GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

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

Honorable Wayne Gulley, Mayor
City of Ray City
P.O. Box 128
Ray City, GA 31645

MAY 03 2017

RE: City of Ray City
Water Pollution Control Plant (WPCP)
NPDES Permit No. GA0033553
Draft Permit
Berrien County

Dear Mayor Gulley:

The Environmental Protection Division (EPD) has received your application for a permit to discharge treated wastewater to the waters of the State of Georgia. We are processing your application and are considering the issuance of a National Pollutant Discharge Elimination System (NPDES) permit in accordance with the Georgia Water Quality Control Act and the Federal Clean Water Act.

Before issuing the permit, you must post a public notice for 30 days in a conspicuous location at the Ray City City Hall. Within ten days of receiving this draft permit, please send a letter to our office stating where and what date the notice was posted. The letter should be signed by an authorized representative of the City. At the end of the 30-day public notice comment period, EPD will make a determination on the issuance of the NPDES permit.

Additionally, NetDMR is a national tool for permittees to submit their discharge monitoring reports (DMRs) electronically via a secure internet application to U.S. EPA and EPD. It is important that you familiarize and prepare to use the NetDMR application as EPD will require DMRs to be submitted electronically. To learn more about NetDMR and sign up to start using the application, please review the enclosed brochure and visit us at: http://epd.georgia.gov/netdmr/.

Enclosed is a Summary of Modifications which outlines the revisions being made to the permit. We request that key operational personnel and your consultants review the permit carefully with particular emphasis being placed on the revisions being made to the permit.

Also enclosed is a copy of the Public Notice, Fact Sheet, Summary of Modifications, and the draft NPDES permit. Should you have any questions, please contact Johanna Smith of my staff at (404) 656-6937 or via email at *Johanna.Smith@dnr.ga.gov*.

Sincerely,

Gigi Steele, Manager
Municipal Permitting Unit
Wastewater Regulatory Program

GS\jds
Attachments: Public Notice, Fact Sheet, Draft Permit, Summary of Modifications, NetDMR Brochure

PUBLIC NOTICE

NOTICE OF APPLICATION FOR A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TO DISCHARGE TREATED WASTEWATER INTO THE WATERS OF THE STATE OF GEORGIA.

The Georgia Environmental Protection Division (EPD) is considering the reissuance of an NPDES permit for the following applicant, subject to specific pollutant limitations and special conditions:

City of Ray City, P.O. Box 128, Ray City, Georgia 31645, NPDES Permit No. GA0033553, for the Ray City Water Pollution Control Plant located at Park Street, Ray City, GA 31645. Up to 0.1 MGD of treated wastewater is being discharged to Cat Creek in the Suwannee River Basin.

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address below, or via e-mail at EPDcomments@dnr.ga.gov, no later than thirty (30) days after this notification. If you choose to e-mail your comments, please be sure to include the words "NPDES permit reissuance: Ray City WPCP - GA0033553 (Berrien County)" in the subject line to ensure that your comments will be forwarded to the correct staff. All comments received prior to or on that date will be considered in the formulation of final determinations for these permits. A public hearing may be held where the EPD Director finds a significant degree of public interest in a proposed permit or group of permits. Additional information regarding public hearing procedures is available by writing the Environmental Protection Division.

A fact sheet or copy of the draft permit is available by writing the Environmental Protection Division. 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 contact: Gigi Steele, Wastewater Regulatory Program at (404) 463-1511.

Please bring this to the attention of persons who you know will be interested in this matter.

Summary of Modifications
City of Ray City
Water Pollution Control Plant (WPCP)
Permit No. GA0033553

Please note the following changes to the NPDES draft permit.

Part I.B.

- ☐ Removed Effluent Testing Data monitoring requirements
- ☐ Added monitoring requirements for Total Phosphorus, Ortho-Phosphate, Total Kjeldahl Nitrogen, Organic Nitrogen, and Nitrate-Nitrite as N. (Part I.B.1.)
- ☐ Added monitoring requirements for Ammonia as N and Dissolved Oxygen
- ☐ Reduced maximum pH limit from 9.0 to 8.5 SU

Part I.C.

- ☐ Removed TRC Compliance Schedule (Part I.C.8.)
- ☐ Removed Effluent Testing Data section (Part I.C.9.)
- ☐ Added pH Compliance Schedule

Boilerplate Modifications

The permit boilerplate includes modified language or added language in the following sections:

- ☐ Cover Page
- ☐ Part I.A.3. Sludge Monitoring Requirements
- ☐ Part I.A.5. Effluent Toxicity and Biomonitoring Requirements
- ☐ Part I.C.2. Sampling Period
- ☐ Part I.C.8. Watershed Assessment and Watershed Protection Plan
- ☐ Part I.D. Reporting Requirements
- ☐ Part II.A. Management Requirements
- ☐ Part II.B. Responsibilities

GEORGIA
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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: Johanna Smith (Johanna.Smith@dnr.ga.gov)
404-656-6937

Draft permit:
(Check one)

- ☐ 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.: GA0033553

1.2 Name and Address of Owner/Applicant

City of Ray City
P.O. Box 128
Ray City, GA 31645

1.3 Name and Address of Facility

City of Ray City Water Pollution Control Plant
Park Street
Ray City, GA 31645

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

Outfall #	Latitude	Longitude	Receiving Waterbody
001	31° 4' 9.8616" N (31.069406)	-83° 12' 23.9178" W (-83.206644)	Cat Creek

1.5 Permitted Capacity

0.1 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:

Three-Cell Pond System (Two Aerated Cells), Chlorination Disinfection, Dechlorination

Solids processing:

Sludge settles to the bottom of the treatment ponds. No sludge disposal occurs on a regular basis.

