

## Caldwell, Mattie

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**Subject:** FW: Draft Permit - Central School WWTP  
**Attachments:** 7808 AL0048810 089 01-14-2020 DPER MFC REVISED.pdf

**From:** Lowe, Nicholas  
**Sent:** Tuesday, January 14, 2020 10:53 AM  
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**Cc:** Anderson, Emily D <[EDAnderson@adem.alabama.gov](mailto:EDAnderson@adem.alabama.gov)>  
**Subject:** Draft Permit - Central School WWTP

Grady and Mr. Cuzzort,

Attached is the revised version of the draft permit for the Central School WWTP. Please note that the permit limits table and the rationale has been edited to include 8-hour composite testing for CBOD, TSS, NH-3 and nutrient parameters.

If you have any questions regarding this matter please let me know,

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*Did you know you can submit your DMRs and SSOs online using our newly enhanced E2 DMR/SSO Reporting System? To sign up and learn more, please visit the Department's E2 Reporting System webpage [here](#).*



# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: MADISON COUNTY BOARD OF EDUCATION  
POST OFFICE BOX 226  
HUNTSVILLE, ALABAMA 35804

FACILITY LOCATION: CENTRAL SCHOOL WWTP (0.015 MGD)  
990 RYLAND PIKE  
HUNTSVILLE, ALABAMA  
MADISON COUNTY

PERMIT NUMBER: AL0048810

RECEIVING WATERS: FLINT RIVER

*In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1388 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-17, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

## Draft

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Alabama Department of Environmental Management

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

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**PART I****DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS****A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS****1. Outfall 0012 Discharge Limits - Treated Domestic Wastewater**

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0012, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	<u>Discharge Limitations*</u>							<u>Monitoring Requirements**</u>			
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	<u>(1) Sample Location</u>	<u>(2) Sample Type</u>	<u>(3) Measurement Frequency</u>	<u>(4) Seasonal</u>
pH 00400 I 0 0	*****	*****	*****	*****	6.0 S.U.	9.0 S.U.	*****	E	GRAB	G	*****
Solids, Total Suspended 00530 I 0 0	3.7 lbs/day	5.6 lbs/day	30.0 mg/l	45.0 mg/l	*****	*****	*****	E	COMP-8	G	*****
Solids, Total Suspended 00530 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP-8	G	*****
Nitrogen, Ammonia Total (As N) 00610 I 0 0	2.5 lbs/day	3.7 lbs/day	20.0 mg/l	30.0 mg/l	*****	*****	*****	E	COMP-8	G	*****
Nitrogen, Kjeldahl Total (As N) 00625 I 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP-8	G	S
Nitrite Plus Nitrate Total I Det. (As N) 00630 I 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP-8	G	S
Phosphorus, Total (As P) 00665 I 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP-8	G	S
Flow, In Conduit or Thru Treatment Plant 50050 I 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	INSTAN	G	*****
Chlorine, Total Residual See note (5) 50060 I 0 0	*****	*****	*****	*****	*****	1.0 mg/l	*****	E	GRAB	G	*****
E. Coli 51040 I 0 0	*****	*****	126 col/100mL	*****	*****	298 col/100mL	*****	E	GRAB	G	ECS
E. Coli 51040 I 0 0	*****	*****	548 col/100mL	*****	*****	2507 col/100mL	*****	E	GRAB	G	ECW
BOD, Carbonaceous 05 Day, 20C 80082 I 0 0	3.1 lbs/day	4.6 lbs/day	25.0 mg/l	37.5 mg/l	*****	*****	*****	E	COMP-8	G	*****
BOD, Carbonaceous 05 Day, 20C 80082 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP-8	G	*****
BOD, Carb-5 Day, 20 Deg C, Percent Remvl 80091 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G	*****
Solids, Suspended Percent Removal 81011 K 0 0	*****	*****	*****	*****	*****	*****	65.0%	K	CALCTD	G	*****

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

\*\* Monitoring Requirements

**(1) Sample Location**

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

**(2) Sample Type:**

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

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

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

**(4) Seasonal Limits:**

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

(5) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter “\*9” or “NODI=9” (if hard copy) on the monthly DMR.

**B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS****1. Representative Sampling**

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

**2. Measurement Frequency**

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

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

**3. Test Procedures**

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

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

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

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

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

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

#### 4. Recording of Results

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

- a. The facility name and location, point source number, date, time and exact place of sampling;
- b. The name(s) of person(s) who obtained the samples or measurements;
- c. The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses;
- e. The analytical techniques or methods used, including source of method and method number; and
- f. The results of all required analyses.

#### 5. Records Retention and Production

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

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

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

#### 7. Monitoring Equipment and Instrumentation

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

### C. DISCHARGE REPORTING REQUIREMENTS

#### 1. Reporting of Monitoring Requirements

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

- (1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.
- (2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should

be reported on the last DMR due for the quarter (i.e. March, June, September and December DMRs).

- (3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e. June and December DMRs).
  - (4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.
- b. The permittee shall submit Discharge Monitoring Reports (DMRs) in accordance with the following schedule:
- (1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
  - (2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
  - (3) **REPORTS OF SEMIANNUAL TESTING** shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
  - (4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, the first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period, unless otherwise directed by the Department.
- c. Except as allowed by Provision I.C.1.c.(1) or (2), the permittee shall submit all Discharge Monitoring Reports (DMRs) required by Provision I.C.1.b. by utilizing the Department's web-based Electronic Environmental (E2) Reporting System.
- (1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's E2 Reporting System (this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the date specified in Provision I.C.1.b., unless otherwise directed by the Department.

If the E2 Reporting System is down on the 28<sup>th</sup> day of the month in which the DMR is due or is down for an extended period of time, as determined by the Department, when a DMR is required to be submitted, the permittee may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 Reporting System resuming operation, the permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date), if applicable.
  - (2) The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee



name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.

A permittee with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The permittee shall submit the Department-approved DMR forms to the address listed in Provision I.C.1.e.

- (3) If a permittee is allowed to submit a hard copy DMR, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit.
  - (4) If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A. of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR and the increased frequency shall be indicated on the DMR.
  - (5) In the event no discharge from a point source identified in Provision I.A. of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR.
- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and Regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

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

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

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

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

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

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

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

Certified and Registered Mail shall be addressed to:

**Alabama Department of Environmental Management  
Municipal Section, Water Division**

**1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2400**

- g. If this permit is a re-issuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b. above.
2. Noncompliance Notifications and Reports
- a. The Permittee shall notify the Department if, for any reason, the Permittee's discharge:
- (1) Does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I.A. of this permit which is denoted by an "(X)";
  - (2) Potentially threatens human health or welfare;
  - (3) Threatens fish or aquatic life;
  - (4) Causes an in-stream water quality criterion to be exceeded;
  - (5) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
  - (6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
  - (7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A. as a result of an unanticipated bypass or upset; or
  - (8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state. (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision.)
- The Permittee shall orally or electronically provide notification of any of the above occurrences, describing the circumstances and potential effects, to the Director or Designee within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic notification, the Permittee shall submit a report to the Director or Designee, as provided in Provision I.C.2.c. or I.C.2.e., no later than five days after becoming aware of the occurrence of such discharge or occurrence.
- b. If, for any reason, the Permittee's discharge does not comply with any limitation of this permit, then the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c below. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Provision I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.
- c. Except for notifications and reports of notifiable SSOs which shall be submitted in accordance with the applicable Provisions of this permit, the Permittee shall submit the reports required under Provisions I.C.2.a. and b. to the Director or Designee on ADEM Form 421, available on the Department's website (<http://www.adem.state.al.us/DeptForms/Form421.pdf>). The completed Form must document the following information:
- (1) A description of the discharge and cause of noncompliance;
  - (2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If the noncompliance is not corrected by the due date of the written report, then the Permittee shall provide an estimated date by which the noncompliance will be corrected; and
  - (3) A description of the steps taken by the Permittee and the steps planned to be taken by the Permittee to reduce or eliminate the noncompliant discharge and to prevent its recurrence.
- d. Immediate notification

The Permittee shall provide notification to the Director, the public, the county health department, and any other affected entity such as public water systems, as soon as possible upon becoming aware of any notifiable sanitary sewer overflow. Notification to the Director shall be completed utilizing the

Department's web-based electronic environmental SSO reporting system in accordance with Provision I.C.2.e.

- e. The Department is utilizing a web-based electronic environmental (E2) reporting system for notification and submittal of SSO reports. **If the Permittee is not already participating in the E2 Reporting System for SSO reports, the Permittee must apply for participation in the system within 30 days of coverage under this permit unless the Permittee submits in writing valid justification as to why it cannot participate and the Department approves in writing utilization of verbal notifications and hard copy SSO report submittals.** Once the Permittee is enrolled in the E2 Reporting System for SSO reports, the Permittee must utilize the system for notification and submittal of all SSO reports unless otherwise allowed by this permit. The Permittee shall include in the SSO reports the information requested by ADEM Form 415. In addition, the Permittee shall include the latitude and longitude of the SSO in the report except when the SSO is a result of an extreme weather event (e.g., hurricane). To participate in the E2 Reporting System for SSO reports, the Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes>. If the E2 Reporting System is down (i.e., electronic submittal of SSO data cannot be completed due to technical problems originating with the Department's system), the Permittee is not relieved of its obligation to notify the Department or submit SSO reports to the Department by the required submittal date, and the Permittee shall submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include verbal reports, reports submitted via the SSO hotline, or reports submitted via fax, e-mail, mail, or hand-delivery such that they are received by the required reporting date. Within five calendar days of the E2 Reporting System resuming operation, the Permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. For any alternate notification, records of the date, time, notification method, and person submitting the notification should be maintained by the Permittee. If a Permittee is allowed to submit SSO reports via an alternate method, the SSO report must be in a format approved by the Department and must be legible.

