GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

SUMMARY PAGE

Name of Facility: Georgia Cumberland Academy – Georgia Cumberland Academy WPCP

NPDES Permit No.: GA0035947

This is a reissuance of the NPDES permit for the Georgia Cumberland Academy WPCP. Up to 0.016 MGD (monthly average) of treated domestic wastewater is discharged to the Oostanaula River in the Coosa River Basin.

The permit expired on July 31, 2019 and became administratively extended.

The permit was placed on public notice from January 30, 2020 to March 4, 2020.

Please Note The Following Changes to the Proposed NPDES Permit From The Existing Permit:

Part I.B – Effluent Limitations and Monitoring Requirements:

- Added total phosphorus effluent limit of 5.0 mg/L to meet the 2008 Lake Weiss TMDL requirement.
- Added orthophosphate, organic nitrogen, nitrate-nitrite and total Kjeldahl nitrogen monitoring requirements to determine nutrient speciation and to quantify nutrient loadings in the Coosa River Basin.
- Changed weekly average effluent limits to daily maximum effluent limits in accordance with 40 CFR 122.45(d)(1).

Part I.C – Monitoring and Reporting:

- Added a 24-month total phosphorus compliance schedule to meet the total phosphorus limits in Part I.B.

Standard Conditions and Boilerplate Modifications:

The permit boilerplate includes modified language or added language consistent with current NPDES permits.

Final Permit Determinations and Public Comments:

- ☐ Final issued permit did not change from the draft permit placed on public notice.
- ☐ Public comments were received during public notice period.
- ☐ Public hearing was held on
- ☒ Final permit includes changes from the draft permit placed on public notice. See attached permit revisions and/or permit fact sheet revisions.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1152, East Tower
Atlanta, Georgia 30334
404-463-1511

MAR 0 6 2020

Persons who commented on
Draft NPDES Permit No. GA0035947

RE: EPD Response to Comments
Georgia Cumberland Academy
Water Pollution Control Plant
NPDES Permit No. GA0035947

Dear Sir/Madam:

Thank you for your comments regarding the permit issuance for the Georgia Cumberland Academy Water Pollution Control Plant NPDES Permit. Attached is a summary of comments from the public and our responses to the issue raised. In addition, we have attached the Permit Revisions documenting the changes made to the attached permit. We appreciate your interest in this matter.

After consideration of your comments, EPD has determined that the permit is protective of water quality standards and we have issued the permit.

If you have any questions, please contact Josh Hayes of my staff at 404-463-1834.

Sincerely,

Audra Dickson, Manager
Wastewater Regulatory Program

AD/jbh
Attachment: Response to Comments

Response to Comments

Georgia Cumberland Academy Water Pollution Control Plant (WPCP)
NPDES Permit No. GA0035947
Murray County, Coosa River Basin

Comment	EPD Response
The Georgia Cumberland Academy is currently in the process of abandoning the facility and connecting onto the City of Calhoun sewerage system. This work should be completed by the end of the year. Therefore, we request that EPD remove the new nutrient testing requirements from the new permit.	The quarterly monitoring requirement for organic nitrogen, nitrate-nitrite, total Kjeldahl nitrogen, total phosphorus, and orthophosphate has been delayed to the last quarter of 2020 (October 1-December 31, 2020). If the wastewater generated by the Academy is not diverted to the City of Calhoun by the end of the year, the permittee will have to conduct nutrient monitoring.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office
2 Martin Luther King, Jr. Drive
Suite 1456, East Tower
Atlanta, Georgia 30334
404-656-4713

Mr. Gregory Gerard, Principal
Georgia Cumberland Academy
397 Academy Drive SW
Calhoun, GA 30701

MAR 6 2020

RE: Permit Issuance
Georgia Cumberland Academy
Water Pollution Control Plant (WPCP)
NPDES Permit No. GA0035947
Gordon County, Coosa River Basin

Dear Mr. Gerard:

Pursuant to the Georgia Water Quality Control Act, as amended; the Federal Water Pollution Control Act, as amended; and the Rules and Regulations promulgated thereunder, we have today issued the attached National Pollutant Discharge Elimination System (NPDES) permit for the referenced wastewater treatment facility.

Your facility has been assigned to the following EPD office for reporting and compliance:

Georgia Environmental Protection Division
Mountain District – Cartersville Office
Post Office Box 3250
Cartersville, Georgia 30121

Please be advised that on and after the effective date indicated in the attached NPDES permit, the permittee must comply with all the terms, conditions and limitations of this permit.

If you have any questions, please contact Josh Hayes at 404-463-1834 or *josh.hayes@dnr.ga.gov*.

Sincerely,

Richard E. Dunn
Director

RED\jbh
Attachment: NPDES Permit No. GA0035947, Fact Sheet
cc: Tom Sterndale, Georgia Cumberland Academy (tsterndale@gcasda.org)
Russel Nix, EPD Mountain District – Cartersville Office (russell.nix@dnr.ga.gov)
Katie Meade, EPD Mountain District – Cartersville Office (katie.meade@dnr.ga.gov)
Patrick Quigley, Quigley and Peoples, Inc. (paquigley@pandqinc.com)

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

PERMIT REVISIONS

Georgia Cumberland Academy WPCP
NPDES Permit No. GA0035947
(Gordon County)

Were there any revisions between the draft and the final permit? ☒ Yes ☐ No

If yes, specify:

Part I.B.1	The permittee is in the process of connecting the facility to the City of Calhoun's sewer collection system. The quarterly monitoring requirement for organic nitrogen, nitrate-nitrite, total Kjeldahl nitrogen, total phosphorus, and orthophosphate has been delayed to the last quarter of 2020 (October 1-December 31, 2020). If the wastewater generated by the Academy is not diverted to the City of Calhoun by the end of the year, the permittee will have to conduct nutrient monitoring.

Permit No. GA0035947
Issuance Date: MAR 6 2020

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

Georgia Cumberland Academy
397 Academy Drive Southwest
Calhoun, Georgia, 30701

is authorized to discharge from a facility located at

Georgia Cumberland Academy
Water Pollution Control Plant
397 Academy Drive Southwest
Calhoun, Georgia, 30701

to receiving waters

Unnamed Tributary of Oostanaula River
(Coosa River Basin)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit.

This permit is issued in reliance upon the permit application signed on October 10, 2018, any other applications upon which this permit is based, supporting data entered therein or attached thereto, and any subsequent submittal of supporting data.

This permit shall become effective on April 1, 2020.

This permit and the authorization to discharge shall expire at midnight, March 31, 2025.

STATE OF GEORGIA CONSTITUTIONI 1776

Director,
Environmental Protection Division

PART I

EPD is the Environmental Protection Division of the Department of Natural Resources.

The Federal Act referred to is The Clean Water Act.

The State Act referred to is The Water Quality Control Act (Act No. 870).

The State Rules referred to are The Rules and Regulations for Water Quality Control (Chapter 391-3-6).

