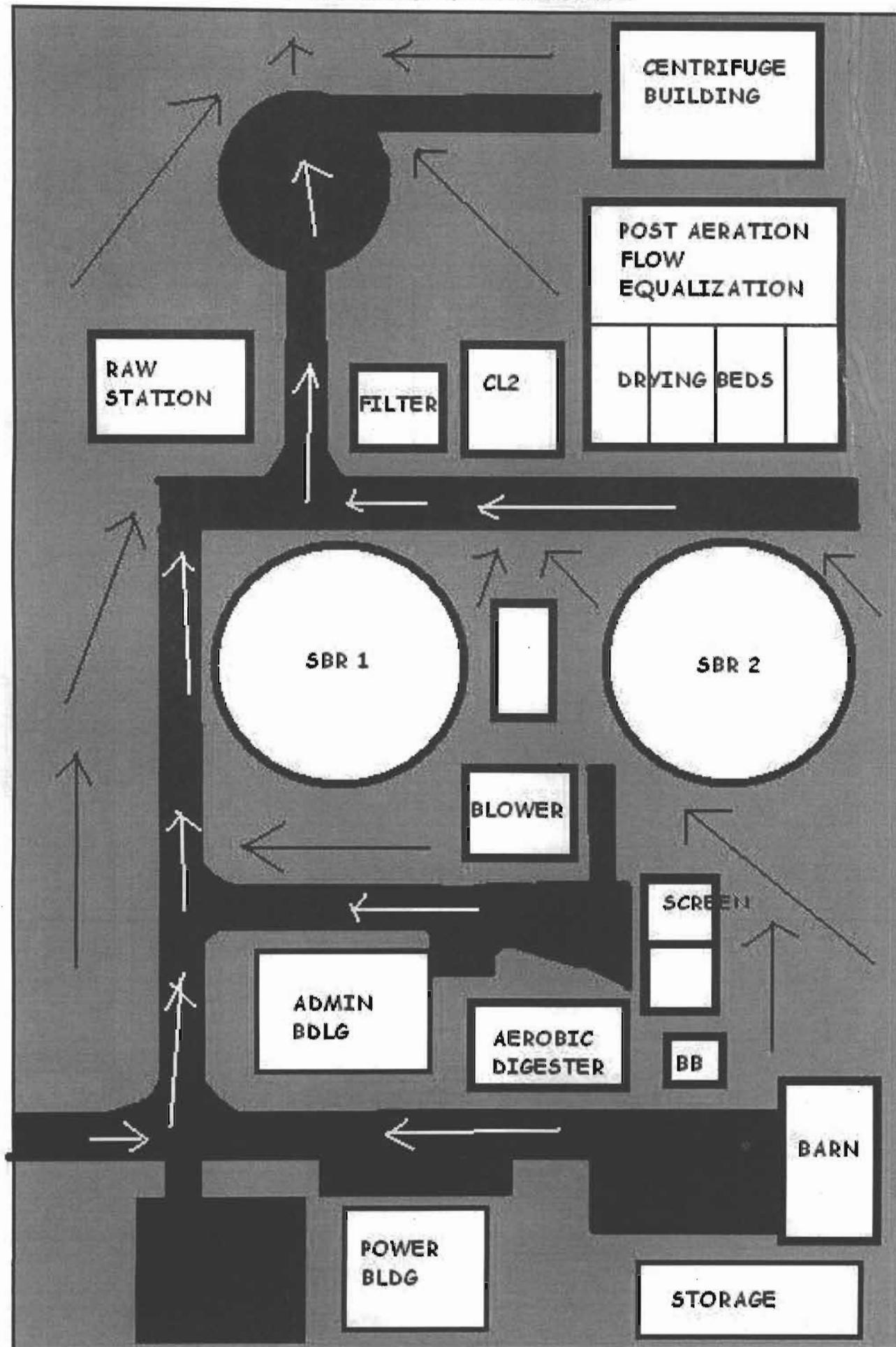
N

SHELBY CO  
CHILTON CO

LOCATION MA  
CALERA WWTTP  
DISCHARGE #001



# BUXAHATCHEE STORM DRAINAGE FLOW



**IV. Narrative Description of Pollutant Sources**

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

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
001	1.40 acres	9.75 acres			

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

Chlorine & sulfur dioxide gas are stored on premises. Potential contact is limited as they are stored in buildings. Dried biosolids are also located on premises, in concrete basins with wooden & sand dams.

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
001	NONE	

**V. Nonstormwater Discharges**

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

Name and Official Title (type or print)	Signature	Date Signed
JON GRAHAM MAYOR		

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.

NONE

**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.

NONE

Continued from Page 2

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 IX)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Guardian Systems	1108 Ashville Rd Leeds, ALA 35094	35094 (205) 699- 6647	

**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) Jon Graham, Mayor	B. Area Code and Phone No. (205) 668-3500
C. Signature Jon Graham	D. Date Signed 6.29.2015