#### **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**

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

#### **3. Certified Operator**

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

### **B. OTHER RESPONSIBILITIES**

#### **1. Duty to Mitigate Adverse Impacts**

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

#### **2. Right of Entry and Inspection**

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

### **C. BYPASS AND UPSET**

#### **1. Bypass**

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:

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

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

- 1. Duty to Comply
  - a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, 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; or

5. Termination

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

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

6. Suspension

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

7. Stay

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

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

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

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

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

**H. PROHIBITIONS**

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

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

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

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

1. Tampering

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

2. False Statements

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

3. Permit Enforcement

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

4. Relief from Liability

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

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

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

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

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, state, or local laws or regulations, nor does it authorize or approve the construction of

any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.

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

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

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

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

#### **F. COMPLIANCE WITH WATER QUALITY STANDARDS**

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

#### **G. GROUNDWATER**

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

## H. DEFINITIONS

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

23. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
25. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category “Division D – Manufacturing” and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. MGD – means million gallons per day.
27. Monthly Average – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.
28. New Discharger – means a person, owning or operating any building, structure, facility or installation:
  - a. From which there is or may be a discharge of pollutants;
  - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and
  - c. Which has never received a final effective NPDES permit for dischargers at that site.
29. NH3-N – means the pollutant parameter ammonia, measured as nitrogen.
30. Notifiable sanitary sewer overflow – means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
  - a. Reaches a surface water of the State; or
  - b. May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
31. Permit application – means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.
32. Point source – means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
33. Pollutant – includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
34. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a “POTW”.
35. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
36. Receiving Stream – means the “waters” receiving a “discharge” from a “point source”.
37. Severe property damage – means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
38. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work’s capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
40. TON – means the pollutant parameter Total Organic Nitrogen.
41. TRC – means Total Residual Chlorine.

42. TSS – means the pollutant parameter Total Suspended Solids.
43. 24HC – means 24-hour composite sample, including any of the following:
- a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
  - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
  - c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
44. Upset – means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
45. Waters – means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground, or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
46. Week – means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
47. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

## **I. SEVERABILITY**

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

## **PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS**

### **A. SLUDGE MANAGEMENT PRACTICES**

#### **1. Applicability**

- a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.
- b. Provisions of Provision IV.A. do not apply to:
  - (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.
  - (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.

#### **2. Submitting Information**

- a. If applicable, the permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:
  - (1) Type of sludge stabilization/digestion method;
  - (2) Daily or annual sludge production (dry weight basis);
  - (3) Ultimate sludge disposal practice(s).
- b. The permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.
- c. The permittee shall give prior notice to the Director of at least 30 days of any change planned in the permittee's sludge disposal practices.

#### **3. Reopener or Modification**

- a. Upon review of information provided by the permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.
- b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit, this permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

### **B. EFFLUENT TOXICITY TESTING REOPENER**

Upon notification under Part II.G. of any newly introduced toxic industrial wastewaters, the Director may reopen the permit to include effluent toxicity limitations and testing requirements.

### **C. SANITARY SEWER OVERFLOW RESPONSE PLAN**

#### **1. SSO Response Plan**

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

- a. General Information:
  - (1) Approximate population of City/Town, if applicable
  - (2) Approximate number of customers served by the Permittee



- (3) Identification of any subbasins designated by the Permittee, if applicable
- (4) Identification of estimated linear feet of sanitary sewers
- (5) Number of Pump/Lift Stations in the collection system
- b. Responsibility Information:
  - (1) The title(s) and contact information of key position(s) who will coordinate the SSO response, including information for a backup coordinator in the event that the primary SSO coordinator is unavailable. The SSO coordinator is the person responsible for assessing the SSO and initiating a series of response actions based on the type, severity, and destination of the SSO, except for routine SSOs for which the coordinator may pre-approve written procedures. Routine SSOs are those for which the corrective action procedures are generally consistent.
  - (2) The title(s), and contact information of key position(s) who will respond to SSOs, including information for backup responder(s) in the event the primary responder(s) are unavailable (i.e., position(s) who provide notification to the Department, the public, the county health department, and other affected entities such as public water systems; position(s) responsible for organizing crews for response; position(s) responsible for addressing public inquiries)
- c. Public Reporting of SSOs
  - (1) Contact information for the public to report an SSO to the Permittee, during both normal and outside of normal business hours (e.g., telephone number, website, email address, etc.)
  - (2) Information requested from the person reporting an SSO to assist the Permittee in identifying the SSO (e.g., date, time, location, contact information)
  - (3) Procedures for communication of the SSO report to the appropriate positions for follow-up investigation and response, if necessary
- d. Procedures to immediately notify the Department, the county health department, and other affected entities (such as public water systems) upon becoming aware of notifiable SSOs
- e. Public Notification Methods for SSOs
  - (1) A listing of methods that are feasible, as determined by the Permittee, for public notifications (e.g., flyers distributed to nearby residents; signs posted at the location of the SSO, where the SSO enters a water of the state, and/or at a central public location; signs posted at fishing piers, boat launches, parks, swimming waterbodies, etc.; website and/or social media notifications; local print or radio and broadcast media notifications; "opt in" email, text message, or automated phone message notifications)
    - (a) If signage is a feasible method for public notification, procedures for use and removal of signage (e.g., availability and maintenance of signs, appropriate duration of postings)
  - (2) Minimum information to be included in public notifications (e.g., identification that an SSO has occurred, date, duration if known, estimated volume if known, location of the SSO by street address or other appropriate method, initial destination of the SSO)
  - (3) Procedures developed by the Permittee for determining the appropriate public notification method(s) based upon the potential for public exposure to health risks associated with the SSO
- f. Date of the SSO Response Plan, dates of all modifications and/or reviews, the title and signature of the reviewer(s) for each date and the signature of the responsible official or the appropriate designee.
- 2. SSO Response Plan Implementation
 

Except as otherwise required by this Permit, the Permittee shall fully implement the SSO Response Plan as soon as practicable, but no later than 180 days after the effective date of this Permit.
- 3. Department Review of the SSO Response Plan
  - a. When requested by the Director or his designee, the Permittee shall make the SSO Response Plan available for review by the Department.

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

#### **D. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS**

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

#### **E. 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.

## NPDES PERMIT RATIONALE

NPDES Permit No: **AL0048810**

Date: 7/16/2019

Revision: 12/30/2019

Permit Applicant: Madison County Board of Education  
Post Office Box 226  
Huntsville, Alabama 35804

Location: Central School WWTP  
990 Ryland Pike  
Huntsville, Alabama 35811

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

Basis for Limitations: Water Quality Model: CBOD, NH3-N  
Reissuance with no modification: N/A  
Instream calculation at 7Q10: 1%  
Toxicity based: TRC  
Secondary Treatment Levels: NH3-N, CBOD, TSS, TSS % Removal,  
CBOD % Removal  
Other (described below): pH, E. coli

Design Flow in Million Gallons per Day: 0.015 MGD

Major: No

Description of Discharge: Outfall Number 001;  
Effluent discharge to Flint River, which is classified as  
Fish & Wildlife.

Discussion: This is a revocation and reissuance of the permit.

This Permit includes an expansion of the facility from a design flow of 0.006 MGD to 0.015 MGD and a change from a lagoon system to an activated sludge package plant. The permittee has indicated that the discharge from the lagoon will cease upon the effective date of this permit, therefore the discharge for the lagoon is not included in the permit. The outfall location will remain the same.

The segment of the Flint River, containing the discharge, is classified as a Tier I stream and is on the most recent 303(d) list for turbidity impairment. Due to the nature of the discharge and the fact that total suspended solids associated with wastewater treatment plants are typically organic in nature, the Department does not expect this discharge to contribute to the turbidity impairment in the Flint River. There is a Total Maximum Daily Load (TMDL) for pathogens affecting the discharge. The TMDL requires that bacteriological criteria be met by new and expanded discharges, therefore the water quality criteria for E. coli is included in this permit.

The limits for Five Day Carbonaceous Biochemical Oxygen Demand (CBOD) and Total Ammonia as Nitrogen (NH<sub>3</sub>-N) are based on the Waste Load Allocation (WLA) model that was completed by ADEM's Water Quality Branch on June 28, 2019. The monthly average limit for CBOD is 25.0 mg/L. The monthly average limit for NH<sub>3</sub>-N is 20.0 mg/L.

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

The Department revised bacteriological criteria in ADEM Administrative Code R.335-6-10-.09. As a result, this permit includes E. coli limits and seasons that are consistent with the revised regulations. The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since the Flint River is classified as Fish & Wildlife, the limits for May through October are 126 col/100ml (monthly average) and 298 col/100ml (daily maximum), while the limits for November through April are 548 col/100ml (monthly average) and 2507 col/100ml (daily maximum). These limits are applicable to both outfall designations 0011 and 0012.