A. SPECIAL CONDITIONS

1. MONITORING

a. The monthly average, other than for fecal coliform bacteria, is the arithmetic mean of values obtained for samples collected during a calendar month.

b. The weekly average, other than for fecal coliform bacteria, is the arithmetic mean of values obtained for samples collected during a 7-day period. The week begins 12:00 midnight Saturday and ends at 12:00 midnight the following Saturday. To define a different starting time for the sampling period, the permittee must notify the EPD in writing. For reporting required by Part I.D.1. of this permit, a week that starts in one month and ends in another month shall be considered part of the second month. The permittee may calculate and report the weekly average as a 7-day moving average.

c. Fecal coliform bacteria will be reported as the geometric mean of the values for the samples collected during the time periods in I.A.1.a. and I.A.1.b.

d. Untreated wastewater influent samples required by I.B. shall be collected before any return or recycle flows. These flows include returned activated sludge, supernatants, centrates, filtrates, and backwash.

e. Effluent samples required by I.B. of this permit shall be collected after the final treatment process and before discharge to receiving waters. Composite samples may be collected before disinfection with written EPD approval.

f. A composite sample shall consist of a minimum of 5 subsamples collected at least once every 2 hours for at least 8 hours and shall be composited proportionately to flow.

g. Flow measurements shall be conducted using the flow measuring device(s) in accordance with the approved design of the facility. If instantaneous measurements are required, then the permittee shall have a primary flow measuring device that is correctly installed and maintained. If continuous recording measurements are required, then flow measurements must be made using continuous recording equipment. Calibration shall be maintained of the continuous recording instrumentation to ± 10% of the actual flow.

Flow shall be measured manually to check the flow meter calibration at a frequency of once a month. If secondary flow instruments are in use and malfunction or fail to maintain calibration as required, the flow shall be computed from manual measurements or by other method(s) approved by EPD until such time as the secondary flow instrument is repaired. For facilities which utilize alternate technologies for measuring flow, the flow measurement device must be calibrated semi-annually by qualified personnel.

Records of the calibration checks shall be maintained.

h. If secondary flow instruments malfunction or fail to maintain calibration as required in I.A.1.g., the flow shall be computed from manual measurements taken at the times specified for the collection of composite samples.

i. Some parameters will be reported as "not detected" when they are below the detection limit and will then be considered in compliance with the effluent limit. The detection limit will also be reported.

2. SLUDGE DISPOSAL REQUIREMENTS

Sludge shall be disposed of according to the regulations and guidelines established by the EPD and the Federal Act section 405(d) and (e), and the Resource Conservation and Recovery Act (RCRA). In land applying nonhazardous municipal sewage sludge, the permittee shall comply with the general criteria outlined in the most current version of the EPD "Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates" and with the State Rules, Chapter 391-3-6-.17. Before disposing of municipal sewage sludge by land application or any method other than co-disposal in a permitted sanitary landfill, the permittee shall submit a sludge management plan to EPD for written approval. This plan will become a part of the NPDES Permit after approval and modification of the permit. The permittee shall notify the EPD of any changes planned in an approved sludge management plan.

If an applicable management practice or numerical limitation for pollutants in sewage sludge is promulgated under Section 405(d) of the Federal Act after approval of the plan, then the plan shall be modified to conform with the new regulations.

3. SLUDGE MONITORING REQUIREMENTS

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor and maintain records documenting the quantity of sludge removed from the facility. Records shall be maintained documenting that the quantity of solids removed from the facility equals the solids generated on an average day. The total quantity of sludge removed from the facility during the reporting period shall be reported each month with the Discharge Monitoring Reports as required under Part I.D.1. of this permit. The quantity shall be reported on a dry weight basis (dry tons).

4. EFFLUENT TOXICITY AND BIOMONITORING REQUIREMENTS

The permittee shall comply with effluent standards or prohibitions established by section 307(a) of the Federal Act and with Chapter 391-3-6-.03(5)(e) of the State Rules and may not discharge toxic pollutants in concentrations or combinations that are harmful to humans, animals, or aquatic life.

If toxicity is suspected in the effluent, the EPD may require the permittee to perform any of the following actions:

a. Acute biomonitoring tests;

b. Chronic biomonitoring tests;

c. Stream studies;

d. Priority pollutant analyses;

e. Toxicity reduction evaluations (TRE); or

f. Any other appropriate study.

The EPD will specify the requirements and methodologies for performing any of these tests or studies. Unless other concentrations are specified by the EPD, the critical concentration used to determine toxicity in biomonitoring tests will be the effluent instream wastewater concentration (IWC) based on the permitted monthly average flow of the facility and the critical low flow of the receiving stream (7Q10). The endpoints that will be reported are the effluent concentration that is lethal to 50% of the test organisms (LC50) if the test is for acute toxicity and the no observed effect concentration (NOEC) of effluent if the test is for chronic toxicity.

The permittee must eliminate effluent toxicity and supply the EPD with data and evidence to confirm toxicity elimination.

5. ELIMINATION OF DISCHARGE

Operation of this facility will cease and the discharge will be eliminated by connection to an appropriate municipal or privately owned water pollution control plant sewer system within three months of reasonable availability of the connection.

6. EXPANSION OF SYSTEM

The permittee shall not allow any new connections to the facility sewer system without written approval from the EPD.

B.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Discharge to Unnamed Tributary of Oostanaula River - Outfall #001 (34.464967°, -85.028019°):

The discharge from the water pollution control plant shall be limited and monitored by the permittee as specified below starting on the effective date of the permit and continuing for 24 months:

Parameters	Discharge limitations in mg/L unless otherwise specified		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	0.016	0.02	One Day/Month	Instantaneous	Effluent
Five-Day Biochemical Oxygen Demand	30	45	One Day/Month	Grab	Effluent
Total Suspended Solids	90	120	One Day/Month	Grab	Effluent
Ammonia, as N (1)	17.4	26.1	One Day/Month	Grab	Effluent
Fecal Coliform Bacteria (#/100 mL)	200	400	One Day/Month	Grab	Effluent

Parameters	Discharge limitations in mg/L unless otherwise specified	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location
pH, Daily Minimum – Daily Maximum (Standard Unit)	6.0 – 9.0	One Day/Month	Grab	Effluent
Total Residual Chlorine, Daily Maximum	0.5	One Day/Month	Grab	Effluent
Organic Nitrogen, as N (1), (2)	Report	One Day/Quarter	Grab	Effluent
Nitrate-Nitrite, as N (1), (2)	Report	One Day/Quarter	Grab	Effluent
Total Kjeldahl Nitrogen, as N (1), (2)	Report	One Day/Quarter	Grab	Effluent
Total Phosphorus, as P (2), (3)	Report	One Day/Quarter	Grab	Effluent
Orthophosphate, as P (2), (3)	Report	One Day/Quarter	Grab	Effluent

(1) Ammonia, organic nitrogen, nitrate-nitrite, and total Kjeldahl nitrogen (TKN) must be analyzed or calculated from the same sample. Organic nitrogen, as N = TKN – ammonia, as N.

(2) Quarterly monitoring requirement is applicable 6 months after the effective date of the permit.

(3) Total phosphorus and orthophosphate must be analyzed from the same sample.

