GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

SUMMARY PAGE

Name of Facility: Trion WPCP

NPDES Permit No.: GA0025607

This permit is a reissuance of the NPDES permit for the Trion WPCP. The facility discharges a maximum of 5.0 MGD of treated domestic wastewater to Chattooga River in the Coosa River Basin. The permit expired on September 30, 2018 and became administratively extended.

The permit was placed on public notice from November 15, 2018 to December 15, 2018.

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

- Replaced the Total Phosphorus limit of 1.0 mg/L with an Ortho-Phosphate limit of 0.75 mg/L to comply with the TMDL requirement.
- Included Total Phosphorus, Organic Nitrogen, Nitrate-Nitrite, and TKN monitoring in the draft permit. The data will be used to determine nutrient speciation and to quantify and manage nutrient loadings in the Coosa River basin.
- Included a phosphorus speciation study plan per EPA recommendations.
- Removed the Total Residual Chlorine compliance schedule. The compliance schedule is complete and facility is able to meet the effluent limit.

Standard Conditions & Boilerplate Modifications:

The permit boilerplate includes modified language or added language consistent with other 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 addendum and/or permit fact sheet addendum.

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

FEB 11 2019

Honorable Larry Stansell, Mayor
City of Trion
Post Office Box 850
Trion, GA 30753

RE: Permit Issuance
Trion Water Pollution Control Plant
NPDES Permit No. GA0025607
Chattooga County, Coosa River Basin

Dear Mayor Stansell:

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. In addition, we hereby approve the proposed amendment to the Sludge Management Plan, which consists of the addition of the Blalock, Clements, Croy, Dooley, Marks, Sanford, Gary Thomas, Jackie Thomas, and Rebecca Thomas properties (201 acres total) in Chattooga County. The attached conditions are incorporated into the above-referenced permit.

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
16 Center Road
Cartersville, GA 30120

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\jh
Attachment: Sludge Management Plan Conditions, NPDES Permit No. GA0025607, Fact Sheet
cc: Mick Smith, EPD Mountain District (*mick.smith@dnr.ga.gov*)
Andy Melton, Town of Trion (*townoftrionwwtp@yahoo.com*)

Sludge Management Plan Conditions

Town of Trion
NPDES Permit No. GA0025607

1. The maximum application rate shall not exceed the rates shown in the following table. The application rates will be adjusted annually based upon the quantity of sludge applied to a site.

Blalock, Clements, Crov, Dooley, Marks, Sanford, Gary Thomas, Jackie Thomas, and Rebecca Thomas Properties:

Plant	Crops	Ungrazed (Dry tons/acre/year)	Grazed (Dry tons/acre/year)
Trion WPCP	Fescue	4.1	3.1

2. The sludge application shall be in accordance with the EPD "Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates," June 2006 or latest revision, unless a more stringent requirement is stated in this document or is required by federal regulations.

3. For slopes of 6-12%, liquid sludge must be incorporated or injected except for closed drainage basins or where runoff is controlled. Sludge shall not be applied to areas with slopes greater than 12%. No sludge may be applied in a manner which allows it to run off-site or into waters of the State.

4. The pH of the sludge and soil mixture must be maintained at 6.5 or above to prevent metals migration. Lime addition or other pH adjustment shall be practiced to maintain that minimum pH.

5. No grazing may be done on the site for at least 30 days after sludge application. Food, feed, and fiber crops may not be harvested for 30 days after sludge application.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

PERMIT ADDENDUM

Trion Water Pollution Control Plant
NPDES Permit No. GA0025607
(Chattooga County)

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

If yes, specify:

Part I.C.9 A requirement for a supplemental phosphorus study (algal growth potential test) has been added to the final permit to reconfirm phosphorus in the discharge to the Chattooga River is non-reactive.

Permit No. GA0025607
Issuance Date: FEB 1 1 2019

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,

Town of Trion
Post Office Box 850
Trion, Georgia 30753

is authorized to discharge from a facility located at

Trion Water Pollution Control Plant
15131 Highway 27
Trion, Georgia 30753
(Chattooga County)

to receiving waters

Chattooga 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 March 28, 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 March 1, 2019.

This permit and the authorization to discharge shall expire at midnight, February 29, 2024.

STATE OF GEORGIA CONSTITUTION 1776

Richard E. Dunn

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

The concentration of pollutants in the discharge will be limited as indicated by the table(s) labeled "Effluent Limitations and Monitoring Requirements."

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 I.C.2. 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 13 subsamples collected at least once every 2 hours for at least 24 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.C.2. of this permit. The quantity shall be reported on a dry weight basis (dry tons).

4. INTRODUCTION OF POLLUTANTS INTO THE PUBLICLY OWNED TREATMENT WORKS (POTW)

The permittee must notify EPD of:

a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the Federal Act if the pollutants were directly discharged to a receiving stream; and

b. Any substantial change in the volume or character of pollutants from a source that existed when the permit was issued.

This notice shall include information on the quality and quantity of the indirect discharge introduced and any anticipated impact on the quantity or quality of effluent to be discharged from the POTW.

5. 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.

B.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Discharge to Chattooga River - Outfall #001 (34.540078°, -85.301327°)

The discharge from the water pollution control plant shall be limited and monitored by the permittee as specified below:

Parameters	Discharge limitations in mg/L (kg/day) unless otherwise specified		Monitoring Requirements		
	Monthly Average	Weekly Average	Measurement Frequency	Sample Type	Sample Location [1]
Flow (MGD)	5.0	6.25	Seven Days/Week	Continuous Recording	Effluent
Five-Day Biochemical Oxygen Demand [1]	26 (493)	39 (616)	Five Days/Week	Composite	Influent & Effluent
Total Suspended Solids [1]	20 (379)	30 (474)	Five Days/Week	Composite	Influent & Effluent
Ammonia, as N [2]	8.5 (161)	12.75 (201)	Five Days/Week	Composite	Effluent
Orthophosphate, as P [3]	0.75 (14.2)	1.13 (17.8)	Five Days/Week	Composite	Effluent
Fecal Coliform Bacteria (#/100 mL)	200	400	Three Days/Week	Grab	Effluent

(1) Numeric limits only apply to the effluent.

(2) 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.

(3) Total Phosphorus and Orthophosphate must be analyzed from the same sample.