For outfall 0012, the pH limits were developed in accordance with the Water-Use designation of the receiving stream and to be consistent with the Department's permitting approach and procedures. The minimum pH limit of 6.0 S.U. and a maximum limit of 9.0 S.U. are imposed.

For outfall 0012, the Total Residual Chlorine (TRC) limit of 1.0 mg/L (maximum daily) is based on EPA's recommended water quality values and on the current Toxicity Rationale, which considers the available dilution and should be protective of acute and chronic criteria in the receiving stream. Monitoring for TRC is only applicable if chlorine is utilized for disinfection purposes. That is, if chlorine disinfection is not utilized, monitoring would not be applicable during the monitoring period, and "9" should be entered on the monthly DMR

This permit imposes monitoring during the summer season (April-October) for the following nutrient-related parameters: Total Kjeldahl Nitrogen (TKN), Nitrite plus Nitrate as Nitrogen (NO<sub>2</sub>+NO<sub>3</sub>-N), and Total Phosphorus (TP). Monitoring for these nutrient-related parameters is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose nutrient limits on this discharge.

Toxicity testing is not required because there are no industrial indirect discharges to the plant and because this is a minor facility.

Monitoring will be conducted once per month for most parameters. Percent removal for CBOD and TSS will be calculated once per month. Monitoring for nutrient-related parameters will be once per month during the summer season. Flow will be monitored instantaneously on sample collection days.

ADEM Administrative Rule 335-6-10-.04 requires applicants to new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is not for a new or expanded discharge to a Tier II stream, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

Revision 12/30/2019:

The sample type for NH<sub>3</sub>-N, TSS, CBOD, and nutrient parameters have been revised to 8 hour composite samples to be consistent with other facilities of similar size and type.

Prepared by: Nicholas Lowe

## TOXICITY AND DISINFECTION RATIONALE

Facility Name:	Central School WWTP	
NPDES Permit Number:	AL0048810	
Receiving Stream:	Flint River	
Facility Design Flow (Q <sub>w</sub> ):	0.015 MGD	
Receiving Stream 7Q <sub>10</sub> :	68.700 cfs	
Receiving Stream 1Q <sub>10</sub> :	64.220 cfs	
Winter Headwater Flow (WHF):	87.58 cfs	
Summer Temperature for CCC:	28 deg. Celsius	
Winter Temperature for CCC:	28 deg. Celsius	
Headwater Background NH <sub>3</sub> -N Level:	0.72 mg/l	
Receiving Stream pH:	7.0 s.u.	
Headwater Background FC Level (summer):	N/A.	(Only applicable for facilities with diffusers.)
(winter)	N/A.	

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

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 0.03\%$$

### AMMONIA TOXICITY LIMITATIONS

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

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

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

$$\begin{aligned} \text{Limiting Dilution} &= \frac{Q_w}{7Q_{10} + Q_w} \\ &= 0.03\% \quad \text{Stream-Dominated, CMC Applies} \end{aligned}$$

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

	<u>CMC</u>	<u>CCC</u>
Allowable Summer Instream NH <sub>3</sub> -N:	36.09 mg/l	2.48 mg/l
Allowable Winter Instream NH <sub>3</sub> -N:	36.09 mg/l	2.48 mg/l

$$\begin{aligned} \text{Summer NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (7Q_{10})]}{Q_w} \\ &= 104758.2 \text{ mg/l NH}_3\text{-N at } 7Q_{10} \end{aligned}$$

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

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

	<u>DO-based NH<sub>3</sub>-N limit</u>	<u>Toxicity-based NH<sub>3</sub>-N limit</u>
Summer	20.00 mg/l NH <sub>3</sub> -N	104758.20 mg/l NH <sub>3</sub> -N
Winter	N/A.	N/A.

**Summer: The DO based limit of 20.00 mg/l NH<sub>3</sub>-N applies.**

**Winter limits are not applicable.**

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

The following factors trigger toxicity testing requirements:

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

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

Chronic toxicity testing is specified for all other situations requiring toxicity testing.

**This is a minor facility (Qw < 1.0 MGD) with no SID permits. No toxicity testing is required.**

$$\text{Instream Waste Concentration (IWC)} = \frac{Q_w}{1Q_{10} + Q_w} = 0.04\% \quad \text{Note: This number will be rounded up for toxicity testing purposes.}$$

## 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 (November through April):	548	<b>548</b>
Monthly limit as monthly average (May through October):	126	<b>126</b>
Daily Max (November through April):	2507	<b>2507</b>
Daily Max (May through October):	298	<b>298</b>
<b><u>Enterococci (applies to Coastal)</u></b>		
Monthly limit as geometric mean (November through April):	Not applicable	<b>Not applicable</b>
Monthly limit as geometric mean (May through October):	Not applicable	<b>Not applicable</b>
Daily Max (November through April):	Not applicable	<b>Not applicable</b>
Daily Max (May through October):	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:	32.572 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	56.261 mg/l (acute)	(0.019)/(SDR)

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

Prepared By: Nicholas Lowe Date: 7/16/2019

# Waste Load Allocation Summary

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## REQUEST INFORMATION

Request Number:

3628

From:	Nicholas Lowe	In Branch/Section	Municipal
Date Submitted	5/14/2019	Date Required	6/13/2019
FUND Code	605		
Date Permit application received by NPDES program		11/21/2018	

Receiving Waterbody: Flint River

Previous Stream Name:

Facility Name: Central School (Name of Discharger-WQ will use to file)

Previous Discharger Name:

River Basin: Tennessee Outfall Latitude: 34.767532 (decimal degrees)

\*County: Madison Outfall Longitude: -86.442749 (decimal degrees)

Permit Number: AL0048810 Permit Type: Expansion and Permit Modification

Permit Status: Active

Type of Discharger: SEMIPUBLIC/PRIVATE

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

If yes, impacting dischargers names:

West Fork WWTP, Hazel Green WWTP, Buckhorn HS WWTP, Buckhorn WWTP, Integra Madison, Huntsville Chase WWTP, Giles and Kendall, Madison Highschool, Integra East, Gurley WWTP, Huntsville Big Cove WWTP, Owens Cross Roads WWTP

Impacting dischargers permit numbers:

AL0078344, AL0066478, AL0051691, AL0078336, AL0078298, AL0071650, AL0048810, AL0083933, AL0070467, AL0070661, AL0055042, AL0053228

Existing Discharge Design Flow	0.006	MGD
Proposed Discharge Design Flow	0.015	MGD

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

Comments included

☒ Yes ☐ No

Information Verified By: JJM

Year File Was Created: 1994

Response ID Number: 1709

Lat/Long Method: GPS

12 Digit HUC Code: 060300020403

Use Classification: F&amp;W

Site Visit Completed? ☒ Yes ☐ NoWaterbody Impaired? ☒ Yes ☐ NoAntidegradation ☐ Yes ☒ No

Waterbody Tier Level: Tier I

Use Support Category: 5

Date of Site Visit: 6/5/2019

Date of WLA Response: 6/21/2019

Approved TMDL?

☒ Yes ☐ No

Approval Date of TMDL: 9/26/2008

## Waste Load Allocation Information

Modeled Reach Length	46.36	Miles	Date of Allocation	6/28/2019
Name of Model Used	SWQM	Allocation Type	Annual	
Model Completed by	James Mooney	Type of Model Used	Data-based	
Allocation Developed by	Water Quality Branch			

# Waste Load Allocation Summary

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

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

Water Quality Characteristics Immediately Upstream of Discharge					
Parameter	Summer		Winter		
CBODu	3.1658	mg/l		mg/l	
NH3-N	0.7152	mg/l		mg/l	
Temperature	28	°C		°C	
pH	7	su		su	

Hydrology at Discharge Location				Method Used to Calculate	
Drainage Area Qualifier Estimated	Drainage Area	370.11	sq mi	ADEM Estimate w/USGS Gage Data	
	Stream 7Q10	68.7	cfs	ADEM Estimate w/USGS Gage Data	
	Stream 1Q10	64.22	cfs	ADEM Estimate w/USGS Gage Data	
	Stream 7Q2	87.58	cfs	ADEM Estimate w/USGS Gage Data	
	Annual Average	564.42	cfs	ADEM Estimate w/USGS Gage Data	

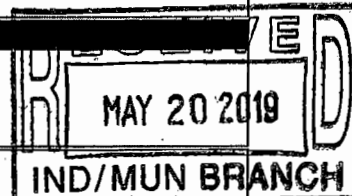
**Comments and/or Notations** WLA was completed in response to Central School planning to increase their effluent flowrate from 0.006 MGD up to 0.015 MGD.



Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM <b>1</b> GENERAL	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> <b>GENERAL INFORMATION</b> <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="5">I. EPA I.D. NUMBER</th> </tr> <tr> <td style="width:5%;">8</td> <td style="width:15%;">F</td> <td style="width:40%;">AL0048810</td> <td style="width:10%;">T/A</td> <td style="width:10%;">C</td> </tr> <tr> <td>1</td> <td>2</td> <td>13</td> <td>14</td> <td>15</td> </tr> </table>	I. EPA I.D. NUMBER					8	F	AL0048810	T/A	C	1	2	13	14	15																																					
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15	16	40	41	54																																																		



CONTINUED FROM THE FRONT

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

A. FIRST										B. SECOND									
C	7	N/A	(specify)							C	7		(specify)						
15	16	17	18	19	20	21	22	23	24	15	16	17	18	19	20	21	22	23	24
C. THIRD										D. FOURTH									
C	7		(specify)							C	7		(specify)						
15	16	17	18	19	20	21	22	23	24	15	16	17	18	19	20	21	22	23	24

## VIII. OPERATOR INFORMATION

A. NAME																				B. Is the name listed in Item VIII-A also the owner?									
C	8	Living Water Services, LLC																		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO									
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	55	56	57	58	59	60				
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)																				D. PHONE (area code & no.)									
F = FEDERAL S = STATE P = PRIVATE										M = PUBLIC (other than federal or state) O = OTHER (specify)										P (specify)					(205) 985-2119				
																				56					15 16 17 18 19 20 21 22 23 24 25 26				

E. STREET OR P.O. BOX																														
5800 Feldspar Way																														
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55

F. CITY OR TOWN																				G. STATE					H. ZIP CODE					IX. INDIAN LAND				
C	B	Birmingham																		AL					35244					Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	40	41	42	43	44	45	46	47	48	49	50				

## X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)															D. PSD (Air Emissions from Proposed Sources)																
C	T	I	9	N	AL0048810										C	T	I	9	P	N/A											
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
B. UIC (Underground Injection of Fluids)															E. OTHER (specify)																
C	T	I	9	U	N/A										C	T	I	9		(specify)											
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
C. RCRA (Hazardous Wastes)															E. OTHER (specify)																
C	T	I	9	R	N/A										C	T	I	9		(specify)											
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

## XI. MAP

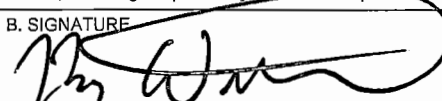
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal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

## XII. NATURE OF BUSINESS (provide a brief description)

Wastewater Treatment and Disposal System; treatment of domestic sanitary sewage from school. Permit modification from lagoon treatment system to mechanical treatment plant.

## 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														
Kerry Wilkerson, Manager of Operations																														8 Nov 2018														

## COMMENTS FOR OFFICIAL USE ONLY

C																																			
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15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50



NAME: CENTRAL SCHOOL WWTP

LOCATION: HUNTSVILLE, MADISON COUNTY, ALABAMA

SCALE: 2000





## FACILITY NAME AND PERMIT NUMBER:

Central School Lagoon AL0048810

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

## BASIC APPLICATION INFORMATION

## PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

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

## A.1. Facility Information.

Facility name Central School WWTPMailing Address P. O. Box 226  
Huntsville, AL 35804Contact person Kerry WilkersonTitle Manager of OperationsTelephone number (256) 852-8960Facility Address 990 Ryland Pike  
(not P.O. Box) Huntsville, AL 35811

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

Applicant name N/A

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 AL0048810

PSD \_\_\_\_\_

UIC \_\_\_\_\_

Other \_\_\_\_\_

RCRA \_\_\_\_\_

Other \_\_\_\_\_

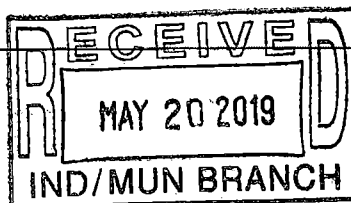
## A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name

Population Served

Type of Collection System

Ownership

Central School lagoon700 CustomersSeparate GravityMadison Co. Board ofEducationTotal population served 700 Customers

## FACILITY NAME AND PERMIT NUMBER:

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

Central School Lagoon AL0048810

## 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
- 0.015
- mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	<u>0.0045</u>	<u>0.0029</u>	<u>0.0040</u>	mgd
c. Maximum daily flow rate	<u>0.0072</u>	<u>0.0072</u>	<u>0.0072</u>	mgd

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

☒ Separate sanitary sewer 100.00 %  
☐ Combined storm and sanitary sewer \_\_\_\_\_ %

## A.8. Discharges and Other Disposal Methods.

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

☒ Yes ☐ No

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

i. Discharges of treated effluent 1  
ii. Discharges of untreated or partially treated effluent 0  
iii. Combined sewer overflow points 0  
iv. Constructed emergency overflows (prior to the headworks) 0  
v. Other 0

- 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:**

Central School Lagoon AL0048810

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

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).

N/A

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:

Central School Lagoon AL0048810

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

## WASTEWATER DISCHARGES:

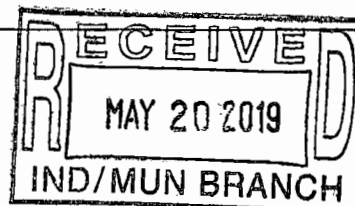
If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional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

## A.9. Description of Outfall.

- a. Outfall number DSN 0011
- b. Location Huntsville 35811  
(City or town, if applicable) (Zip Code)  
Madison Alabama  
(County) (State)  
N 34.767525 W 86.442536  
(Latitude) (Longitude)
- c. Distance from shore (if applicable) \_\_\_\_\_ ft.
- d. Depth below surface (if applicable) \_\_\_\_\_ ft.
- e. Average daily flow rate 0.0072 mgd
- f. Does this outfall have either an intermittent or a periodic discharge? \_\_\_\_\_ Yes ☒ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: \_\_\_\_\_
- Average duration of each discharge: \_\_\_\_\_
- Average flow per discharge: \_\_\_\_\_ mgd
- Months in which discharge occurs: \_\_\_\_\_
- g. Is outfall equipped with a diffuser? \_\_\_\_\_ Yes ☒ No

## A.10. Description of Receiving Waters.

- a. Name of receiving water Flint River
- b. Name of watershed (if known) N/A
- United States Soil Conservation Service 14-digit watershed code (if known): N/A
- c. Name of State Management/River Basin (if known): N/A
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): N/A
- 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:

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

Central School Lagoon AL0048810

## 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 85.00 %Design SS removal 65.00 %Design P removal 65.00 %Design N removal 85.00 %

Other \_\_\_\_\_ %

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

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: DSN0011

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.50	s.u.			
pH (Maximum)	7.00	s.u.			
Flow Rate	0.0072	MGD	0.0040	MGD	52.00
Temperature (Winter)	16.60	C.	10.20	C	12.00
Temperature (Summer)	23.40	C	19.70	C	12.00

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

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

## CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5							
	CBOD-5	11.90	mg/l	4.86	mg/l	24.00	5210B	25.0/37.5 mg/l
FECAL COLIFORM		500.00	Colonies	127.00	Colonies	24.00	9222D	126/487 Colonies
TOTAL SUSPENDED SOLIDS (TSS)		72.00	mg/l	26.38	mg/l	24.00	2540D	90.0/135.0 mg/l

## 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:**

Central School Lagoon AL0048810

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.50.00 gpd

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

Minimal infiltration due to length of collection system; periodic inspection of clean outs and manholes.**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

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

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

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

Name: Living Water Services, LLCMailing Address: 5800 Feldspar Way  
Birmingham, AL 35051Telephone Number: (205) 985-2119Responsibilities of Contractor: Sampling, Analyses, Reporting; serves as Certified Operator of Record.**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

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

DSN0011

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

Yes ☒ No

## FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99  
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Central School Lagoon AL0048810

- 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: N/A

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

**END OF PART B.**

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

## FACILITY NAME AND PERMIT NUMBER:

Central School Lagoon AL0048810

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:

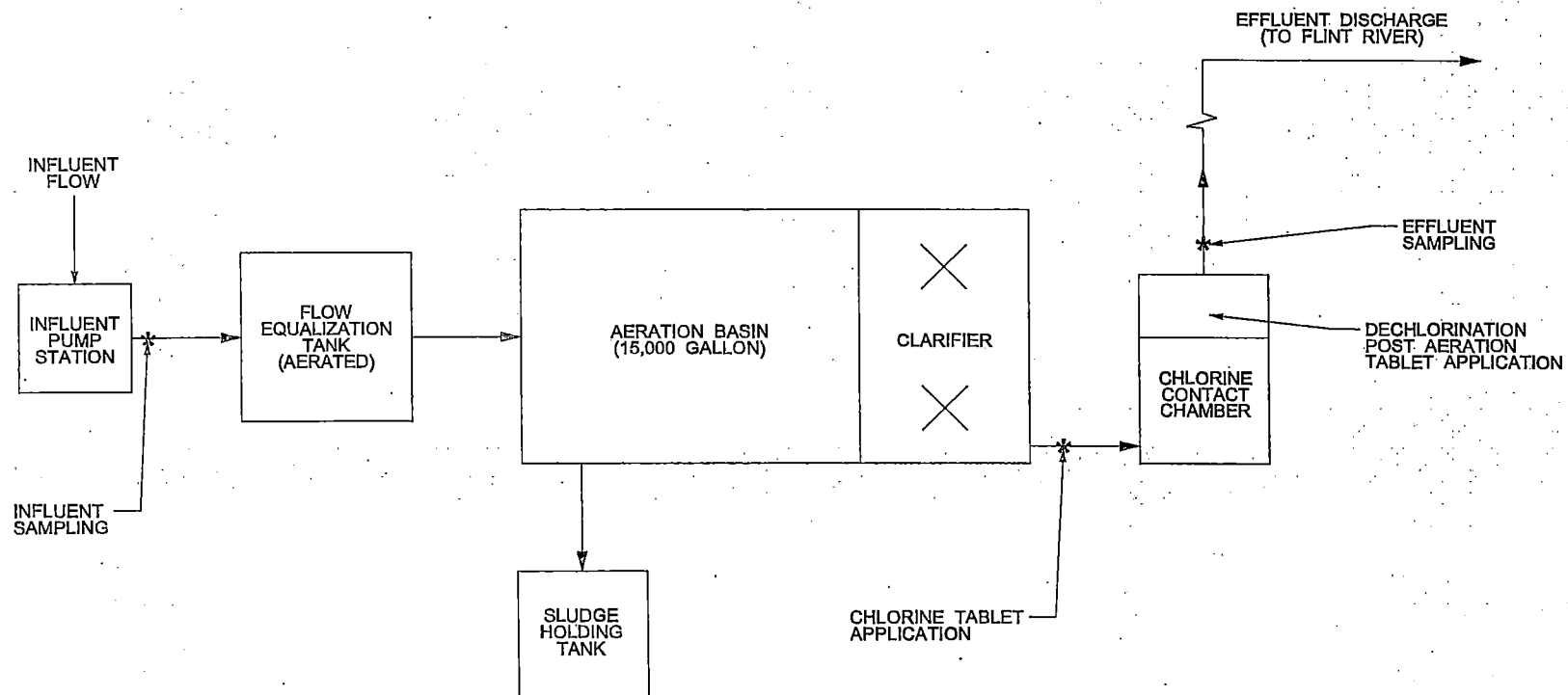
☐ Part D (Expanded Effluent Testing Data)☐ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