(4) Refer to Part I.C.8. TOTAL PHOSPHORUS COMPLIANCE SCHEDULE

B.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Discharge to Unnamed Tributary of Oostanaula River - Outfall #001 (34.464967°, -85.028019°):

The discharge from the water pollution control plant shall be limited and monitored by the permittee as specified below starting 24 months after the effective date of the permit:

Parameters	Discharge limitations in mg/L unless otherwise specified		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	0.016	0.02	One Day/Month	Instantaneous	Effluent
Five-Day Biochemical Oxygen Demand	30	45	One Day/Month	Grab	Effluent
Total Suspended Solids	90	120	One Day/Month	Grab	Effluent
Ammonia, as N (1)	17.4	26.1	One Day/Month	Grab	Effluent
Total Phosphorus, as P (2)	5.0	7.5	One Day/Month	Grab	Effluent
Fecal Coliform Bacteria (#/100 mL)	200	400	One Day/Month	Grab	Effluent

Parameters	Discharge limitations in mg/L unless otherwise specified	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location
pH, Daily Minimum – Daily Maximum (Standard Unit)	6.0 – 9.0	One Day/Month	Grab	Effluent
Total Residual Chlorine, Daily Maximum	0.5	One Day/Month	Grab	Effluent
Organic Nitrogen, as N (1)	Report	One Day/Quarter	Grab	Effluent
Nitrate-Nitrite, as N (1)	Report	One Day/Quarter	Grab	Effluent
Total Kjeldahl Nitrogen, as N (1)	Report	One Day/Quarter	Grab	Effluent
Orthophosphate, as P (2)	Report	One Day/Quarter	Grab	Effluent

(1) Ammonia, organic nitrogen, nitrate-nitrite, and total Kjeldahl nitrogen (TKN) must be analyzed or calculated from the same sample. Organic nitrogen, as N = TKN – ammonia, as N.

(2) Total phosphorus and orthophosphate must be analyzed from the same sample.

C. MONITORING AND REPORTING

1. REPRESENTATIVE SAMPLING

Samples and measurements of the monitored waste shall represent the volume and nature of the waste stream. The permittee shall maintain a written sampling and monitoring schedule.

2. SAMPLING PERIOD

a. Unless otherwise specified in this permit, quarterly samples shall be taken during the periods January-March, April-June, July-September, and October-December.

b. Unless otherwise specified in this permit, semiannual samples shall be taken during the periods January-June and July-December.

c. Unless otherwise specified in this permit, annual samples shall be taken during the period of January-December.

3. MONITORING PROCEDURES

All analytical methods, sample containers, sample preservation techniques, and sample holding times must be consistent with the techniques and methods listed in 40 CFR Part 136. The analytical method used shall be sufficiently sensitive. EPA-approved methods must be applicable to the concentration ranges of the NPDES permit samples.

4. RECORDING OF RESULTS

For each required parameter analyzed, the permittee shall record:

a. The exact place, date, and time of sampling, and the person(s) collecting the sample. For flow proportioned composite samples, this shall include the instantaneous flow and the corresponding volume of each sample aliquot, and other information relevant to document flow proportioning of composite samples;

b. The dates and times the analyses were performed;

c. The person(s) who performed the analyses;

d. The analytical procedures or methods used; and

e. The results of all required analyses.

5. ADDITIONAL MONITORING BY PERMITTEE

If the permittee monitors required parameters at the locations designated in I.B. more frequently than required, the permittee shall analyze all samples using approved analytical methods specified in I.C.3. The results of this additional monitoring shall be included in calculating and reporting

the values on the Discharge Monitoring Report forms. The permittee shall indicate the monitoring frequency on the report. The EPD may require in writing more frequent monitoring, or monitoring of other pollutants not specified in this permit.

6. RECORDS RETENTION

The permittee shall retain records of:

a. All laboratory analyses performed including sample data, quality control data, and standard curves;

b. Calibration and maintenance records of laboratory instruments;

c. Calibration and maintenance records and recordings from continuous recording instruments;

d. Process control monitoring records;

e. Facility operation and maintenance records;

f. Copies of all reports required by this permit;

g. All data and information used to complete the permit application; and

h. All monitoring data related to sludge use and disposal.

These records shall be kept for at least three years. Sludge handling records must be kept for at least five years. Either period may be extended by EPD written notification.

7. PENALTIES

Both the Federal and State Acts provide that any person who falsifies or tampers with any monitoring device or method required under this permit, or who makes any false statement, representation, or certification in any record submitted or required by this permit shall, if convicted, be punished by a fine or by imprisonment or by both. The Acts include procedures for imposing civil penalties for violations or for negligent or intentional failure or refusal to comply with any final or emergency order of the Director of the EPD.

8. TOTAL PHOSPHORUS COMPLIANCE SCHEDULE

The permittee shall comply with the total phosphorus effluent limitations in Part I.B.2. of this permit in accordance with the following schedule:

a. Within 9 months of the effective date of the permit, the permittee shall submit a design development report (DDR) to EPD for any modifications needed at the facility that will allow the facility to meet the total phosphorus effluent limitations in Part I.B.2. of this permit.

b. Within 12 months of the effective date of the permit, the permittee shall submit plans and specifications for any modifications needed at the facility that will allow it to meet the total phosphorus effluent limitations in Part I.B.2. of this permit.

c. Within 18 months of the effective date of the permit, the permittee shall submit a report to EPD that outlines the progress towards completing construction of the treatment process modifications. The report shall include an estimate of what percentage of the construction is complete and is to describe what work remains to be completed in order to meet the total phosphorus effluent limitations in Part I.B.2. of this permit.

d. Within 24 months of the effective date of the permit, the permittee shall comply with the total phosphorus effluent limitations in Part I.B.2. of this permit.

If at any time during the compliance schedule the permittee believes that the facility will be able to consistently meet the total phosphorus effluent limitations without having to make any plant modifications, then the permittee may choose to write a letter to EPD stating this. The letter needs to include data supporting the permittee's position. Upon written notification by EPD, the permittee may be excused from completing any remaining items in the above compliance schedule. However, the permittee will also be subject to the total phosphorus effluent limitations from the date of EPD's letter and any future exceedance of those effluent limitations in Part I.B.2. will be considered to be a permit violation. If the permittee does not receive written notification from EPD releasing it from the compliance schedule, then the permittee is required to complete all items in the schedule by the dates indicated and will be required to attain compliance with the total phosphorus effluent limitations in Part I.B.2. within 24 months of the effective date of the permit.

All correspondences and documents shall be submitted to EPD at the address below:

Environmental Protection Division
Wastewater Regulatory Program
2 Martin Luther King Jr. Drive SE
Suite 1152 East
Atlanta, Georgia 30334

D. REPORTING REQUIREMENTS

1. The permittee must electronically report the DMR, OMR and additional monitoring data using the web based electronic NetDMR reporting system, unless a waiver is granted by EPD.

   a. The permittee must comply with the Federal National Pollutant Discharge Elimination System Electronic Reporting regulations in 40 CFR §127. The permittee must electronically report the DMR, OMR, and additional monitoring data using the web based electronic NetDMR reporting system online at: https://netdmr.epa.gov/netdmr/public/home.htm

   b. Monitoring results obtained during the calendar month shall be summarized for each month and reported on the DMR. The results of each sampling event shall be reported on the OMR and submitted as an attachment to the DMR.

c. The permittee shall submit the DMR, OMR and additional monitoring data no later than 11:59 p.m. on the 15th day of the month following the sampling period.

d. All other reports required herein, unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

2. **No later than December 21, 2020**, the permittee must electronically report the following compliance monitoring data and reports using the online web based electronic system approved by EPD, unless a waiver is granted by EPD:

a. Sewage Sludge/Biosolids Annual Program Reports provided that the permittee has an approved Sewage Sludge (Biosolids) Plan;

b. Pretreatment Program Reports provided that the permittee has an approved Industrial Pretreatment Program in this permit;

c. Sewer Overflow/Bypass Event Reports;

d. Noncompliance Notification;

e. Other noncompliance; and

f. Bypass

3. OTHER REPORTS

All other reports required in this permit not listed above in Part I.D.2 or unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

4. OTHER NONCOMPLIANCE

All instances of noncompliance not reported under Part I.B. and Part II. A. shall be reported to EPD at the time the monitoring report is submitted.