(Effluent limitations continued on the next page)

B.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

Discharge to Chattooga River - Outfall #001 (34.540078°, -85.301327°):

Parameters	Discharge limitations in mg/L unless otherwise specified	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location
Five-Day Biochemical Oxygen Demand Removal, Minimum (%) [1]	85	See Below	See Below	See Below
Total Suspended Solids Removal, Minimum (%) [1]	85	See Below	See Below	See Below
pH, (Standard Unit), Daily Minimum – Daily Maximum	6.0 – 9.0	Seven Days/Week	Grab	Effluent
Dissolved Oxygen, Daily Minimum	5.0	Seven Days/Week	Grab	Effluent
Total Residual Chlorine, Daily Maximum [2]	0.08	Seven Days/Week	Grab	Effluent
Total Phosphorus, as P [3], [4]	Report	One Day/Month	Composite	Effluent
Organic Nitrogen, as N [5]	Report	One Day/Month	Composite	Effluent
Nitrate-Nitrite, as N [5]	Report	One Day/Month	Composite	Effluent
Total Kjeldahl Nitrogen, as N [5]	Report	One Day/Month	Composite	Effluent
Chronic Whole Effluent Toxicity (%) [6]	Report NOEC	Annually	Composite	Effluent

(1) Percent removal shall be calculated from monthly average influent and effluent concentrations. Influent and effluent samples shall be collected at approximately the same time.

(2) Total Residual Chlorine (TRC) monitoring requirements only apply when chlorine is in use at the facility (disinfection system back up, algae control, etc.).

(3) Total Phosphorus and Orthophosphate must be analyzed from the same sample.

(4) Refer to Part I.C.9. PHOSPHORUS STUDY

(5) Ammonia, Organic Nitrogen, Nitrate-Nitrite, and Total Kjeldahl Nitrogen must be analyzed or calculated from the same sample. Organic Nitrogen, as N = TKN – Ammonia, as N.

(6) Refer to Part I.C.10. CHRONIC WHOLE EFFLUENT TOXICITY

B.2. INSTREAM SURFACE WATER QUALITY MONITORING

Chattooga River:

The receiving stream shall be monitored by the permittee as specified below:

Parameters	Instream Surface Water Quality Monitoring	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location[1]
Color (ADMI color value) [1]	Report Monthly Minimum, Average, & Maximum	Five Days/Week	Grab	Upstream & Downstream

[1] The upstream sampling location refers to the crossing of the Chattooga River with Central Avenue. The downstream sampling location refers to the crossing of the Chattooga River with Penn Bridge Road.

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. WATERSHED PROTECTION PLAN

The permittee has a Watershed Protection Plan that has been approved by EPD. The permittee's approved Watershed Protection Plan shall be enforceable through this permit.

Each June 30th the permittee is to submit the following to EPD:

a. An annual certification statement documenting that the plan is being implemented as approved. The certification statement shall read as follows: "I certify, under penalty of law, that the Watershed Protection Plan is being implemented. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

b. All Watershed Plan data collected during the previous year in an electronic format. This data shall be archived using a digital format such as a spreadsheet developed in coordination with EPD. All archived records, data, and information pertaining to the Watershed Protection Plan shall be maintained permanently.

c. A progress report that provides a summary of the BMPs that have been implemented and documented water quality improvements. The progress report shall also include any necessary changes to the Watershed Protection Plan.

The report and other information shall be submitted to EPD at the address below:

Environmental Protection Division
Watershed Planning and Monitoring Program
2 Martin Luther King Jr. Drive SE
Suite 1152 East
Atlanta, Georgia 30334

9. PHOSPHORUS STUDY

a. Within 6 months of the effective date of the permit, the permittee shall submit to EPD a Sampling and Quality Assurance Plan (SQAP) to conduct an algal growth potential test. The goal of this test is to re-confirm phosphorus in the discharge to the Chattooga River is non-reactive.

b. Within 24 months of approval by EPD of the SQAP, the permittee shall submit to EPD the results of the algal growth potential test.

10. CHRONIC WHOLE EFFLUENT TOXICITY (WET)

The permittee must conduct annual chronic Whole Effluent Toxicity (WET) tests. The testing must include the most current U.S. Environmental Protection Agency (EPA) chronic aquatic toxicity testing manuals. The referenced document is entitled Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, U.S. EPA, 821-R-02-013, October 2002. Definitive tests must be run on the same samples concurrently using both an invertebrate species (i.e., *Ceriodaphnia dubia*) and a vertebrate species (i.e., *Pimephales promelas*). The testing must include a dilution equal to 14%. EPD will evaluate the WET tests submitted to determine whether toxicity has been demonstrated. An effluent discharge will not be considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the Instream Wastewater Concentration (IWC) of 14%. If the test results indicate effluent toxicity, the permittee may be required to perform additional WET tests, and/or to submit a toxicity reduction evaluation upon notification by the EPD and/or the permit may be reopened to incorporate a WET limit.

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:

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

(1) 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

(2) 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.

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

iii. 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:

i. 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;

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

iii. 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 I 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. NOTICE CONCERNING ENDANGERING WATERS OF THE STATE

Whenever, because of an accident or otherwise, any toxic or taste and color producing substance, or any other substance which would endanger downstream users of the waters of the State or would damage property, is discharged into such waters, or is so placed that it might flow, be washed, or fall into them, it shall be the duty of the person in charge of such substances at the time to forthwith notify EPD in person or by telephone of the location and nature of the danger, and it shall be such person's further duty to immediately take all reasonable and necessary steps to prevent injury to property and downstream users of said water.

Spills and Major Spills:

A "spill" is any discharge of raw sewage by a Publicly Owned Treatment Works (POTW) to the waters of the State.

A "major spill" means:

a. The discharge of pollutants into waters of the State by a POTW that exceeds the weekly average permitted effluent limit for biochemical oxygen demand (5-day) or total suspended solids by 50 percent or greater in one day, provided that the effluent discharge concentration is equal to or greater than 25 mg/L for biochemical oxygen demand or total suspended solids.

b. Any discharge of raw sewage that 1) exceeds 10,000 gallons or 2) results in water quality violations in the waters of the State.

"Consistently exceeding effluent limitation" means a POTW exceeding the 30 day average limit for biochemical oxygen demand or total suspended solids for at least five days out of each seven day period during a total period of 180 consecutive days.

The following specific requirements shall apply to POTW's. If a spill or major spill occurs, the owner of a POTW shall immediately:

a. Notify EPD, in person or by telephone, when a spill or major spill occurs in the system.

b. Report the incident to the local health department(s) for the area affected by the incident. The report at a minimum shall include the following:

i. Date of the spill or major spill;
ii. Location and cause of the spill or major spill;
iii. Estimated volume discharged and name of receiving waters; and
iv. Corrective action taken to mitigate or reduce the adverse effects of the spill or major spill.

c. Post a notice as close as possible to where the spill or major spill occurred and where the spill entered State waters and also post additional notices along portions of the waterway affected by the incident (i.e. bridge crossings, boat ramps, recreational areas, and other points of public access to the affected waterway). The notice at a minimum shall include the same information required in 11(b)(1-4) above. These notices shall remain in place for a minimum of seven days after the spill or major spill has ceased.

d. Within 24 hours of becoming aware of a spill or major spill, the owner of a POTW shall report the incident to the local media (television, radio, and print media). The report shall include the same information required in 11(b)(1-4) above.

e. Within 5 days (of the date of the spill or major spill), the owner of a POTW shall submit to EPD a written report which includes the same information required in 11(b)(1-4) above.

f. Within 7 days (after the date of a major spill), the owner of a POTW responsible for the major spill, shall publish a notice in the largest legal organ of the County where the incident occurred. The notice shall include the same information required in 11(b)(1-4) above.

g. The owner of a POTW shall immediately establish a monitoring program of the receiving waters affected by a major spill or by consistently exceeding an effluent limit, with such monitoring being at the expense of the POTW for at least one year. The monitoring program shall include an upstream sampling point as well as sufficient downstream locations to accurately characterize the impact of the major spill or the consistent exceedence of effluent limitations described in the definition of " Consistently exceeding effluent limitation" above. As a minimum, the following parameters shall be monitored in the receiving stream:

i. Dissolved Oxygen;
ii. Fecal Coliform Bacteria;
iii. pH;
iv. Temperature; and
v. Other parameters required by the EPD.