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 Kerry Wilkerson, Manager of OperationsSignature Telephone number (256) 852-8960Date signed 8 Nov 2018

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:**



CENTRAL SCHOOL WWTP  
 NPDES PERMIT No. AL0048810  
 Permitted Flow = 0.015 MGD

NOT TO SCALE

PAGE 1 OF 1

**SCH-1**

10/31/18

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)**  
**NPDES INDIVIDUAL PERMIT APPLICATION**  
**SUPPLEMENTARY INFORMATION FOR PUBLICLY-OWNED TREATMENT WORKS (POTW), OTHER TREATMENT**  
**WORKS TREATING DOMESTIC SEWAGE (TWTDS), AND PUBLIC WATER SUPPLY TREATMENT PLANTS**

**Instructions:** This form should be used to submit the required supplementary information for an application for an NPDES individual permit for Publicly Owned Treatment Works (POTW) and other Treatment Works Treating Domestic Sewage (TWTDS). The completed application should be submitted to ADEM in duplicate. If insufficient space is available to address any item, please continue on an attached sheet of paper. Please mark "N/A" in the appropriate box when an item is not applicable to the applicant. Please type or print legibly in blue or black ink. Mail the completed application to:

ADEM-Water Division  
Municipal Section  
P O Box 301463  
Montgomery, AL 36130-1463



**PURPOSE OF THIS APPLICATION**

- ☐ Initial Permit Application for New Facility\*  
☐ Modification of Existing Permit  
☒ Revocation & Reissuance of Existing Permit

- ☐ Initial Permit Application for Existing Facility  
☐ Reissuance of Existing Permit

\* An application for participation in the ADEM's Electronic Environmental (E2) Reporting must be submitted to allow permittee to electronically submit reports as required.

**SECTION A - GENERAL INFORMATION**

1. Facility Name: Central School WWTP
- a. Operator Name: Living Water Services, LLC
- b. Is the operator identified in A.1.a, the owner of the facility? ☐ Yes ☒ No  
If no, provide name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.  
Living Water Services, LLC  
5800 Feldspar Way, Suite 200, Birmingham, AL 35244
- c. Name of Permittee\* if different than Operator: Madison County Board of Education  
\*Permittee will be responsible for compliance with the conditions of the permit
2. NPDES Permit Number: AL 0048810 (Not applicable if initial permit application)
3. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)  
Street: 990 Ryland Pike  
City: Huntsville County: Madison State: AL Zip: 35811  
Facility Location (Front Gate): Latitude: 34.763844 N Longitude: 86.454075 W
4. Facility Mailing Address: Madison County Board of Education, P. O. Box 226  
City: Huntsville County: Madison State: AL Zip: 35804
5. Responsible Official (as described on last page of this application):  
Name and Title: Kerry Wilkerson, Manager of Operations  
Address: P. O. Box 226  
City: Huntsville State: AL Zip: 35804  
Phone Number: (256) 852-8960 Email Address: kwilkerson@mcssk12.org

6. Designated Facility/DMR Contact:

Name and Title: Grady Parsons

Phone Number: (205) 790-4026

Email Address: grady@lwutilities.com

7. Designated Emergency Contact:

Name and Title: Tyler McKeller

Phone Number: (205) 983-4774

Email Address: tyler@lwutilities.com

8. Please complete this section if the Applicant's business entity is a Proprietorship or Limited Liability Company (LLC) with a responsible official not listed in A.5.

Name and Title: N/A

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

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

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

<u>Permit Type</u>	<u>Permit Number</u>	<u>Held By</u>
<u>Surface Water Discharge</u>	<u>AL0048810</u>	<u>Madison County Board of Education</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):

<u>Facility Name</u>	<u>Permit Number</u>	<u>Type of Action</u>	<u>Date of Action</u>
<u>None</u>	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**SECTION B – WASTEWATER DISCHARGE INFORMATION**

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

Outfall No.	Highest Flow in Last 12 Months (MGD)	Highest Daily Flow (MGD)	Average Flow (MGD)
DSN0011	0.0072	0.0072	0.0040

2. Attach a process flow schematic of the treatment process, including the size of each unit operation and sample collection locations.

3. Do you share an outfall with another facility? ☐ Yes ☒ No (If no, continue to B.4)

For each shared outfall, provide the following:

Applicant's Outfall No.	Name of Other Permittee/Facility	NPDES Permit No.	Where is sample collected by Applicant?

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

<b>Current:</b>	Flow Metering	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Sampling Equipment	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>Planned:</b>	Flow Metering	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
	Sampling Equipment	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

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

Mechanical activated sludge treatment plant with contact chamber for disinfection; influent and effluent pump stations, flow equalization tank and separate sludge holding tank.

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

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

Replace existing treatment lagoon system with mechanical treatment plant.

**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
Waste Activated Sludge	Adjacent aerated sludge storage component



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*
Waste Activated Sludge	0.1 lbs/day	Removal of liquid sludge by septic hauler

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

#### SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS

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

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to SID Permit?	
N/A				<input type="checkbox"/> Yes	<input type="checkbox"/> No
				<input type="checkbox"/> Yes	<input type="checkbox"/> No
				<input type="checkbox"/> Yes	<input type="checkbox"/> No
				<input type="checkbox"/> Yes	<input type="checkbox"/> No

- b. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance? ☐ Yes ☐ No  
If yes, please attach a copy of the ordinance.

#### SECTION E – COASTAL ZONE INFORMATION

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County? ☐ Yes ☒ No  
If yes, complete items E.1 – E.12 below:

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



---

## SECTION F – ANTI-DEGRADATION EVALUATION

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

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

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

If yes, do not complete this section.

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

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

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

None

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

None

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

None

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

None

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

Removal of a wastewater treatment lagoon on a school campus.

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

Removal of a wastewater lagoon allows for use of property for other purposes.

---

## SECTION G – EPA Application Forms

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

1. All applicants must submit Form 1.
2. Applicants for new or existing discharges of sanitary wastewater from Publicly-Owned Treatment Works (POTW) and Other Treatment Works Treating Domestic Sewage (TWTDS) must submit Form 2A.
3. Applicants for new or existing land application of sanitary wastewater must submit Form 2A and, if the land application site is not completely bermed to prevent runoff, applicants must also submit Form 2F.
4. Applicants for new and existing discharges of process wastewater from water treatment facilities (i.e. public water supply treatment plants) must submit Form 2C.
5. Applicants that generate sewage sludge, derive a material from sewage sludge, or dispose of sewage sludge must submit Part 2 of Form 2S.

## SECTION H- ENGINEERING REPORT/BMP PLAN REQUIREMENTS

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

## SECTION I- RECEIVING WATERS

Outfall No.	Receiving Water(s)	303(d) Segment?		Included in TMDL?*	
DSN0011	Flint River	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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

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

## SECTION J - APPLICATION CERTIFICATION

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

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

Signature of Responsible Official: 

Date Signed: 8 Nov 2018

Name and Title: Kerry Wilkerson, Manager of Operations

If the Responsible Official signing this application is not identified in Section A.5 or A.8, provide the following information:

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

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

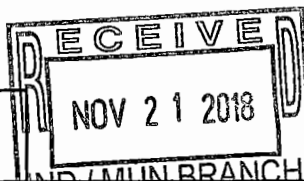
Phone Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

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

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

**FACILITY NAME AND PERMIT NUMBER:**

Central School WWTP AL0048810


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

**A. GENERAL INFORMATION**

All applicants must complete this section.