5. SIGNATORY REQUIREMENTS

All reports, certifications, data or information submitted in compliance with this permit or requested by EPD must be signed and certified as follows:

a. Any State or NPDES Permit Application form submitted to the EPD shall be signed as follows in accordance with the Federal Regulations, 40 C.F.R. 122.22:

1. For a corporation, by a responsible corporate officer. A responsible corporate officer means:

i. a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or

ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

3. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.

b. All other reports or requests for information required by the permit issuing authority shall be signed by a person designated in (a) above or a duly authorized representative of such person, if:

1. The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;

2. The authorization is made in writing by the person designated under (a) above; and

3. The written authorization is submitted to the Director.

c. Any changes in written authorization submitted to the permitting authority under (b) above which occur after the issuance of a permit shall be reported to the permitting authority by submitting a copy of a new written authorization which meets the requirements of (b) and (b.1) and (b.2) above.

d. Any person signing any document under (a) or (b) above shall make 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 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."

PART II

A. MANAGEMENT REQUIREMENTS

1. PROPER OPERATION AND MAINTENANCE

The permittee shall properly maintain and operate efficiently all treatment or control facilities and related equipment installed or used by the permittee to achieve compliance with this permit. Efficient operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. Back-up or auxiliary facilities or similar systems shall be operated only when necessary to achieve permit compliance.

2. PLANNED CHANGE

Any anticipated facility expansions, or process modifications which will result in new, different, or increased discharges of pollutants requires the submission of a new NPDES permit application. If the changes will not violate the permit effluent limitations, the permittee may notify EPD without submitting an application. The permit may then be modified to specify and limit any pollutants not previously limited.

3. TWENTY-FOUR HOUR REPORTING

If, for any reason the permittee does not comply with, or will be unable to comply with any effluent limitations specified in the permittee's NPDES permit, the permittee shall provide EPD with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

a. A description of the noncompliance and its cause; and

b. The period of noncompliance, including the exact date and times; or, if not corrected, the anticipated time the noncompliance is expected to continue; and

c. The steps taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

4. ANTICIPATED NONCOMPLIANCE NOTIFICATION

The permittee shall give written notice to the EPD at least 10 days before:

a. Any planned changes in the permitted facility; or

b. Any activity which may result in noncompliance with the permit.

5. OTHER NONCOMPLIANCE

The permittee must report all instances of noncompliance not reported under other specific reporting requirements, at the time monitoring reports are submitted. The reports shall contain the information required under conditions of twenty-four hour reporting.

6. OPERATOR CERTIFICATION REQUIREMENTS

The person responsible for the daily operation of the facility must be a Class III Certified Operator in compliance with the Georgia State Board of Examiners for Certification of Water and Wastewater Plant Operators and Laboratory Analysts Act, as amended, and as specified by Subparagraph 391-3-6-.12 of the Rules and Regulations for Water Quality Control. All other operators must have the minimum certification required by this Act.

7. LABORATORY ANALYST CERTIFICATION REQUIREMENTS

Laboratory Analysts must be certified in compliance with the Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act, as amended.

8. BYPASSING

Any diversion of wastewater from or bypassing of wastewater around the permitted treatment works is prohibited, except if:

a. Bypassing is unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There are no feasible alternatives to bypassing; and

c. The permittee notifies the EPD at least 10 days before the date of the bypass.

Feasible alternatives to bypassing include use of auxiliary treatment facilities and retention of untreated waste. The permittee must take all possible measures to prevent bypassing during routine preventative maintenance by installing adequate back-up equipment.

The permittee shall operate the facility and the sewer system to minimize discharge of pollutants from combined sewer overflows or bypasses and may be required by the EPD to submit a plan and schedule to reduce bypasses, overflows, and infiltration.

Any unplanned bypass must be reported following the requirements for noncompliance notification specified in II.A.3. The permittee may be liable for any water quality violations that occur as a result of bypassing the facility.

9. POWER FAILURES

If the primary source of power to this water pollution control facility is reduced or lost, the permittee shall use an alternative source of power to reduce or control all discharges to maintain permit compliance.

10. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge disposal which might adversely affect human health or the environment.

11. UPSET PROVISION

Provision under 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

B. RESPONSIBILITIES

1. DUTY TO COMPLY

The permittee must comply with all conditions of this permit. Any permit noncompliance is a violation of the Federal Clean Water Act, State Act, and the State Rules, and is grounds for:

a. Enforcement action;

b. Permit termination, revocation and reissuance, or modification; or

c. Denial of a permit renewal application.

2. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit.

3. INSPECTION AND ENTRY

The permittee shall allow the Director of the EPD, the Regional Administrator of EPA, and their authorized representatives, agents, or employees after they present credentials to:

a. Enter the permittee's premises where a regulated activity or facility is located, or where any records required by this permit are kept;

b. Review and copy any records required by this permit;

c. Inspect any facilities, equipment, practices, or operations regulated or required by this permit; and

d. Sample any substance or parameter at any location.

4. DUTY TO PROVIDE INFORMATION

The permittee shall furnish any information required by the EPD to determine whether cause exists to modify, revoke and reissue, or terminate this permit or to determine compliance with this permit. The permittee shall also furnish the EPD with requested copies of records required by this permit.

5. TRANSFER OF OWNERSHIP

A permit may be transferred to another person by a permittee if:

a. The permittee notifies the Director in writing at least 30 days in advance of the proposed transfer;

b. An agreement is written containing a specific date for transfer of permit responsibility including acknowledgment that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on. This agreement must be submitted to the Director at least 30 days in advance of the proposed transfer; and

c. The Director does not notify the current permittee and the new permittee within 30 days of EPD intent to modify, revoke and reissue, or terminate the permit. The Director may require that a new application be filed instead of agreeing to the transfer of the permit.

6. AVAILABILITY OF REPORTS

Except for data determined to be confidential by the Director of EPD under O.C.G.A. 12-5-26 or by the Regional Administrator of EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared to comply with this permit shall be available for public inspection at an EPD office. Effluent data, permit applications, permittees' names and addresses, and permits shall not be considered confidential.

7. PERMIT ACTIONS

This permit may be modified, terminated, or revoked and reissued in whole or in part during its term for causes including, but not limited to:

a. Permit violations;

b. Obtaining this permit by misrepresentation or by failure to disclose all relevant facts;

c. Changing any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

d. Changes in effluent characteristics; and

e. Violations of water quality standards.

The filing of a request by the permittee for permit modification, termination, revocation and reissuance, or notification of planned changes or anticipated noncompliance does not negate any permit condition.

8. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

9. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights of either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, or any infringement of Federal, State or local laws or regulations.

10. DUTY TO REAPPLY

The permittee shall submit an application for permit reissuance at least 180 days before the expiration date of this permit. The permittee shall not discharge after the permit expiration date. To receive authorization to discharge beyond the expiration date, the permittee shall submit the information, forms, and fees required by the EPD no later than 180 days before the expiration date.

11. CONTESTED HEARINGS

Any person aggrieved or adversely affected by any action of the Director of the EPD shall petition the Director for a hearing within 30 days of notice of the action.

12. SEVERABILITY

The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the provision does not affect other circumstances or the remainder of this permit.

13. OTHER INFORMATION

Where 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 form to the Director, it shall promptly submit such facts or information.