The monitoring and reporting frequency as well as the need to monitor additional parameters, will be determined by EPD. The results of the monitoring will be provided by the POTW owner to EPD and all downstream public agencies using the affected waters as a source of a public water supply.

h. Within 24 hours of becoming aware of a major spill, the owner of a POTW shall provide notice of a major spill to every county, municipality, or other public agency whose public

water supply is within a distance of 20 miles downstream and to any others which could be potentially affected by the major spill.

12. 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 by the issuance 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

A. APPROVED INDUSTRIAL PRETREATMENT PROGRAM FOR PUBLICLY OWNED TREATMENT WORKS (POTWs)

1. The permittee's approved pretreatment program shall be enforceable through this permit. The permittee shall also comply with the provisions of 40 CFR 403.

2. The permittee shall administer the approved pretreatment program by:

   a. Maintaining records identifying the character and volume of pollutants contributed by industrial users to the POTW.

   b. Enforcing and obtaining appropriate remedies for noncompliance by any industrial user with any applicable pretreatment standard or requirement defined by Section 307(b) and (c) of the Federal Act, 40 CFR Part 403.5 and 403.6 or any State or local requirement, whichever is more stringent.

   c. Revising the adopted local limits based on technical analyses to ensure that the local limits continue to prevent:

      i. Interference with the operation of the POTW;
      ii. Pass-through of pollutants in violation of this permit;
      iii. Municipal sludge contamination; and
      iv. Toxicity to life in the receiving stream.

      Within 180 days of the effective date of this permit issuance or reissuance (excluding permit modifications), the permittee shall review the local limits of the program and submit to EPD a written technical evaluation of the need to revise the local limits.

   d. Ensuring that industrial wastewater discharges from industrial users are regulated through discharge permits or equivalent individual control mechanisms. Compliance schedules will be required of each industrial user for the installation of control technologies to meet applicable pretreatment standards and the requirements of the approved program.

   e. Inspecting, surveying, and monitoring to determine if the industrial user is in compliance with the applicable pretreatment standards.

   f. Equitably maintaining and adjusting revenue levels to ensure adequate and continued pretreatment program implementation.

   g. Preparing a list of industrial users which, during the reporting period June 1 to May 31, have been in significant noncompliance with the pretreatment requirements enumerated in 40 CFR Part 403.8 (f)(2)(viii). This list will be published annually each June in the newspaper with the largest circulation in the service area.

B. APPROVED PRETREATMENT PROGRAM ANNUAL REPORT

1. Within 30 days of the close of the reporting period June 1 through May 31, the permittee shall submit a report to the EPD that includes:

   a. An updated list of POTW industrial users;

   b. The results of POTW sampling and analyses required by the EPD;

   c. A summary of POTW industrial user inspections;

   d. A summary of POTW operations including information on upsets, interferences, pass through events, or violations of the permit related to industrial user discharges;

   e. A summary of all activities to involve and inform the public of pretreatment requirements;

   f. A summary of the annual pretreatment program budget;

   g. A descriptive summary of any compliance activities initiated, ongoing, or completed against industrial users which shall include the number of administrative orders, show cause hearings, penalties, civil actions, and fines;

   h. A list of contributing industries using the treatment works, divided into Standard Industrial Classification Code (SIC) categories, which have been issued permits or similar enforceable individual control mechanisms, and a status of compliance for each industrial user. The list should also identify the industries that are categorical or significant industrial users;

   i. The name and address of each industrial user that has received a conditionally revised discharge limit;

   j. A list of all industrial users who were in significant noncompliance with applicable pretreatment standards and requirements;

   k. A list of all industrial users showing the date that each was notified that a categorical pretreatment standard had been promulgated by EPA for their industrial category and the status of each industrial user in achieving compliance within the 3 year period allowed by the Federal Act; and

   l. A description of all substantial changes proposed for the program. All substantial changes must first be approved by the EPD before formal adoption by the POTW. Substantial changes shall include but not be limited to:

      i. Changes in legal authority;
      ii. Changes in local limits;
      iii. Changes in the control mechanisms;
      iv. Changes in the method for implementing categorical pretreatment standards.

v. A decrease in the frequency of self-monitoring or reporting required of industrial users;
vi. A decrease in the frequency of industrial user inspections or sampling by the POTW;
vii. Significant reductions in the program resources including personnel commitments, equipment, and funding levels;
viii. Changes in confidentiality procedures; and
ix. Changes in the POTW sludge disposal and management practices.

2. Reports submitted by an industrial user will be retained by the permittee for at least 3 years and shall be available to the EPD for inspection and copying. This period shall be extended during the course of any unresolved litigation concerning the discharge of pollutants by an industrial user or concerning the operations of the program or when requested by the Director.

C. INDUSTRIAL PRETREATMENT STANDARDS

Effluent limitations for the permittee's discharge are listed in Part I. Other pollutants attributable to industrial users may also be present in the discharge. When sufficient information becomes available, this permit may be revised to specify effluent limitations for these pollutants based on best practicable technology or water quality standards. Once the specific nature of industrial contributions has been identified, data collection and reporting may be required for parameters not specified in Part I.

D. REQUIREMENTS FOR EFFLUENT LIMITATIONS ON POLLUTANTS ATTRIBUTABLE TO INDUSTRIAL USERS

1. The permittee shall require all industrial dischargers to the POTW to meet State pretreatment regulations promulgated in response to Section 307(b) of the Federal Act. Other information about new industrial discharges may be required and will be requested from the permittee after the EPD has received notice of the discharge.

2. The permittee may be required to supplement the requirements of the State and Federal pretreatment regulations to ensure compliance with all applicable effluent limitations listed in Part I. Supplemental actions by the permittee concerning some or all of the industries discharging to the POTW may be necessary.