**A.1. Facility Information.**

- a. Facility name Central School WWTP
- b. Mailing Address Madison County Board of Education  
P. O. Box 236, Huntsville, Alabama 35804
- c. Contact person Kerry Wilkerson  
Title Manager of Operations  
Telephone number (256) 852-8960
- d. Facility Address (not P.O. Box) 990 Ryland Pike  
Huntsville, Alabama 35811
- e. Is this facility a Class I sludge management facility? ☐ Yes ☒ No
- f. Facility design flow rate:        mgd
- g. Total population served: 700.00
- h. Indicate the type of facility:
- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Publicly owned treatment works (POTW) | <input type="checkbox"/> Privately owned treatment works |
| <input type="checkbox"/> Federally owned treatment works                  | <input type="checkbox"/> Blending or treatment operation |
| <input type="checkbox"/> Surface disposal site                            | <input type="checkbox"/> Sewage sludge incinerator       |
| <input type="checkbox"/> Other (describe) _____                           |  |

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

- a. Applicant name Same
- b. Mailing Address \_\_\_\_\_  
\_\_\_\_\_
- c. Contact person \_\_\_\_\_  
Title \_\_\_\_\_  
Telephone number \_\_\_\_\_
- d. Is the applicant the owner or operator (or both) of this facility?  
☒ owner ☐ operator
- e. Should correspondence regarding this permit should be directed to the facility or the applicant.  
☐ facility ☒ applicant

**FACILITY NAME AND PERMIT NUMBER:**

Central School WWTP AL0048810

Form Approved 1/14/99  
OMB Number 2040-0086**A.3. Permit Information.**

- a. Facility's NPDES permit number (if applicable): AL0048810
- b. List, on this form or an attachment, all other Federal, State, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number	Type of Permit
_____	_____
_____	_____
_____	_____

**A.4. Indian Country.** Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur in Indian Country?

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

\_\_\_\_\_

**A.5. Topographic Map.** Provide a topographic map or maps (or other appropriate map(s) if a topographic map is unavailable) that show the following information. Map(s) should include the area one mile beyond all property boundaries of the facility:

- a. Location of all sewage sludge management facilities, including locations where sewage sludge is stored, treated, or disposed.
- b. Location of all wells, springs, and other surface water bodies, listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundaries.

**A.6. Line Drawing.** Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit, including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.**A.7. Contractor Information.**

Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor?   ✓   Yes        No

If yes, provide the following for each contractor (attach additional pages if necessary):

- |                                   |  |
|-----------------------------------|--|
| a. Name                           | <u>Meeks Environmental Services, LLC</u>             |
| b. Mailing Address                | <u>1625 Holmes Road, Bessemer Alabama 35020</u>      |
| c. Telephone Number               | <u>(205) 425-8303</u>                                |
| d. Responsibilities of contractor | <u>Removal of excess sludge from treatment plant</u> |

**FACILITY NAME AND PERMIT NUMBER:**

Central School WWTP AL0048810

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

**A.8. Pollution Concentrations:** Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR Part 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC			N/A
CADMIUM			
CHROMIUM			
COPPER			
LEAD			
MERCURY			
MOLYBDENUM			
NICKEL			
SELENIUM			
ZINC			

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

\_\_\_\_\_ Part 1 Limited Background Information packet

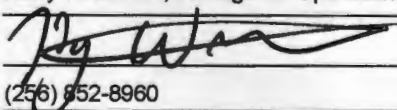
Part 2 Permit Application Information packet:

- ☒ Section A (General Information)  
☒ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)  
\_\_\_\_\_ Section C (Land Application of Bulk Sewage Sludge)  
\_\_\_\_\_ Section D (Surface Disposal)  
\_\_\_\_\_ Section E (Incineration)

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

Name and official title Kerry Wilkerson, Manager of Operations, Madison County Board of Education

Signature

Date signed 08 Nov 2018

Telephone number

(256) 852-8960

Upon request of the permitting authority, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

**SEND COMPLETED FORMS TO:**



## FACILITY NAME AND PERMIT NUMBER:

Central School WWTP AL0048810

Form Approved 1/14/99  
OMB Number 2040-0086**B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF  
A MATERIAL DERIVED FROM SEWAGE SLUDGE**

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge.

**B.1. Amount Generated On Site.**Total dry metric tons per 365-day period generated at your facility: 0.30 dry metric tons

**B.2. Amount Received from Off Site.** If your facility receives sewage sludge from another facility for treatment, use, or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.

- a. Facility name N/A
- b. Mailing Address \_\_\_\_\_
- c. Contact person \_\_\_\_\_
- Title \_\_\_\_\_
- Telephone number \_\_\_\_\_
- d. Facility Address (not P.O. Box) \_\_\_\_\_
- e. Total dry metric tons per 365-day period received from this facility: \_\_\_\_\_ dry metric tons

f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics.

\_\_\_\_\_

\_\_\_\_\_

**B.3. Treatment Provided At Your Facility.**

a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?

\_\_\_\_\_ Class A \_\_\_\_\_ Class B ☒ Neither or unknown

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

N/A

\_\_\_\_\_

\_\_\_\_\_

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

- \_\_\_\_\_ Option 1 (Minimum 38 percent reduction in volatile solids)
- \_\_\_\_\_ Option 2 (Anaerobic process, with bench-scale demonstration)
- \_\_\_\_\_ Option 3 (Aerobic process, with bench-scale demonstration)
- \_\_\_\_\_ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
- \_\_\_\_\_ Option 5 (Aerobic processes plus raised temperature)
- \_\_\_\_\_ Option 6 (Raise pH to 12 and retain at 11.5)
- \_\_\_\_\_ Option 7 (75 percent solids with no unstabilized solids)
- \_\_\_\_\_ Option 8 (90 percent solids with unstabilized solids)
- ☒ None or unknown

**FACILITY NAME AND PERMIT NUMBER:**

Central School WWTP AL0048810

Form Approved 1/14/99  
OMB Number 2040-0086**B.3. Treatment Provided At Your Facility. (con't)**

- d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

N/A

- e. Describe, on this form or another sheet of paper, any other sewage sludge treatment or blending activities not identified in (a) - (d) above:

Complete Section B.4 if sewage sludge from your facility meets the ceiling concentrations in Table 1 of 40 CFR 503.13, the pollutant concentrations in Table 3 of §503.13, the Class A pathogen reduction requirements in §503.32(a), and one of the vector attraction reduction requirements in § 503.33(b)(1)-(8) and is land applied. Skip this section if sewage sludge from your facility does not meet all of these criteria.

**B.4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1-8.**

- a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: 0.00 dry metric tons
- b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away for application to the land?
- Yes        No

Complete Section B.5. if you place sewage sludge in a bag or other container for sale or give-away for land application. Skip this section if the sewage sludge is covered in Section B.4.

**B.5. Sale or Give-Away in a Bag or Other Container for Application to the Land.**

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: 0.00 dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

Complete Section B.6 if sewage sludge from your facility is provided to another facility that provides treatment or blending. This section does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this section if the sewage sludge is covered in Sections B.4 or B.5. If you provide sewage sludge to more than one facility, attach additional pages as necessary.

**B.6. Shipment Off Site for Treatment or Blending.**

- a. Receiving facility name Huntsville Spring Branch WWTP
- b. Mailing address 1800 Vermont Road SW  
Huntsville, AL 35802
- c. Contact person Shane Cook  
Title Water Pollution Control Director  
Telephone number (256) 883-3719
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 0.30

## FACILITY NAME AND PERMIT NUMBER:

Central School WWTP AL0048810

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

## B.6. Shipment Off Site for Treatment or Blending. (con't)

- e. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? ☐ Yes ☒ No

Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?

☐ Class A ☐ Class B ☒ Neither or unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

- f. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge?

☐ Yes ☒ No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

- ☐ Option 1 (Minimum 38 percent reduction in volatile solids)  
☐ Option 2 (Anaerobic process, with bench-scale demonstration)  
☐ Option 3 (Aerobic process, with bench-scale demonstration)  
☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)  
☐ Option 5 (Aerobic processes plus raised temperature)  
☐ Option 6 (Raise pH to 12 and retain at 11.5)  
☐ Option 7 (75 percent solids with no unstabilized solids)  
☐ Option 8 (90 percent solids with unstabilized solids)  
☐ None

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge.

N/A

- g. Does the receiving facility provide any additional treatment or blending activities not identified in (c) or (d) above? ☐ Yes ☒ No

If yes, describe, on this form or another sheet of paper, the treatment or blending activities not identified in (c) or (d) above:

- h. If you answered yes to (e), (f), or (g), attach a copy of any information you provide the receiving facility to comply with the "notice and necessary information" requirement of 40 CFR 503.12(g).

- i. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

Complete Section B.7 if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in:

- Section B.4 (it meets Table 1 ceiling concentrations, Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8); or
- Section B.5 (you place it in a bag or other container for sale or give-away for application to the land); or
- Section B.6 (you send it to another facility for treatment or blending).

## B.7. Land Application of Bulk Sewage Sludge.

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: 0.00 dry metric tons



**FACILITY NAME AND PERMIT NUMBER:**

Central School WWTP AL0048810

Form Approved 1/14/99  
OMB Number 2040-0086**B.7. Land Application of Bulk Sewage Sludge. (con't)**

- b. Do you identify all land application sites in Section C of this application?
- ☐
- Yes
- ☒
- No

If no, submit a copy of the land application plan with application (see instructions).

- c. Are any land application sites located in States other than the State where you generate sewage sludge or derive a material from sewage sludge?
- ☐
- Yes
- ☐
- No

If yes, describe, on this form or another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

---

---

**Complete Section B.8 if sewage sludge from your facility is placed on a surface disposal site.****B.8. Surface Disposal.**

- a. Total dry metric tons of sewage sludge from your facility placed on all surface disposal sites per 365-day period:
- 0.00
- dry metric tons

- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?

☐ Yes ☒ No

If no, answer B.8.c through B.8.f for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one such surface disposal site, attach additional pages as necessary.