14. PREVIOUS PERMITS

All previous State wastewater permits issued to this facility, whether for construction or operation, are hereby revoked on the effective date of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

PART III

APPROVED SLUDGE MANAGEMENT PLAN

1. The permittee's approved Sludge Management Plan allows for sewage sludge generated at the facility to be sent to an off-site preparer for further treatment and ultimate disposal.

2. The permittee will report on an annual basis the amount of sewage sludge sent to the off-site preparer during the most recent calendar year. The annual report shall be submitted to EPD no later than February 19 of the following year.

3. The permittee will maintain sludge handling records in accordance with Part I.C.6. of the Permit.

4. The permittee will notify EPD in writing of any planned changes to the permittee's sewage sludge use or disposal practices.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

The Georgia Environmental Protection Division proposes to issue an NPDES permit to the applicant identified below. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to waters of the State.

Technical Contact:

Josh Hayes, Environmental Engineer
josh.hayes@dnr.ga.gov
404-463-1834

Draft permit:

- ☐ First issuance
- ☐ Reissuance with no or minor modifications from previous permit
- ☒ Reissuance with substantial modifications from previous permit
- ☐ Modification of existing permit
- ☐ Requires EPA review

1. FACILITY INFORMATION

1.1 NPDES Permit No.: GA0035947

1.2 Name and Address of Owner/Applicant

Georgia Cumberland Academy
397 Academy Drive Southwest
Calhoun, Georgia, 30701

1.3 Name and Address of Facility

Georgia Cumberland Academy Water Pollution Control Plant (WPCP)
397 Academy Drive Southwest
Calhoun, Georgia, 30701

1.4 Location and Description of the Discharge (as reported by applicant)

Outfall #	Latitude (°)	Longitude (°)	Receiving Waterbody
001	34.464967	-85.028019	Unnamed Tributary of Oostanaula River

1.5 Permitted Design Capacity

0.016 MGD

1.6 SIC Code and Description

SIC Code 4952 – Sewerage systems: Establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system, including such treatment processes as may be provided.

1.7 Description of the Water Pollution Control Plant

Wastewater treatment:

The treatment process consists of a septic tank, polishing pond, and chlorination/dechlorination. Treated effluent is discharged to an unnamed tributary of the Oostanaula River.

Solids processing:

The septic tank is pumped out when needed. Solids settle and stabilize at the bottom of the pond. The pond will be dredged, and dewatered sludge sent to a permitted landfill when needed.

1.8 Type of Wastewater Discharge

☐	Process wastewater	☐	Stormwater
☒	Domestic wastewater	☐	Combined (Describe)
☐	Other (Describe)		

1.9 Characterization of Effluent Discharge (as reported by applicant)

Outfall No. 001:

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	0.029	0.013
Five-Day Biochemical Oxygen Demand (mg/L)	22.4	2.37
Total Suspended Solids (mg/L)	34.5	9.75
Fecal Coliform Bacteria (#/100mL)	198	20.2
Ammonia, as N (mg/L)	21.5	10.7

2. APPLICABLE REGULATIONS

2.1 State Regulations

Chapter 391-3-6 of the Georgia Rules and Regulations for Water Quality Control

2.2 Federal Regulations

Source	Activity	Applicable Regulation
Municipal	Municipal Effluent Discharge	40 CFR 122 40 CFR 125 40 CFR 133
	Non-Process Water Discharges	40 CFR 122 40 CFR 125
	Municipal Sludge Use and Disposal	40 CFR 122 40 CFR 257 40 CFR 501 & 503

3. WATER QUALITY STANDARDS & RECEIVING WATERBODY INFORMATION

Section 301(b)(1)(C) of the Clean Water Act (CWA) requires the development of limitations in permits necessary to meet water quality standards. Federal Regulations 40 CFR 122.4(d) require that conditions in NPDES permits ensure compliance with the water quality standards which are composed of use classifications, numeric and or narrative water quality criteria and an anti-degradation policy. The use classification system designates the beneficial uses that each waterbody is expected to achieve, such as drinking water, fishing, or recreation. The numeric and narrative water quality criteria are deemed necessary to support the beneficial use classification for each water body. The antidegradation policy represents an approach to maintain and to protect various levels of water quality and uses.

3.1 Receiving Waterbody Classification and Information – Oostanaula River:

Specific Water Quality Criteria for Classified Water Usage [391-3-6-.03(6)]:

Fishing: Propagation of Fish, Shellfish, Game and Other Aquatic Life; secondary contact recreation in and on the water; or for any other use requiring water of a lower quality.

(i) Dissolved Oxygen: A daily average of 6.0 mg/L and no less than 5.0 mg/L at all times for water designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/L and no less than 4.0 mg/L at all times for waters supporting warm water species of fish.

(ii) pH: Within the range of 6.0 - 8.5.

(iii) Bacteria:

1. For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 per 100 mL based

on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200/100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 mL in lakes and reservoirs and 500 per 100 mL in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 per 100 mL for any sample. The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.

2. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.

(iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.

3.2 Ambient Information

Outfall ID	30Q3 (cfs)	7Q10 (cfs)	1Q10 (cfs)	Annual Average Flow (cfs)	Hardness (mg $CaCO_3$/L)	Upstream Total Suspended Solids (mg/L)
001	720	320	165	2,795	25 [(1)]	10 [(2)]

(1) Not available. A conservative value of 25 mg/L will be used for the reasonable potential analysis calculations.

(2) Not available. A conservative value of 10 mg/L will be used for the reasonable potential analysis calculations.

3.3 Georgia 305(b)/303(d) List Documents

Oostanaula River	Hwy 156 to Hwy 140	Coosa	Not Supporting	FC(PCBs)	18	69	TMDLs completed FC 2004, FC(PCBs) 2005 (revised 2005 & 2014)
GAR031501030609	Gordon, Floyd	Fishing	1,10	LIN	Miles		

Oostanaula River is listed on the 2018 305(b)/303(d) list as not supporting its designated use (fishing) but TMDLs have been completed for the impacted parameters (fecal coliform bacteria, PCBs, and chlorophyll-*a*).

3.4 Total Maximum Daily Loads (TMDLs)

A TMDL evaluation for 58 stream segments in the Coosa River Basin for fecal coliform was completed in 2004. The TMDL recommended that all municipal treatment facilities with the potential for the occurrence of fecal coliform in their discharge will be given end of pipe limits equivalent to the water quality standard of 200 counts/100 ml or less. The fecal coliform bacteria limits in the draft permit are in accordance with the TMDL requirements.

In 2008, EPA completed a TMDL for Nutrient Impairment for Lake Weiss, AL. The TMDL requires a 30% reduction in the aggregated total phosphorus load allocation to Georgia at the state line. The proposed total phosphorus limits in the draft permit meet the TMDL requirements.

A TMDL evaluation for 36 stream segments in the Coosa River Basin for polychlorinated biphenyls was completed in 2014. The TMDL does not identify the Cumberland Academy WPCP as a point source for PCBs.

3.5 Wasteload Allocation (WLA)

The WLA for reissuance was issued on April 16, 2019. Refer to *Appendix A* of the Fact Sheet for a copy of the WLA.

4. EFFLUENT LIMITS AND PERMIT CONDITIONS

4.1 Reasonable Potential Analysis (RP)

Title 40 of the Federal Code of Regulations, 40 CFR 122.44(d) requires delegated States to develop procedures for determining whether a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above a narrative or numeric criteria within a State water. If such reasonable potential is determined to exist, the NPDES permit must contain pollutant effluent limits and/or effluent limits for whole effluent toxicity. Georgia's Reasonable Potential Procedures are based on Georgia's Rules and Regulations for Water Quality Control (Rules), Chapter 391-3-6-.06(4)(d)5. The chemical specific and biomonitoring data and other pertinent information in EPD's files will be considered in accordance with the review procedures specified in the Rules in the evaluation of a permit application and in the evaluation of the reasonable potential for an effluent to cause an exceedance in the numeric or narrative criteria.