E. RETAINER

EPD may require the permittee to amend an approved pretreatment program to incorporate revisions in State Pretreatment Regulations or other EPD requirements. Any approved POTW pretreatment program identified by EPD that needs to modify its program to incorporate requirements that have resulted from revision to the Rules shall develop and submit those revisions to EPD no later than one (1) year of notification by EPD to modify the Program. Any modifications made to the approved pretreatment program must be incorporated into the permit and the program pursuant to Chapter 391-3-6-.09(7) of the State Rules. Implementation of any revision or amendments to the program shall be described in the subsequent annual report to the EPD.

PART IV

APPROVED SLUDGE MANAGEMENT PLAN

1. The permittee's approved Sludge Management Plan shall be implemented in accordance with Chapter 391-3-6-.17 of the State Rules and EPD's, "*Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates*", unless a more stringent requirement is stated in this Permit, and shall be enforceable through this Permit.

2. The permittee will submit an annual report pertaining to the most recent calendar year, as required under Chapter 391-3-6-.17(14) of the State Rules. The annual report shall be submitted to EPD no later than January 31 of the following year.

3. The permittee will maintain records of the amount of sludge land applied to each site. The amount of sludge land applied during each calendar year will be reported in the annual report in units of dry tons per year.

4. The permittee will monitor in accordance with the following requirements:

   a. The pH of the sludge and soil mixture from each field within each land application site will be measured once per year. The sample will be a separate, composite sample of each soil type present and will be representative of field conditions.

   b. The sewage sludge shall be monitored for the following parameters at the frequencies specified in Part IV.A.5:

Parameter	**Units***
Total nitrogen	Percent
Ammonia-nitrogen	Percent
Nitrate-nitrogen	Percent
Volatile solids	Percent
Total solids	Percent
pH	Standard units
Arsenic	mg/kg
Cadmium	mg/kg
Copper	mg/kg
Lead	mg/kg
Mercury	mg/kg
Molybdenum	mg/kg
Nickel	mg/kg
Selenium	mg/kg
Zinc	mg/kg

*Units must be reported on a dry weight basis with the exception of pH.

   c. The pathogen density requirements listed in Chapter 391-3-6-.17(7) of the State Rules shall be monitored at the frequency listed in Part IV.A.5.

   d. The vector attraction reduction requirements listed in Chapter 391-3-6-.17(8)(a) through (8)(h) of the State Rules shall be monitored at the frequency listed in Part IV.A.5.

5. Monitoring Frequency:

Amount of Sewage Sludge* (dry tons/year)	Frequency
0-300	Once/year
300-1,600	Once/quarter
1,600-16,000	Once/two months
>16,000	Once/month

*The amount of sewage sludge refers to either the amount of bulk sewage sludge (dry weight) applied to the land or the amount of sewage sludge (dry weight) received by a preparer that sells or otherwise distributes sewage sludge in a bag or other container for application to the land.

6. In accordance with Chapter 391-3-6-.17(12) of the State Rules, sewage sludge samples shall be analyzed using EPA approved methods contained in 40 CFR Part 503.8.

7. A proposed addition (or removal) of a new land application site(s) will be subject to EPD's review and approval process as outlined in the Guidelines for Land Application of Sewage Sludge(Biosolids). Upon written approval of the Director, addition or removal of a land application site(s) will be considered as amending the approved Sludge Management Plan and as an addendum to the permit.

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.: GA0025607

1.2 Name and Address of Owner/Applicant

Town of Trion
Post Office Box 850
Trion, Georgia 30753

1.3 Name and Address of Facility

Trion Water Pollution Control Plant (WPCP)
15131 Highway 27
Trion, Georgia 30753

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

Outfall #	Latitude (°)	Longitude (°)	Receiving Waterbody
001	34.540108	-85.301319	Chattooga River

1.5 Permitted Design Capacity

5.0 MGD

1.6 SIC Code & 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 screening, pH control, chemical addition for phosphorus removal, biological treatment (activated sludge), secondary clarification, and ozone disinfection (chlorine chamber is used as a backup disinfection system). Treated effluent is discharged to the Chattooga River.

Solids processing:

Sludge is stabilized in two aerobic digesters. The sludge then flows to two sludge gravity thickeners. The sludge is dewatered with belt presses and is then transported to either the approved land application sites or to a landfill.

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)	7.21	4.12
Five-Day Biochemical Oxygen Demand (mg/L)	7.76	4.61
Total Suspended Solids (mg/L)	11	4
Fecal Coliform Bacteria (#/100mL)	21	1
Ammonia, as N (mg/L)	4.18	1.15
Total Phosphorus, as P (mg/L)	10.59	8.38

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 – Chattooga 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:

a. 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.

b. 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	63	49	37	294	118	10

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

Chattooga River	Lyerly to Stateline	Cause	Not Supporting	FC	2	4u	TMDL completed FC 2009.
GAR031303050601	Chattooga	Fishing	3.30	NP	Miles		

Chattooga River is listed on the 2016 305(b)/303(d) list as not supporting its designated use (fishing) but TMDLs have been completed for the impacted parameters (fecal coliform bacteria).

3.4 Total Maximum Daily Loads (TMDLs)

A TMDL evaluation for 29 stream segments in the Coosa River Basin for fecal coliform was completed in 2009. 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.

A TMDL for nutrient impairment in Lake Weiss in Alabama was developed by EPA in 2008. This TMDL provided an aggregate allocation to Georgia at the State border for the Total Phosphorus loads originating from the Coosa River and the Chattooga River. The aggregate allocations for point and non-point sources require a 30% reduction of Total Phosphorus loads from Georgia. The proposed ortho-phosphate limit in the draft permit is in accordance with the TMDL for Lake Weiss.

3.5 Wasteload Allocation (WLA)

A WLA for reissuance was issued on August 30, 2018. Refer to *Appendix A* of the Fact Sheet for a copy of the WLAs.

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)

Chronic WET test measures the effect of wastewater on indicator organisms' growth, reproduction and survival. Effluent toxicity is predicted when the No Observable Effect Concentrations (NOEC) for a test organism is less than the facility's Instream Wastewater Concentration (IWC). WET testing also requires a measure of test sensitivity known as the Percent Minimum Significant Difference (PMSD). See Table below from Section 10.2.8.3 (page 52) of EPA 821-R-02-013 *Short-term Methods for*

Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, 2002 for PMSD variability criteria.

TABLE 6. VARIABILITY CRITERIA (UPPER AND LOWER PMSD BOUNDS) FOR SUBLETHAL HYPOTHESIS TESTING ENDPOINTS SUBMITTED UNDER NPDES PERMITS.[1]

Test Method	Endpoint	Lower PMSD Bound	Upper PMSD Bound
Method 1000.0, Fathead Minnow Larval Survival and Growth Test	growth	12	30
Method 1002.0, *Ceriodaphnia dubia* Survival and Reproduction Test	reproduction	13	47
Method 1003.0, *Selenastrum capricornutum* Growth Test	growth	9.1	29

[1] Lower and upper PMSD bounds were determined from the 10th and 90th percentile, respectively, of PMSD data from EPA's WET Interlaboratory Variability Study (USEPA, 2001a; USEPA, 2001b).

$$\text{PMSD} = \frac{\text{Minimum Significant Data (MSD)}}{\text{Control Mean}} \times 100 \quad \%$$

The effluent from the Trion WPCP will not be considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the Instream Wastewater Concentration (IWC) of 14%. If results of the WET tests predict toxicity or are invalid, then the permittee may be required to perform additional WET tests or the permit may be modified to include chronic WET effluent limitations.