- c. Site name or number

---

- d. Contact person

---

Title

---

Telephone number

---

Contact is

☐ Site owner☐ Site operator

- e. Mailing address

---

---

- f. Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period:
- 
- dry metric tons

**Complete Section B.9 if sewage sludge from your facility is fired in a sewage sludge incinerator.****B.9. Incineration.**

- a. Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period:
- 0.00
- dry metric tons

- b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
- ☐
- Yes
- ☒
- No

If no, complete B.9.c through B.9.f for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one such sewage sludge incinerator, attach additional pages as necessary.

- c. Incinerator name or number:

---

- d. Contact person:

---

Title:

---

Telephone number:

---

Contact is:

☐ Incinerator owner☐ Incinerator operator

**FACILITY NAME AND PERMIT NUMBER:**

Central School WWTP AL0048810

Form Approved 1/14/99  
OMB Number 2040-0086**B.9. Incineration. (con't)**e. Mailing address: \_\_\_\_\_  
\_\_\_\_\_

f. Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period: \_\_\_\_\_ dry metric tons

**Complete Section B.10 if sewage sludge from this facility is placed on a municipal solid waste landfill.****B.10. Disposal in a Municipal Solid Waste Landfill.** Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

a. Name of landfill N/A \_\_\_\_\_

b. Contact person \_\_\_\_\_

Title \_\_\_\_\_

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

Contact is \_\_\_\_\_ Landfill owner \_\_\_\_\_ Landfill operator

c. Mailing address \_\_\_\_\_  
\_\_\_\_\_

## d. Location of municipal solid waste landfill:

Street or Route # \_\_\_\_\_

County \_\_\_\_\_

City or Town \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

e. Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period:

\_\_\_\_\_ dry metric tons

f. List, on this form or an attachment, the numbers of all other Federal, State, and local permits that regulate the operation of this municipal solid waste landfill.

Permit Number	Type of Permit
_____	_____
_____	_____
_____	_____

g. Submit, with this application, information to determine whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a municipal solid waste landfill (e.g., results of paint filter liquids test and TCLP test)

h. Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR Part 258?

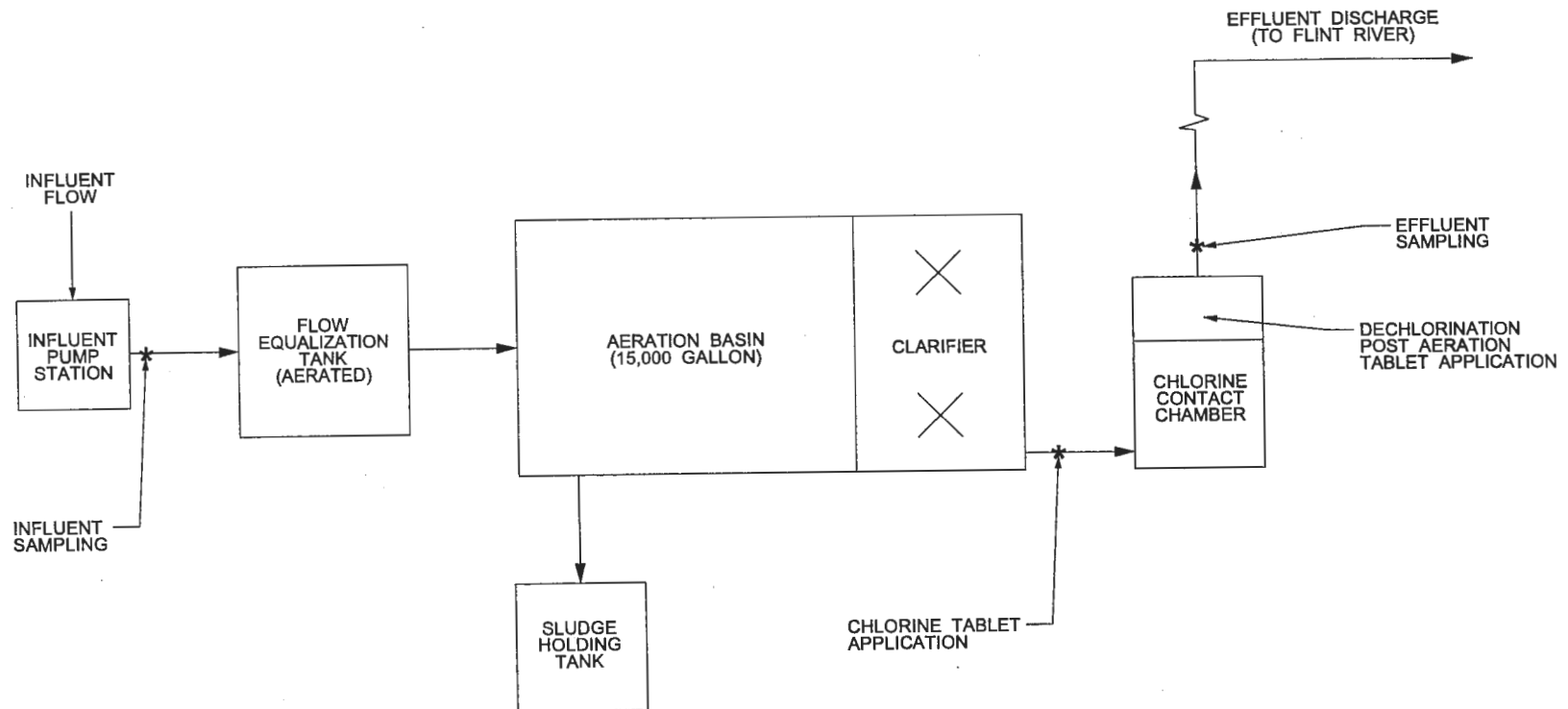
\_\_\_\_\_ Yes \_\_\_\_\_ No



**SCALE: 2000**







CENTRAL SCHOOL WWTP  
 NPDES PERMIT No. AL0048810  
 Permitted Flow = 0.015 MGD

NOT TO SCALE

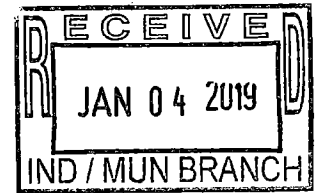
PAGE 1 OF 1

**SCH-1**

10/31/18



MADISON COUNTY BOARD OF EDUCATION  
CENTRAL SCHOOL LAGOON  
ANTI-DEGRADATION REPORT



**ALTERNATIVES ANALYSIS FOR MALLARD FOX WEST WWTP**

**1.0 INTRODUCTION**

Madison County Board of Education is proposing an expansion to the existing Central School Lagoon currently authorized for discharge to the Flint River under Permit Number AL0048810. The lagoon is currently owned, operated and maintained by Madison County Board of Education. The existing lagoon is presently permitted to discharge 0.006 MGD. The approximate discharge location is indicated on the attached USGS Quadrangle map. (See Exhibit 1).

The purpose for this request for capacity expansion with maintaining the current surface water discharge location is to provide additional capacity for wastewater treatment and disposal for domestic wastewater from the adjacent school in Madison County, Alabama.

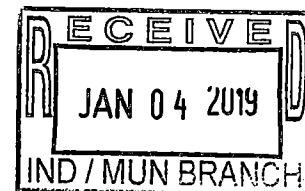
The treatment facility will be owned, operated, and maintained by the Madison County Board of Education. The wastewater treatment facility and sanitary sewer infrastructure will be increased to handle a design flow of 15,000 gallons per day. The existing discharge location will remain. The proposed treatment levels are herein included in the permit application forms.

The treated effluent will continue to discharge to Flint River. The site located approximately 0.25 miles east of the Central School Lagoon.

In accordance with 40 CFR 131.12 and the Alabama Department of Environmental Management Administrative Code, Section 336-6-10-.04 for anti-degradation, the following report for the Central School Lagoon hereby submitted with Permit Application Form 188 to ADEM for comment and approval.



MADISON COUNTY BOARD OF EDUCATION  
CENTRAL SCHOOL LAGOON  
ANTI-DEGRADATION REPORT



**2.0 Alternative Analysis**

**2.1 ADEM Form 311**

**Attachment 1 to Supplementary Form ADEM Form 311**

***Alternatives Analysis Applicant/Project: Central School Lagoon***

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

Alternative	Viable	Non-Viable	Comment
1 Land Application		X	
2 Pretreatment/Discharge to POTW		X	
3 Relocation of Discharge		X	
4 Reuse/Recycle		X	
5 Process/Treatment Alternatives		X	
6 On-site/Sub-surface Disposal		X	
7 Proposed Project	X		Discharge to Fox Creek

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

Signature: \_\_\_\_\_  
(Professional Engineer)

Date: \_\_\_\_\_

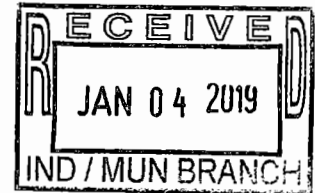
*(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)*

MADISON COUNTY BOARD OF EDUCATION  
 CENTRAL SCHOOL LAGOON  
 ANTI-DEGRADATION REPORT

**3.0 ADEM FORM 313**

**3.01 LAND APPLICATION**

**Attachment 3 to Supplementary  
 Form ADEM Form 313  
 Calculation of Total Annualized Project Costs  
 for Private-Sector Projects**



Capital Costs to be Financed (Supplied by applicant) \$ 1,250,000 (1)

Interest rate for Financing (Expressed as a decimal) .06 (i)

Time Period of Financing (Assume 10 years\*) 10 years (n)

Annualization Factor =  $\frac{i}{(1+i)^{10}-1} + i$  .136 (2)

Annualized Capital Cost [Calculate: (1) x (2)] \$ 170,000 (3)

Annual Cost of Operation and Maintenance  
 (including but not limited to monitoring, inspection, permitting fees, waste  
 disposal charges, repair, administration and replacement)\*\* \$ 100,000 (n)

**Total Annual Cost of Pollution Control Project [ (3) + (4) ]**

\$ 270,000 (5)

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

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



MADISON COUNTY BOARD OF EDUCATION  
CENTRAL SCHOOL LAGOON  
ANTI-DEGRADATION REPORT

**3.02 PRETREATMENT/DISCHARGE TO POTW (SEE SUMMARY THAT FOLLOWS)**

The option of Pretreatment/Discharge to POTW has not been included as part of this analysis. The proximity to a POTW has precluded this option from further consideration.