Refer to Section 4.2 for reasonable potential analysis on effluent toxicity.

Refer to Section 4.6 for reasonable potential analysis on toxic and manmade pollutants.

4.2 Whole Effluent Toxicity (WET)

WET tests are not required for facilities with a permitted design flow less than 1.0 MGD and without an approved pre-treatment program; therefore, no WET test results were submitted with the application and the draft permit does not include any WET testing requirements.

4.3 Applicable Water Quality Based Effluent Limitations (WQBELs)

When drafting a National Pollutant Discharge Elimination System (NPDES) permit, a permit writer must consider the impact of the proposed discharge on the quality of the receiving water. Water quality goals for a waterbody are defined by state water quality standards. By analyzing the effect of a discharge on the receiving water, a permit writer could find that technology-based effluent limitations (TBELs) alone will not achieve the applicable water quality standards. In such cases, the Clean Water Act (CWA) and its implementing regulations require development of water quality-based effluent limitations (WQBELs). WQBELs help meet the CWA objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters and the goal of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water (*fishable/swimmable*).

WQBELs are designed to protect water quality by ensuring that water quality standards are met in the receiving water and downstream uses are protected. On the basis of the requirements of Title 40 of the *Code of Federal Regulations* (CFR) 125.3(a), additional or more stringent effluent limitations and conditions, such as WQBELs, are imposed when TBELs are not sufficient to protect water quality.

The term *pollutant* is defined in CWA section 502(6) and § 122.2. Pollutants are grouped into three categories under the NPDES program: conventional, toxic, and nonconventional. Conventional pollutants are those defined in CWA section 304(a)(4) and § 401.16 (BOD_5, TSS, fecal coliform, pH, and oil and grease). Toxic (priority) pollutants are those defined in CWA section 307(a)(1) and include 126 metals and manmade organic compounds. Nonconventional pollutants are those that do not fall under either of the above categories (conventional or toxic pollutants) and include parameters such as chlorine, ammonia, nitrogen, phosphorus, chemical oxygen demand (COD), and whole effluent toxicity (WET).

4.4 Conventional Pollutants

Pollutants of Concern	Basis
pH	The instream wastewater concentration (IWC) is less than 0.1%. When the IWC is less than 50%, there is no reasonable potential to cause or contribute to violation of the instream Georgia Water Quality Standard; therefore, pH limits of 6.0-9.0 SU (daily minimum-daily maximum) were included in the draft permit.
Five-Day Biochemical Oxygen Demand (BOD_5)	The monthly average BOD_5 limit of 30 mg/L is in accordance with technology-based effluent limitations for plants treating domestic wastewater. Refer to Section 4.8 below for more information. In the future, if instream monitoring or water quality modeling indicates the need for a higher level of treatment, then EPD may modify the permit to include a more stringent BOD_5 limit along with a compliance schedule to meet the new limit, if necessary.
Total Suspended Solids (TSS)	The monthly average TSS limit of 90 mg/L is in accordance with technology-based effluent limitations for ponds treating domestic wastewater. Refer to Section 4.8 below.
Fecal Coliform Bacteria (FCB)	The monthly average FCB limit of 200 #/100mL is in accordance with the instream Water Quality Standards in Section 3.1 above and TMDL requirements in Section 3.4 above.

4.5 Nonconventional Pollutants

Pollutants of Concern	Basis
Total Residual Chlorine (TRC)	Chlorine is used for disinfection. A daily maximum TRC limit of 0.5 mg/L has been determined using the US EPA's chronic TRC criterion of 11 µg/L in the receiving stream after dilution. Refer to Section 4.7.6 below for calculations.
Dissolved Oxygen (DO)	A minimum DO effluent limit has not been included in the draft permit. In the future, if instream monitoring or water quality modeling indicates the need for a higher level of treatment, then EPD may modify the permit to include a DO limit along with a compliance schedule to meet the new limit, if necessary.
Total Phosphorus (TP)	A monthly average TP limit of 5.0 mg/L is in accordance with the TMDL requirements for Chlorophyll-a for Lake Weiss. The TMDL requires a 30% reduction in the aggregated total phosphorus load allocation to Georgia at the state line.
Orthophosphate, Total Kjeldahl Nitrogen (TKN), Organic Nitrogen, Nitrate-Nitrite	Orthophosphate, TKN, organic nitrogen, and nitrate-nitrite monitoring has been included in the draft permit. The data will be used to determine nutrient speciation and to quantify nutrient loadings in the Coosa River Basin.
Ammonia (NH_3)	A monthly average ammonia limit of 17.4 mg/L is in accordance with EPD's *NPDES Permitting Strategy for Addressing Ammonia Toxicity*, 2017 and therefore has been maintained in the draft permit. In the future, if instream monitoring or water quality modeling indicates the need for a higher level of treatment to meet or protect the Water Quality Standards for dissolved oxygen, then EPD may modify the permit to include an ammonia limit along with a compliance schedule to meet the new limit, if necessary.

4.6 Toxics & Manmade Organic Compounds

EPA Form 3510-2E does not require priority pollutant scans to be conducted; therefore, no test results were submitted with the application.

4.7 Calculations for Effluent Limits

4.7.1 Instream Waste Concentration (IWC):

$$IWC = \frac{Q_{Effluent}\ (ft^3/sec)}{Q_{Effluent}\ (ft^3/sec) + 7Q10\ (ft^3/sec)}\ \%$$

$$= \frac{0.02}{0.02 + 320}$$

$$= 0\ \%$$

4.7.2 Flow:

Q = Flow
C = Concentration
M = Mass

- *Daily Maximum Flow:*

$Q_{Maximum}$ = $Q_{Monthly}$ (MGD) x 1.25

= 0.016 x 1.25

= 0.02 MGD

4.7.3 Five-Day Biochemical Oxygen Demand:

- *Daily Maximum Concentration:*

$[C]_{Maximum}$ = $[C]_{Monthly}$ (mg/L) x 1.5

= 30 x 1.5

= 45 mg/L

4.7.4 Total Suspended Solids:

- *Daily Maximum Concentration:*

$[C]_{Maximum}$ = $[C]_{Monthly}$ (mg/L) x 1.33

= 90 x 1.33

= 120 mg/L

4.7.5 Fecal Coliform Bacteria:

- *Daily Maximum Concentration:*

$C_{Maximum}$ $= C_{Monthly}$ (#/100 mL) x 2

$= 200 \times 2$

$= 400$ #/100 mL

4.7.6. Total Residual Chlorine (TRC):

- *Daily Maximum Concentration:*

$$[TRC]_{Effluent} = \frac{[Q_{Effluent}\ (ft^3/sec) + 7Q10\ (ft^3/sec)] \times [TRC]_{Stream}\ (mg/L)}{Q_{Effluent}\ (ft^3/sec)}$$

$$= \frac{(0.02 + 320) \times 0.011}{0.02}$$

$= 176$ mg/L

A technology-based effluent limitation of 0.5 mg/L (daily maximum) has been included in the draft permit. This limit is in accordance with EPD's *Total Residual Chlorine Strategy*, 2010.