The permittee submitted the results of four WET tests with the application. For all tests, the NOEC for the *Ceriodaphnia dubia* survival and reproduction and the *Pimephales promelas* survival and growth were greater than or equal to the IWC of 14%; therefore, effluent is not considered toxic. Refer to WET Test results summary in the table below.

Test	Sample Date	No Observed Effect Concentration (NOEC)			
		Ceriodaphnia dubia		*Pimephales promelas*	
		Survival (%)	Reproduction (%)	Survival (%)	Growth (%)
1	2014	56	56	56	56
2	2015	28	28	56	56
3	2016	56	28	56	56
4	2017	56	28	56	56

PMSD values were calculated for each set of results and compared to EPA's Variability Criteria to ensure their validity. PMSD for *Ceriodaphnia dubia* reproduction and *Pimephales promelas* survival from the four WET tests were lower or within EPA's

Variability Criteria; therefore, the tests are considered valid. Refer to *Appendix C* for PSMD values.

EPD is including annual WET monitoring for all facilities with a permitted discharge of 1.0 MGD or greater; therefore, annual WET testing has been included in the draft permit.

EPD will evaluate the WET tests submitted to determine whether toxicity has been demonstrated. If the test results indicate effluent toxicity, the permittee may be required to perform additional WET tests in accordance with Part I.C.5 of the permit and/or the permit may be modified to include a chronic WET limit.

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 14%. 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)	According to the steady-state dissolved oxygen Georgia DOSAG model, a monthly average BOD_5 limit of 26 mg/L, when combined with the ammonia limit (refer to Section 4.5 below), is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1. Refer to WLA in *Appendix A* for model inputs.
Total Suspend Solids (TSS)	The plant is equipped with secondary clarifiers. A review of the DMR indicates that the plant is able to consistently meet the monthly average TSS limit of 20 mg/L; therefore this technology-based limit has been maintained in the draft permit.
Fecal Coliform Bacteria (FCB)	The monthly average limit of 200 #/100mL is in accordance with the instream Water Quality Standards (Section 3.1) and TMDL requirements (Section 3.4).

4.5 Nonconventional Pollutants

Pollutants of Concern	Basis
Total Residual Chlorine (TRC)	Chlorine is intermittently used as a back-up disinfection system; therefore a TRC limit has been included in the draft permit. The effluent limitations and monitoring requirements are only applicable when chlorine is used at the facility. A daily maximum TRC limit of 0.08 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 4.7.8 below for calculations.
Dissolved Oxygen (DO)	A minimum effluent DO of 5.0 mg/L is protective of the instream Water Quality Standard for dissolved oxygen at the discharge location.
Total Phosphorus (TP)	The monthly average limit of 1 mg/L of TP limit has been removed from the draft permit. Algal Growth Potential tests demonstrated the TP is non-reactive and remains non-reactive over time. Effluent monitoring for TP has been included in the draft permit.
Orthophosphate	A monthly average Orthophosphate limit of 0.75 mg/L has been included in the draft permit in lieu of the TP limit. The new Ortho-Phosphate limit is based on the nutrient TMDL for Lake Weiss. The aggregate allocations for point & non-point sources require a reduction of 30% of TP loads to the Coosa and Chattooga Rivers at the state line. The year 2005 was selected as a critical year and was used for TMDL development. A review of the DMRs indicated that the facility can meet the proposed limit without process modification; therefore, a compliance schedule was not included in the draft permit.
Total Kjeldahl Nitrogen (TKN), Organic Nitrogen, Nitrate-Nitrite	Organic nitrogen, nitrate-nitrite, and TKN monitoring has been included in the draft permit. The data will be used to determine nutrient speciation and to quantify and manage nutrient loadings in the Coosa River Basin.

Ammonia (NH_3)	According to the steady-state dissolved oxygen Georgia DOSAG model, an ammonia limit of 8.5 mg/L, when combined with the BOD_5 limit (Refer to Section 4.4), is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1 above. An ammonia limit of 8.5 mg/L also meets EPD's permitting strategy to address Ammonia toxicity in State waters under 30Q3 stream flow conditions.

4.6 Toxics & Manmade Organic Compounds

The permittee submitted the results of three Priority Pollutant Scans (PPS) with the permit application. All pollutants were "non-detect" except for the following:

Pollutants of Concern	Basis
Total Recoverable Antimony	This parameter was evaluated and its instream concentration was found to be less than 50% of the acute instream standards. Refer to *Appendix C* for reasonable potential evaluation. In accordance with EPD reasonable potential procedures, antimony is not considered a pollutant of concern and additional monitoring is not required.
Total Recoverable Arsenic	This parameter was evaluated and its instream concentration was found to be less than 50% of the acute & chronic instream standards. Refer to *Appendix C* for reasonable potential evaluation. In accordance with EPD reasonable potential procedures, arsenic is not considered a pollutant of concern and additional monitoring is not required.
Total Recoverable Nickel	This parameter was evaluated and its instream concentration was found to be less than 50% of the acute & chronic instream standards. Refer to *Appendix C* for reasonable potential evaluation. In accordance with EPD reasonable potential procedures, nickel is not considered a pollutant of concern and additional monitoring is not required.

Total Recoverable Zinc	This parameter was evaluated and its instream concentration was found to be less than 50% of the acute & chronic instream standards. Refer to *Appendix C* for reasonable potential evaluation. In accordance with EPD reasonable potential procedures, zinc is not considered a pollutant of concern and additional monitoring is not required.
Total Cyanide	This parameter was evaluated and its instream concentration was found to be less than 50% of the acute instream standards. Refer to *Appendix C* for reasonable potential evaluation. In accordance with EPD reasonable potential procedures, cyanide is not considered a pollutant of concern and additional monitoring is not required.