**3.03 RELOCATION OF DISCHARGE**

The option of Relocation of Discharge has not been included as part of this analysis. The current discharge location is permitted. While retaining the current discharge location additional discharge flow will be added at Flint River.

**3.04 REUSE/RECYCLE**

The option of Reuse/Recycle has not been included as part of this analysis. Currently the state of Alabama does not have regulations on the Reuse/Recycle of treated sanitary sewer unless the entire disposal area is inclusive within the NPDES permit.

**3.05 PUBLIC ACCESS REUSE**

The option of Public Access Reuse has not been included as part of this analysis. Currently the state of Alabama does not have regulations on the Reuse/Recycle of treated sanitary sewer unless the entire disposal area is inclusive within the NPDES permit.





MADISON COUNTY BOARD OF EDUCATION  
CENTRAL SCHOOL LAGOON  
ANTI-DEGRADATION REPORT

**3.06 ON-SITE/SUB-SURFACE DISPOSAL**

**Attachment 3 to Supplementary  
Form ADEM Form 313  
Calculation of Total Annualized Project Costs  
for Private-Sector Projects**

Capital Costs to be Financed (Supplied by applicant)	<u>\$ 1,500,000</u> (1)
Interest rate for Financing (Expressed as a decimal)	<u>.06</u> (i)
Time Period of Financing (Assume 10 years*)	<u>10 years</u> (n)
Annualization Factor = $\frac{i}{(1+i)^{10}-1} + i$	<u>.136</u> (2)
Annualized Capital Cost [Calculate: (1) x (2)]	<u>\$ 204,000</u> (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	<u>\$ 150,000</u> (n)

**Total Annual Cost of Pollution Control Project [ (3) + (4) ]**

\$ 354,000 (5)

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

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



MADISON COUNTY BOARD OF EDUCATION  
CENTRAL SCHOOL LAGOON  
ANTI-DEGRADATION REPORT

**3.07 PROPOSED PROJECT (INCREASE DISCHARGE FLOW TO FLINT RIVER)**

**Attachment 3 to Supplementary  
Form ADEM Form 313  
Calculation of Total Annualized Project Costs  
for Private-Sector Projects**

Capital Costs to be Financed (Supplied by applicant)	<u>\$ 210,500</u>	(1)
Interest rate for Financing (Expressed as a decimal)	<u>.06</u>	(i)
Time Period of Financing (Assume 10 years*)	<u>10 years</u>	(n)
Annualization Factor = $\frac{i}{(1+i)^{10}-1} + i$	<u>.136</u>	(2)
Annualized Capital Cost [Calculate: (1) x (2)]	<u>\$ 28,628</u>	(3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	<u>\$ 100,000</u>	(n)

**Total Annual Cost of Pollution Control Project [ (3) + (4) ]**

<u>\$ 128,628</u>	(5)
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\* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

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



MADISON COUNTY BOARD OF EDUCATION  
CENTRAL SCHOOL LAGOON  
ANTI-DEGRADATION REPORT

#### 4.0 SUMMARY

The Central School Lagoon is located at Central School in Madison County in the city of Huntsville. The lagoon is currently approaching its functional maximum with the increase of enrollment. An increased ability to discharge would significantly benefit the school.

The analysis of alternatives was based on several assumptions. We will discuss the methodology and assumptions, which went into the cost analysis for each alternative in this section.

The cost analysis for the proposed project is included as Part 3.07 *Proposed Project (Increase discharge flow to Flint River)*. The capital costs were based on typical \$/gallon treatment cost values for secondary treatment and estimated lengths of piping for the collection system multiplied by the respected current installation costs for gravity sewer installation. The operation and maintenance costs were estimated on the experience of Living Water Services with the costs associated with other similar systems they own and operate.

Option 3.01 Land Application was considered for this application. Central School Lagoon currently discharges to the Flint River therefore in order to use land application Central School Lagoon (Madison County Board of Education) would need to acquire additional property. The current property surrounding the plant is limited and currently being used for residential and agricultural purposes. The proximity of available property, cost of acquiring the property, installing the necessary force main and spray fields, and other costs associated with the construction make this option economically infeasible.

The option of pretreatment and discharge to POTW (Part 3.02) has not been included as part of this analysis. The proximity to a POTW has precluded this option from further consideration. The nearest POTW is owned by the City of Decatur. The approximate ten miles of 6 inch force main and river crossing required to connect to this system make this option economically infeasible. The required force main size would be 6 inch in diameter. The estimated cost to install ten miles of 6 inch diameter force main, railroad crossings and river crossing is approximately \$2,750,000 in additional costs. This cost along with other costs associated with construction and maintenance make this option economically infeasible.

The option of Relocation of Discharge (Part 3.03) has not been included as part of this analysis. Currently Central School Lagoon discharges to the Flint River of which they will maintain while increasing discharge flow to Flint River.

The option of Reuse/Recycle (Part 3.04) has not been included as part of this analysis. Currently the state of Alabama does not have regulations on discharging for the purpose of reuse/recycle unless the entire disposal area is inclusive within the NPDES permit.

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The option of Public Access Reuse (Part 3.05) has not been included as part of this analysis. This option is essentially similar to alternative Part 3.04 and the state of Alabama does not currently have regulations on discharging for the purpose of reuse unless the entire disposal area is inclusive within the NPDES permit.

Two essentially similar options are Part 3.01 Land Application and Part 3.06 On-Site/Subsurface disposal. Both options will require the same level of treatment and storage. As previously discussed, there are several limitations with applying treated wastewater to the existing property. Therefore this option has been eliminated from consideration.

The option of increasing the discharge flow to Flint River has been selected as the best option for this system. The treatment system will be a biological waste treatment plant that consists of six basic parts:

1. Primary Treatment
2. Aeration Basins
3. Final Clarifiers
4. Chlorination/Dechlorination
5. Aerobic Holding/Digester

The purpose of the headworks is to meter the incoming flow of wastewater and remove large solids and materials that could damage or cause excessive wear to plant equipment following the headworks. Next, wastewater enters the Aeration Basins, where it is mixed with microorganisms (sludge) and aerated for a given period of time. This process is called activated sludge and will help stabilize the organic matter and to remove nutrients such as nitrogen. Combined sludge and water (Mixed Liquor) flows from the Aeration Basins into the Final Clarifiers for separation. In the Clarifiers, sludge is allowed to settle for returning to the Aeration Basins. Returned sludge is mixed with more raw sewage to repeat the process. Water separated from Mixed Liquor flow over a weir and then to the Chlorine Contact Chamber. The purpose of the Chlorine Contact Basin is disinfection of filtered wastewater so the effluent from this plant will not present a health hazard to those who are down stream of the discharge. The chlorine may be in the form of chlorine tablets. The chlorine contact chamber will be sized to provide a minimum of 20 minutes of detention. Dechlorination tablets will be provided to eliminate the toxic effects of chlorinated compounds. A Sludge holding tank (or aerobic digester) is used to hold excess sludge that must be occasionally removed from the Clarifier to maintain a suitable degree of treatment.





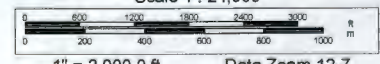
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Scale 1 : 24,000







CENTRAL SCHOOL WWTP  
NPDES PERMIT No. AL0048810  
Permitted Flow = 0.015 MGD

NOT TO SCALE

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**SCH-1**

11/5/18

**Living Water Services Scope of Work:**

- Provide inspections and equipment checks of the treatment facility on a two to three day per week frequency.
- Perform monthly and annual preventive maintenance on equipment in accordance with manufacturer's recommendations.
- Provide on-site sampling, monitoring, analyses, and laboratory analyses as required by the NPDES Permit (AL0048810).
- Perform adjustments to the operations or the process, as required and coordinate removal of sludge from the facility with the Owner and vendor
- Maintain an on-site log book of activities within the facility.
- Provide assistance with the development of capital needs lists and cost estimates for these items, or repairs, to assure long-term reliable operation of the facility. The approval of all expenditures to remain the Owner's responsibility.
- Provide 24 hour on-call availability for emergency services.
- Prepare and submit copies of monthly Discharge Monitoring Reports to ADEM and Owner.
- Provide assistance to the Owner in interaction with ADEM or the local Health Department in matters relating to the facility, as needed.
- Provide quotations for repairs or improvements to the facility, as requested by the Owner.