4.7.7 Ammonia:

- *Toxicity Analysis:*

The chronic criterion based on *Villosa iris* (rainbow mussel) is determined as follows:

$$CCC = 0.8876 \times \left(\frac{0.0278}{1+10^{7.688-pH}} + \frac{1.1994}{1+10^{pH-7.688}}\right) \times 2.126 \times 10^{0.028 \times (20-MAX(T,7))}\ mg/L$$

Where: pH : pH of receiving stream and discharge
T : Temperature of receiving stream
CCC : Chronic Continuous Concentration

The ammonia effluent limit (monthly average) is then calculated as follows:

$$[NH_3]_{Effluent} = \frac{\left(Q_{Effluent}\ (ft^3/sec) + 30Q3\ (ft^3/sec)\right) \times CCC\ (mg/L) - 30Q3\ (ft^3/sec) \times [NH_3]_{Stream\ Background}\ (mg/L)}{Q_{Effluent}\ (ft^3/sec)}$$

Refer to *Appendix B* for detailed calculations.

- *Daily Maximum Concentration:*

$[C]_{Maximum}$ = $[C]_{Monthly}$ (mg/L) x 1.5

= 17.4 x 1.5

= 26.1 mg/L

4.7.8 Total Phosphorus:

- *Daily Maximum Concentration:*

$[C]_{Maximum}$ = $[C]_{Monthly}$ (mg/L) x 1.5

= 5.0 x 1.5

= 7.5 mg/L

4.7.9 Metals

Not applicable

4.8 Applicable Technology Based Effluent Limits (TBELS)

Technology-based effluent limitations aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. TBELs are developed independently of the potential impact of a discharge on the receiving water, which is addressed through water quality standards and water quality-based effluent limitations. The NPDES regulations at Title 40 of the Code of Federal Regulations 125.3(a) require NPDES permit writers to develop technology-based treatment requirements, consistent with CWA section 301(b), that represent the minimum level of control that must be imposed in a permit. The regulation also indicates that permit writers must include in permits additional or more stringent effluent limitations and conditions, including those necessary to protect water quality.

For pollutants not specifically regulated by Federal Effluent Limit Guidelines, the permit writer must identify any needed Technology-based effluent limitations and utilizes best professional judgment to establish technology-based limits or determine other appropriate means to control its discharge.

Title 40 of the Code of Federal Regulations contains secondary effluent standards for Publicly-Owned Treatment Works treating domestic wastewater. Based on best professional judgment, EPD has determined a privately-owned facility treating domestic wastewater can meet the same secondary standards. Therefore, the following technology-based limits for five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH have been established:

Parameter	Technology-based Effluent Limitations	
	30-day Average	*Daily Maximum*
BOD_5	30 mg/L	45 mg/L
TSS [1]	90 mg/L	--
pH (Daily Minimum – Daily Maximum)	6.0 – 9.0 S.U.	

[1] Value based on adjusted secondary standard for ponds in accordance with Federal Register, Volume 49, Number 184, page 37005, September 20, 1984

4.9 Comparison & Summary of Water Quality vs. Technology Based Effluent Limits

After determining applicable technology-based effluent limitations and water quality-based effluent limitations, the most stringent limits are applied in the permit:

Parameter	WQBELS [1]	TBELS [1]
	Monthly Average	*Monthly Average*
Five-Day Biochemical Oxygen Demand (mg/L)	None	**30.0**
Total Suspended Solids (mg/L)	None	**90**
Total Phosphorus (mg/L)	**5.0**	None
Ammonia (mg/L)	**17.4**	None
Fecal Coliform Bacteria (#/100 mL)	**200**	None
pH (SU), Daily Minimum and Daily Maximum	None	**6.0 – 9.0**
Total Residual Chlorine (mg/L), Daily Maximum	None	**0.5**

[1] Effluent limits in bold were included in the permit. Refer to Sections 4.4, 4.5, 4.7, and 4.8 above for more information.

5. OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

5.1 Continuous Discharges from Privately-Owned Facilities

The proposed limits are expressed as monthly average and daily maximum in accordance with 40 CFR 122.45(d)(1).

5.2 Industrial Pre-treatment Program (IPP)

Not applicable. This is a privately-owned facility.

5.3 Sludge Management Plan (SMP)

According to the permit application, septage was removed by the following vendor: Bagley Tank, Inc., 229 Confederate Cemetery Rd, Resaca, GA 30735. Language for an approved SMP to deliver sludge to a third party for further treatment and ultimate disposal has been included in the draft permit.

5.4 Watershed Protection Plan (WPP)

Privately-owned facilities are not required to develop and implement a Watershed Protection Plan.

5.5 Service Delivery Strategy

Not applicable. This is a privately-owned facility.

5.6 Compliance Schedules

A 24-month compliance schedule to meet the new limitation for total phosphorus has been included in the draft permit. Based on best professional judgment, the proposed compliance schedule represents the shortest reasonable period of time to allow the permittee to upgrade the treatment process and test new equipment before the limit becomes effective. Language has also been included in the permit for the new limitation to become effective prior to the end of the schedule if the permittee can consistently meet the new limitation. All other effluent limitations are applicable immediately upon the effective date of the permit.

5.7 Anti-Backsliding

The limits in this permit are in compliance with the 40 C.F.R. 122.44(l), which requires a reissued permit to be as stringent as the previous permit.

6. REPORTING

6.1 Compliance office

The facility has been assigned to the following EPD office for reporting, compliance and enforcement:

Georgia Environmental Protection Division
Mountain District – Cartersville Office
16 Center Road
Cartersville, GA 30121

6.2 E-Reporting

The permittee is required to electronically submit documents in accordance with 40 CFR Part 127.

7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

8. PERMIT EXPIRATION

The permit will expire five years from the effective date.

9. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

9.1 Comment Period

The Georgia Environmental Protection Division (EPD) proposes to issue a permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

The permit application, draft permit, and other information are available for review at 2 Martin Luther King Jr. Drive, Suite 1152 East, Atlanta, Georgia 30334, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For additional information, you can contact 404-463-1511.

9.2 Public Comments

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address above, or via e-mail at *EPDcomments@dnr.ga.gov* within 30 days of the initiation of the public comment period. All comments received prior to that date will be considered in the formulation of final determinations regarding the application. The permit number should be placed on the top of the first page of comments to ensure that your comments will be forwarded to the appropriate staff.

9.3 Public Hearing

Any applicant, affected state or interstate agency, the Regional Administrator of the U.S. Environmental Protection Agency (EPA) or any other interested agency, person or group of persons may request a public hearing with respect to an NPDES permit application if such request is filed within thirty (30) days following the date of the public notice for such application. Such request must indicate the interest of the party filing the request, the reasons why a hearing is requested, and those specific portions of the application or other NPDES form or information to be considered at the public hearing.

The Director shall hold a hearing if he determines that there is sufficient public interest in holding such a hearing. If a public hearing is held, notice of same shall be provided at least thirty (30) days in advance of the hearing date.

In the event that a public hearing is held, both oral and written comments will be accepted; however, for the accuracy of the record, written comments are encouraged. The Director or a designee reserves the right to fix reasonable limits on the time allowed for oral statements and such other procedural requirements, as deemed appropriate.

Following a public hearing, the Director, unless it is decided to deny the permit, may make such modifications in the terms and conditions of the proposed permit as may be appropriate and shall issue the permit.