4.7 Calculations for Effluent Limits

4.7.1 Instream Waste Concentration (IWC):

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

$$= \frac{7.75}{7.75+4}$$

$$= 14\ \%$$

4.7.2 Flow:

Q = Flow
C = Concentration
M = Mass

- *Weekly Average Flow:*

$Q_{Weekly} = Q_{Monthly}\ (MGD) \times 1.25$

$= 5.0 \times 1.25$

$= 6.25\ MGD$

4.7.3 Five-Day Biochemical Oxygen Demand:

- *Weekly Average Concentration:*

$[C]_{Weekly} = [C]_{Monthly}\ (mg/L) \times 1.5$

$= 26 \times 1.5$

$= 39$ mg/L

- *Monthly Average Mass Loading:*

$$M_{Monthly} = \frac{Q_{Monthly}\,(MGD) \times [C]_{Monthly}\,(mg/L \text{ or } ppm) \times 8.34\,(lbs/gal)}{2.2\,(lbs/Kg)}$$

$$= \frac{5.0 \times 26 \times 8.34}{2.2}$$

$= 493$ kg/day

- *Weekly Average Mass Loading:*

$$M_{Weekly} = \frac{Q_{Weekly}\,(MGD) \times [C]_{Monthly}\,(mg/L \text{ or } ppm) \times 8.34\,(lbs/gal)}{2.2\,(lbs/Kg)}$$

$$= \frac{6.25 \times 26 \times 8.34}{2.2}$$

$= 616$ kg/day

4.7.4 Ammonia:

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 D* for detailed calculations.

- *Weekly Average Concentration:*

$[C]_{Weekly} = [C]_{Monthly}\,(mg/L) \times 1.5$

$= 8.5 \times 1.5$

$= 12.75$ mg/L

- *Monthly Average Mass Loading:*

$$M_{Monthly} = \frac{Q_{Monthly}\,(MGD) \times [C]_{Monthly}\,(mg/L \text{ or } ppm) \times 8.34\,(lbs/gal)}{2.2\,(lbs/Kg)}$$

$$= \frac{5.0 \times 8.5 \times 8.34}{2.2}$$

$= 161$ kg/day

- *Weekly Average Mass Loading:*

$$M_{Weekly} = \frac{Q_{Weekly}\ (MGD) \times [C]_{Monthly}\ (mg/L \text{ or } ppm) \times 8.34\ (lbs/gal)}{2.2\ (lbs/Kg)}$$

$$= \frac{6.25 \times 8.5 \times 8.34}{2.2}$$

$= 201$ kg/day

4.7.5 Ortho-Phosphate:

- *Weekly Average Concentration:*

$[C]_{Weekly} = [C]_{Monthly}\ (mg/L) \times 1.5$

$= 0.75 \times 1.5$

$= 1.13$ mg/L

- *Monthly Average Mass Loading:*

$$M_{Monthly} = \frac{Q_{Monthly}\ (MGD) \times [C]_{Monthly}\ (mg/L \text{ or } ppm) \times 8.34\ (lbs/gal)}{2.2\ (lbs/Kg)}$$

$$= \frac{5.0 \times 0.75 \times 8.34}{2.2}$$

$= 14.2$ kg/day

- *Weekly Average Mass Loading:*

$$M_{Weekly} = \frac{Q_{Weekly}\ (MGD) \times [C]_{Monthly}\ (mg/L \text{ or } ppm) \times 8.34\ (lbs/gal)}{2.2\ (lbs/Kg)}$$

$$= \frac{6.25 \times 0.75 \times 8.34}{2.2}$$

$= 17.8$ kg/day

4.7.6 Total Suspended Solids:

- *Weekly Average Concentration:*

$[C]_{Weekly} = [C]_{Monthly}\ (mg/L) \times 1.5$

$= 20 \times 1.5$

$= 30$ mg/L

- *Monthly Average Mass Loading:*

$$M_{Monthly} = \frac{Q_{Monthly}\,(MGD) \times [C]_{Monthly}\,(mg/L \text{ or } ppm) \times 8.34\,(lbs/gal)}{2.2\,(lbs/Kg)}$$

$$= \frac{5.0 \times 20 \times 8.34}{2.2}$$

$= 379$ kg/day

- *Weekly Average Mass Loading:*

$$M_{Weekly} = \frac{Q_{Weekly}\,(MGD) \times [C]_{Monthly}\,(mg/L \text{ or } ppm) \times 8.34\,(lbs/gal)}{2.2\,(lbs/Kg)}$$

$$= \frac{6.25 \times 20 \times 8.34}{2.2}$$

$= 474$ kg/day

4.7.7 Fecal Coliform Bacteria:

- *Weekly Average concentration:*

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

$= 200 \times 2$

$= 400$ #/100 mL

4.7.8 Total Residual Chlorine (TRC):

- *Daily Maximum Concentration:*

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

$$= \frac{(7.75 + 49) \times 0.011}{7.75}$$

$= 0.08$ 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.

40 CFR Part §122.44(a)(1) requires that NPDES permits include applicable technology-based limitations and standards, while regulations at § 125.3(a)(1) state that TBELs for publicly owned treatment works must be based on secondary treatment standards and the "equivalent to secondary treatment standards" (40 CFR Part 133). The regulation applies to all POTWs and identifies the technology-based performance standards achievable based on secondary treatment for five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH.

The table below shows the secondary treatment standards:

Parameter	**Secondary Treatment Standards**	
	30-day average	*7-day average*
BOD_5	30 mg/L	45 mg/L
TSS	30 mg/L	45 mg/L
BOD_5 and TSS removal (concentration)	≥ 85%	--
pH (Daily Minimum – Daily Maximum)	6.0-9.0 S.U.	

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)	**26**	30.0
Total Suspended Solids (mg/L)	None	**20**
Ortho-Phosphate, as P (mg/L)	**0.75**	None
Ammonia, as N (mg/L)	**8.5**	None
Fecal Coliform Bacteria (#/100 mL)	**200**	None
Dissolved Oxygen (mg/L), Daily Minimum	**5.0**	None
Total Residual Chlorine (mg/L), Daily Maximum	**0.08**	None

[1] Effluent limits in bold were included in the permit. Refer to Sections 4.4, 4.5, and 4.6 above for more information.

5. OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

5.1 Color (ADMI color value)

A local textile company contributes to up to 94% of the Trion WPCP influent flow. Since the raw influent contains dyes, instream color monitoring has been maintained in the draft permit.

5.2 Long-Term BOD (LTBOD) Test

For facilities with a capacity of 1.0 MGD or greater, EPD may include requirements for LTBOD tests in permits for when data is needed for water quality modeling. The permittee conducted a LTBOD test during the current permit cycle; therefore, requirements for LTBOD testing have not been included in the draft permit.

5.3 Industrial Pre-treatment Program (IPP)

The Town of Trion has an approved IPP; therefore language has been included in the draft permit to reflect the approved program.

5.4 Sludge Management Plan (SMP)

The Town of Trion has an approved SMP land apply sludge at agronomic rates; therefore language to reflect the approved plan has been included in the draft permit. In addition, the City requested that their SMP be amended to include additional sites. The information provided for the proposed addition of the Blalock property (14.7 acres), Clements property (12.6 acres), Croy property (9.1 acres), Dooley property (36.7 acres), Marks property (29.6 acres), Sanford property (23.8 acres), Gary Thomas property (24.5 acres),

Jackie Thomas property (26.8 acres), and Rebecca Thomas property (32.4 acres) in Chattooga County has been reviewed. An inspection was conducted on August 22, 2018 to verify the suitability of the proposed site for sludge application. It has been determined that the sludge may be applied at the following maximum rates:

Blalock, Clements, Croy, Dooley, Marks, Sanford, Gary Thomas, Jackie Thomas, and Rebecca Thomas Properties:

Plant	Crops	Ungrazed[1] (Dry tons/acre/year)	Grazed (Dry tons/acre/year)
Trion WPCP	Fescue	4.1	3.1

[1] Calculated using maximum application rates from UGA Cooperative Extension Soil Test Report completed February 8, 2018

Note that these application rates are valid for the first year only. Application rates for subsequent years will have to be calculated based upon the quantity of sludge applied, the most recent sludge analyses, and any operational changes. The application rate may be significantly reduced in future years depending upon the mineralization calculations. If the allowable application rate drops significantly next year or in future years, the City may need to obtain approval of additional sites.

5.5 Watershed Protection Plan (WPP)

The Town of Trion has an approved WPP; therefore language has been included in the draft permit to reflect the approved plan.

5.6 Service Delivery Strategy

The Town of Trion is in compliance with the Department of Community Affairs approved Service Delivery Strategy for Chattooga County.

5.7 Compliance Schedules

Effluent limitations are applicable immediately upon the effective date of the permit.

5.8 Anti-Backsliding

In accordance with Section 404(o) of the Clean Water Act & 122.44(l)(2)(i)(B)(1), a permit may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant if information is available which was not available at the time of permit issuance and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. Tests have demonstrated that total phosphorus in the effluent is non-reactive. This data was not available at the time the total phosphorus limits were developed. Therefore the permit complies with the anti-backsliding requirements of the Clean Water Act.

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
P.O. Box 3250
16 Center Rd.
Cartersville, GA 30120

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

Trion Water Pollution Control Plant
NPDES Permit No. GA0025607

Waste Load Allocation (WLA)

National Pollutant Discharge Elimination System
Waste Load Allocation Form

Part I: Background Information

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

Facility Name: Trion WPCP County: Chattooga WQMU: 1401

NPDES Permit No.: GA0025607 Expiration Date: September 30, 2018 Outfall Number: 001

Receiving Water: Chattooga River River Basin: Coosa 10-Digit HUC: 0315110504

Discharge Type: Domestic ☐ Industrial ☐ Both ☒ Proportion (D:I): 10% : 90% Flow(s) Requested (MGD): 5.0

Industrial Contributions Type(s): Denim Fabric

Treatment Process Description: Bar screen, influent pump station, equalization basin, activated sludge (extended air), chemical addition (pH and color control), secondary clarification, ozonation or chlorination (as back up).

Additional Information: (history, special conditions, other facilities). Phosphorus limit modification is requested as part of permit renewal

Requested by: Yilin Fan Title: EE Program: WRP

Telephone: Date: March 29, 2018

Part II: Receiving Water Information

Receiving Water: Chattooga River, tributary to Lake Weiss, Alabama Designated Use Classification: Fishing

Integrated 305(b)/303(d) List: Yes ☒ No ☐ Partial Support: ☐ Not Support: ☒ Criteria: FC

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

- Fecal Coliform TMDL - Chattooga River (GA EPD, 2004): The WLA for fecal coliform is equivalent to the WQ standard, 200 counts/100 mL.
- Nutrients TMDL - Lake Weiss, AL (US EPA, 2008): The aggregate allocations for point & nonpoint sources require a 30% reduction of TP loads from Coosa and Chattooga Rivers at the state line. 2005 was selected as the critical year and was used for TMDL development.

Part III: Water Quality Model Review Information

Model Type: Uncalibrated ☒ Calibrated ☐ Verified ☐ Cannot be Modeled ☐ Model Length (mi): 46.5

Field Data: None ☐ Fair ☒ Good ☐ Excellent ☐

Model and Field Data Description: Steady-state dissolved oxygen GA DOSAG model

Critical Water Temperature:(°C):	25			Drainage Area (mi²):	163			Mean annual streamflow at discharge (cfs):	294
7Q10 Yield (cfs/mi²):	0.3			Velocity (range fps):	0.35 – 0.48			30Q3 streamflow at discharge (cfs):	63
Effluent Flow Rate (cfs):	7.7			7Q10 IWC (%):	14			7Q10 streamflow at discharge (cfs):	49
Slope (range - fpm):	0.9 – 9.8	K1:	0.3	K3:	0.3	K2 (range):		1Q10 streamflow at discharge (cfs):	37
SOD:	Not Modeled	Escape Coef. (ft^{-1}):	0.11	f-Ratio (BOD_u/BOD_5):	1.5	Background Hardness (mg/L as $CaCO_3$):			118

The predicted minimum DO concentration is 5.4 mg/L approximately 12.4 miles downstream from the discharge.
Hardness is average data at Chattooga River (RV_14_4788), upstream from the discharge. Average TSS at this station is 10 mg/L.

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

Rationale: Same as current ☐ Revised ☒ New ☐

Location: Chattooga River

Effluent Flow Rate (MGD)	BOD_5	NH_3 (as N)	DO (min)	[1]TRC	FC (No./100ml)	pH (std. units)	Total Phosphorus	Ortho-Phosphorus	TKN	Nitrate-Nitrite	Organic Nitrogen
5.0	26	8.5	5.0	0.08	200	6.0 – 9.0	Monitor	0.75	Monitor	Monitor	Calculated

Additional Comments:

[1]The TRC limit applies when chlorine is used at the facility, as specified in the current permit.

- Priority pollutant permit limits, aquatic toxicity testing requirements and other parameters required by the categorical effluent guidelines or identified during review of permit application are to be determined by the Wastewater Regulatory Program.
- The current ammonia limit meets the U.S. EPA's Aquatic Life Ambient WQ Criteria for NH_3-Freshwater 2013 under 30Q3 streamflow condition and current maximum effluent pH.
- In response to the City's request for an Ortho-P limit in lieu of TP limit, the new Ortho-P limit is based on reducing the City's Ortho-P concentration in 2005 by 30%. Algal Growth Potential tests were performed to demonstrate the TP is non-reactive and remains non-reactive over time.
- Effluent monitoring of TP, TKN and nitrate-nitrite is recommended. TP and Ortho-P should be analyzed from the same effluent sample. Ortho-P is a component of TP and should always be less than or equal to TP. The nitrogen constituents should be analyzed from the same effluent sample. Organic Nitrogen should be calculated as TKN minus NH_3.
- Instream color monitoring should be continued. The upstream color monitoring location should be specified. An upstream location unaffected by other point sources with textile effluent is Spring Branch off Ridgeway Rd. Downstream location is Penn Bridge Rd.