If no public hearing is held, and, after review of the written comments received, the Director determines that a permit should be issued and that the determinations as set forth in the proposed permit are substantially unchanged, the permit will be issued and will become final in the absence of a request for a contested hearing. Notice of issuance or denial will be made available to all interested persons and those persons that submitted written comments to the Director on the proposed permit.

If no public hearing is held, but the Director determines, after a review of the written comments received, that a permit should be issued but that substantial changes in the proposed permit are warranted, public notice of the revised determinations will be given and written comments accepted in the same manner as the initial notice of application was given and written comments accepted pursuant to EPD Rules, Water Quality Control, subparagraph 391-3-6-.06(7)(b). The Director shall provide an opportunity for public hearing on the revised determinations. Such opportunity for public hearing and the issuance or denial of a permit thereafter shall be in accordance with the procedures as are set forth above.

9.4 Final Determination

At the time that any final permit decision is made, the Director shall issue a response to comments. The issued permit and responses to comments can be found at the following address:

http://epd.georgia.gov/watershed-protection-branch-permit-and-public-comments-clearinghouse-0

9.5 Contested Hearings

Any person who is aggrieved or adversely affected by the issuance or denial of a permit by the Director of EPD may petition the Director for a hearing if such petition is filed in the office of the Director within thirty (30) days from the date of notice of such permit issuance or denial. Such hearing shall be held in accordance with the EPD Rules, Water Quality Control, subparagraph 391-3-6-.01.

Petitions for a contested hearing must include the following:

1. The name and address of the petitioner;
2. The grounds under which petitioner alleges to be aggrieved or adversely affected by the issuance or denial of a permit;
3. The reason or reasons why petitioner takes issue with the action of the Director;
4. All other matters asserted by petitioner which are relevant to the action in question.

FACT SHEET

Appendix A

Georgia Cumberland Academy Water Pollution Control Plant
NPDES Permit No. GA0035947

Waste Load Allocation (WLA)

National Pollutant Discharge Elimination System
Wasteload Allocation Form

3H

Part I: Background Information

WLA Request Type: Reissuance ☒ Modification ☐ Relocation ☐ New Discharge ☐ Expansion ☐

Facility Name: **Georgia Cumberland Academy** County: **Gordon** WQMU: **1413**

NPDES Permit No.: **GA0035947** Expiration Date: **31.Jul.19** Outfall Number: **001**

Receiving Water: **Oostanaula River** River Basin: **Coosa** 10-Digit HUC: **0315010301**

Discharge Type: Domestic ☒ Industrial ☐ Both ☐ Proportion (D:I): Flow(s) Requested (MGD): **0.016**

Industrial Contributions Type(s):

Treatment Process Description: **Aeration Pond, Disinfection**

Additional information: (history, special conditions, other facilities):

Requested by: **Benoit Causse** Title: **EE** Program: **WRP**

Telephone: Date: **10.Jan.19**

Part II: Receiving Water Information

Receiving Water: **Oostanaula River** Designated Use Classification: **Fishing**

Integrated 305(b)/303(d) List: Yes ☒ No ☐ Support: ☐ Not Support: ☒ Criteria: **FCG (PCBs)**

Total Maximum Daily Load: Yes ☒ No ☐ Parameter(s) **FC, PCBs, Chlor-a** WLA Complies with TMDL Yes ☒ No ☐

The 2004 Fecal Coliform TMDL requires NPDES point source discharges to meet applicable water quality standards for bacteria. The 2014 TMDL for PCBs does not identify this facility as a source. The Lake Weiss chlorophyll-a TMDL requires 30% reduction in TP load at the State Line.

Part III: Water Quality Model Review Information

Model Type: Uncalibrated ☐ Calibrated ☐ Verified ☐ Not Modeled ☒ Model Length (mi):

Field Data: None ☐ Fair ☐ Good ☐ Excellent ☐

Model and Field Data Description:

Critical Water Temperature:(°C):		Drainage Area (mi²):	1750	Mean annual streamflow at discharge (cfs):	2795
7Q10 Yield (cfs/mi²):	0.183	Velocity (range fps):		30Q3 streamflow at discharge (cfs):	720
Effluent Flow Rate (cfs):	0.02	IWC (%):	0	7Q10 streamflow at discharge (cfs):	320
Slope (range - fpm):		K1:		K3: K2 :	1Q10 streamflow at discharge (cfs): 165
SOD:	Escape Coef. (ft^{-1}):	f-Ratio BOD_u/BOD_5):			

Part IV: Recommended Permit Limitations and Conditions (mg/L as a monthly average except as noted)

Rationale: Same as current ☐ Revised ☒ New ☐

Location: **Oostanaula River**

Effluent Flow Rate (MGD)	NH_3-N	TRC (daily max.)	Fecal Coliform (No./100ml)	pH (std. units)	Total P	Ortho-P, TKN, Organic Nitrogen, Nitrite-Nitrate
0.016	17.4	0.5	200	6.0 – 9.0	5.0	Monitor

Additional Comments:

- **Priority pollutant permit limits, aquatic toxicity testing requirements, and other parameters required by categorical effluent guidelines or identified during review of permit application are to be determined by WRP.**
- **The existing ammonia limit meets the U.S. EPA's Aquatic Life Ambient Water Quality Criteria for Ammonia-Freshwater 2013 under the 7Q10 stream flow condition.**
- **Effluent monitoring for Ortho-P, TKN, nitrate-nitrite, and organic nitrogen is recommended. Total P and Ortho-P should be analyzed from the same effluent sample; TKN, nitrate-nitrite, and ammonia should be analyzed from the same effluent sample. Organic nitrogen should be calculated as TKN minus NH_3.**
- **The new TP limit is recommended to meet the Lake Weiss Chlorophyll-a TMDL.**

Prepared by: **Josh Welte** Date: **12.Apr.19** Reviewed by: Date:

Part V: Program Manager Comments

Elizabeth A Booth

Elizabeth Booth Date: 4/16/19

FACT SHEET

Appendix B

Georgia Cumberland Academy Water Pollution Control Plant
NPDES Permit No. GA0035947

Ammonia Toxicity Analysis

Ammonia Toxicity Analysis
for
Waste Load Allocation Development (Updated 2013)

Date: 19.Mar.19
Facility: GA Cumberland Academy
NPDES Permit Number: GA0035947
Receiving Stream: Oostanaula River
Engineer: Welte
Comments:

Stream and Facility Data:

Background Stream pH (standard units): 7.0
Effluent pH (standard units): 9.0
Final Stream pH (standard units): 7.00
Stream Temperature (Celsius): 25.0
Estimated 30Q3 Streamflow (cfs): 720
Stream background concentration (Total NH3-N, mg/L): 0.13
Facility Discharge (MGD/cfs): 0.016 0.02
Total Combined Flow (cfs): 719.71

Effluent concentration (Total NH3-N, mg/L) = 35957.0

If 35957.0 is greater than 17.4 mg/L, use 17.4 mg/L in WLA modeling.

Chronic Criterion based on Villosa Iris (Rainbow mussel):

Instream CCC = criterion continuous concentration (chronic criterion):

$$CCC = 0.8876 \times \left(\frac{0.0278}{1 + 10^{(7.688 - pH)}} + \frac{1.1994}{1 + 10^{(pH - 7.688)}}\right) \times \left(2.126 \times 10^{0.028 \times (20 - MAX(T,7))}\right)$$

Allowable instream concentration CCC (Total NH3-N, mg/l) = 1.4

Based on National Criterion For Ammonia In Fresh Water As Revised In Year 2013

Source: Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013, U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, EPA-822-R-13-001. April 2013. Washington, D.C.