Prepared by: Azarina Carmical AC Date: August 30, 2018 | Reviewed by: Josh Welte JW Date: 30.AUG.18

Part V: Program Manager Comments

Elizabeth Booth Elizabeth C. Booth Date: 8/30/18

FACT SHEET

Appendix B

Trion WPCP
NPDES Permit No. GA0025607

Stream Data (upstream of the discharge):

TSS:	10	mg/L
7Q10:	49.00	ft^3/s
1Q10:	37.00	ft^3/s
Mean flow:	294.0	ft^3/s

Effluent Data:

TSS:	4.0	mg/L
Flow:	5,000,000	gal/day
Flow:	7.74	ft^3/s

Stream data (downstream of the discharge):

Hardness (at 7Q10):	118.0	mg/L		
TSS (at 7Q10):	9.18	mg/L		
Dilution factor (at average flow):	39.0		IWC (at average flow):	3
Dilution factor (at 7Q10):	7.33		IWC (at 7Q10):	14
Dilution factor (at 1Q10):	5.78		IWC (at 1Q10):	17

Acute Water Quality Criteria (WQC_{Acute}) - Metals:

Metal	K_{PO}	α	f_D	Maximum effluent C_T (µg/L)	Instream C_D (µg/L)	WQC_{Acute} (µg/L)	Action needed?
Arsenic	4.80.E+05	-0.729	0.53	12.9	1.2	340.00	no
Cadmium	4.00.E+06	-1.131	0.000	0.0	0.0	2.37	no
Chromium III	3.36.E+06	-0.930	0.00	0.0	0.0	652.48	no
Chromium VI	3.36.E+06	-0.930	0.00	0.0	0.0	16.00	no
Copper	1.04.E+06	-0.744	0.00	0.0	0.00	15.71	no
Lead	2.80.E+06	-0.800	0.00	0.0	0.0	77.30	no
Mercury	2.91.E+06	-1.136	0.00	0.0	0.0	1.40	no
Nickel	4.90.E+05	-0.572	0.44	8.8	0.7	538.61	no
Zinc	1.25.E+06	-0.704	0.29	31.6	1.60	134.82	no

$$f_D = \frac{1}{1 + K_{PO} \times TSS_{Instream}(mg/L)^{(1+\alpha)} \times 10^{-6}} \qquad \text{Instream } C_D = \frac{\text{Effluent } C_T(mg/L) \times f_D}{DF} \text{ mg/L}$$

$$\text{Dilution Factor} = \frac{Q_{Stream}(ft^3/sec) + Q_{Effluent}(ft^3/sec)}{Q_{Effluent}(ft^3/sec)}$$

FACT SHEET

Appendix B

Trion WPCP
NPDES Permit No. GA0025607

Chronic Water Quality Criteria ($WQC_{Chronic}$) - Metals:

Metal	K_{PO}	α	f_D	Average effluent C_T (µg/L)	Instream C_D (µg/L)	$WQC_{Chronic}$ (µg/L)	Action needed?
Arsenic	4.80.E+05	-0.729	0.53	**7.9**	0.6	150.00	no
Cadmium	4.00.E+06	-1.131	0.000	0.0	0.0	0.28	no
Chromium III	3.36.E+06	-0.930	0.00	0.0	0.0	84.87	no
Chromium VI	3.36.E+06	-0.930	0.00	0.0	0.0	11.00	no
Copper	1.04.E+06	-0.744	0.00	0.0	0.0	10.32	no
Lead	2.80.E+06	-0.800	0.00	0.0	0.0	3.01	no
Mercury	2.91.E+06	-1.136	0.00	0.0	0.0	0.012	no
Nickel	4.90.E+05	-0.572	0.44	**6.3**	0.4	59.82	no
Zinc	1.25.E+06	-0.704	0.29	**17.2**	0.69	135.92	no

$$f_D = \frac{1}{1 + K_{PO} \times TSS_{Instream}(mg/L)^{(1+\alpha)} \times 10^{-6}} \qquad \text{Instream } C_D = \frac{\text{Effluent } C_T(mg/L) \times f_D}{DF} \text{ mg/L}$$

Water Quality Criteria (WQC) - Non Metals:

Pollutant	Effluent C_T (µg/L)	Instream Concentration (µg/L)	WQC (µg/L)	WQC/2 (µg/L)	Action needed?
Cyanide	**46.0**	1.18	**5.2**	3	**no**
Antimony	**33.5**	0.86	**640.0**	320	**no**

NOTES:

- Water Quality Criteria (WQC) from State of Georgia Rules and Regulations 391-3-6-.03.
- If the calculated instream concentration is less than 50% of the instream water quality criteria, then the constinuent will be considered not to be present at levels of concern.
- If the calculated instream concentration is greater than 50% of the instream water quality criteria, then additional monitoring may be required or a permit limit for that constinuent may be included in the permit.

FACT SHEET

Appendix C

Chattooga County - Trion WPCP
NPDES Permit No. GA0025607

WET Test PMSD Values:

PMSD = Minimum Significant Data (MSD) / Control Mean x 100 %

WET Test #1 **2013**

Species	PMSD Bounds	MSD	Control Mean	PMSD	
Water Flea (C. dubia)	13-47	--	--	**13.3**	Within
Fathead Minnow (P. promelas)	12-30	--	--	**7.6**	Lower

WET Test #2 **2014**

Species	PMSD Bounds	MSD	Control Mean	PMSD	
Water Flea (C. dubia)	13-47	--	--	**11.7**	Lower
Fathead Minnow (P. promelas)	12-30	--	--	**7.4**	Lower

WET Test #3 **2015**

Species	PMSD Bounds	MSD	Control Mean	PMSD	
Water Flea (C. dubia)	13-47	--	--	**13.9**	Within
Fathead Minnow (P. promelas)	12-30	--	--	**11.9**	Lower

WET Test #4 **2016**

Species	PMSD Bounds	MSD	Control Mean	PMSD	
Water Flea (C. dubia)	13-47	--	--	**15.7**	Within
Fathead Minnow (P. promelas)	12-30	--	--	**22.1**	Within

Appendix D
Ammonia Toxicity Analysis
for
Waste Load Allocation Development

Date: 4/9/2018
Facility: Trion WPCP
NPDES Permit Number: GA0025607
Receiving Stream: Chattooga River
Engineer: Azarina Carmical
Comments: USING ANNUAL 30Q3 and MAXIMUM EFFLUENT pH OF 9

Stream and Facility Data:

Background Stream pH (standard units): 7.0
Effluent pH (standard units): 9.0
Final Stream pH (standard units): 7.05
Stream Temperature (Celsius): 25.0
30Q3 Streamflow (cfs): 63
Stream background concentration (Total NH3-N, mg/L): 0.08
Facility Discharge (MGD/cfs): 5 7.74
Total Combined Flow (cfs): 70.74

Effluent concentration (Total NH3-N, mg/L) = 11.6

If 11.6 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) = 1.34

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.