Outfall	Operation Description	Treatment Description
001	Sanitary Wastewater	See Above

1.8 Type of Wastewater Discharge

☐ process wastewater ☐ stormwater

☒ domestic wastewater ☐ combined (describe)

☐ other (description)

1.9 Characterization of Effluent Discharge (as reported by applicant)

Outfall No. 001 (Discharge to Cat Creek)

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	0.120	0.043
Biochemical Oxygen Demand$_{(5\text{-day})}$ (mg/L)	30	15
Total Suspended Solids (mg/L)	55	42
Fecal Coliform Bacteria (#/100mL)	50	10
Ammonia (mg/L)	6.3	5.1
Total Phosphorus (mg/L)	2.2	1.9

2.0 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
	Combined Sewer Overflow Discharges	40 CFR 122 40 CFR 125
	Municipal Sludge Use and Disposal	40 CFR 122 40 CFR 257 40 CFR 501 &503

3.0 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

Cat Creek

SPECIFIC WATER QUALITY CRITERIA FOR CLASSIFIED WATER USAGE

[391-3-6-.03(6)]

Fishing

1. *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.*

2. *pH - Within the range of 6.0 to 8.5.*

3. *Bacteria - 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.*

4. *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 stream designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.*

5. *Toxic Wastes, Other Deleterious Materials - None in concentrations that would harm man, fish, and game or other beneficial aquatic life.*

3.2 Ambient Information

Outfall ID	7Q10 (cfs)	1Q10 (cfs)	30Q3 (cfs)	Hardness (mg/L as $CaCO_3$)	Annual Average Flow (cfs)	Upstream Total Suspended Solids (mg/l)
001	*0.078*	*0.052*	*0.38*	*18*	*36.6*	*Not Available*

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

Cat Creek	Beaverdam Cr. downstream SR 37 to Beatty Mill Creek	Suwannee	DO	NP	4 miles	4a	TMDL completed DO 2001.
R031102030305	Berrien/ Lowndes County	Fishing					
62							

Cat Creek is listed on the 2014 305(b)/303(d) list as not supporting its designated use (fishing) but a TMDL has been completed for the impaired parameter, Dissolved Oxygen. Details about this TMDL is found below, in Section 3.4.

3.4 Total Maximum Daily Load (TMDL)

3.4.1. Dissolved Oxygen

In 2001, the Georgia Environmental Protection Division (EPD) prepared a "Suwannee River Basin Dissolved Oxygen (DO) TMDL Submittals" document (TMDL). The City of Ray City WPCP was not identified as a point discharge in the Cat Creek Watershed with the ability to contribute TOC loading. The TMDL states that, "most, if not all, total organic carbon loading to streams in the Suwannee River Basin is the result of nonpoint sources" and that permitted discharges will be regulated through the NPDES permitting process; therefore, a DO limit has not been included in the draft permit. DO monitoring has been included in the permit (See Part I.B. of the permit).

3.5 Wasteload Allocation Date (if applicable)

A WLA was issued on April 12, 2017. Refer to *Appendix A* of the Fact Sheet.

4. EFFLUENT LIMITS AND PERMIT CONDITIONS

4.1 Proposed Effluent Limitations

B.1.a. Discharge to Cat Creek (0.1 MGD):

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

Parameter	Discharge Limitations mg/L (kg/day) unless otherwise specified	
	Monthly Average	Weekly Average
Flow (MGD)	0.1	0.125
Five-Day Biochemical Oxygen Demand	30 (11.4)	45 (14.2)
Total Suspended Solids	90 (34.1)	120 (42.6)
Ammonia, as N	Report	Report
Fecal Coliform Bacteria (#/100mL)	200	400
Total Residual Chlorine	0.011	0.011

Discharge to Cat Creek: (Continued)

Parameter	Discharge limitations, mg/L unless otherwise specified
pH, Minimum – Maximum (Standard Unit)	6.0 – 9.0
Dissolved Oxygen, Daily minimum	Report
Total Phosphorus	Report
Ortho-phosphate	Report
Organic Nitrogen	Report
Total Kjeldahl Nitrogen	Report
Nitrate-Nitrite as N	Report

B.1.b. Discharge to Cat Creek (0.1 MGD):

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

Parameter	Discharge Limitations mg/L (kg/day) unless otherwise specified	
	Monthly Average	Weekly Average
Flow (MGD)	0.1	0.125
Five-Day Biochemical Oxygen Demand	30 (11.4)	45 (14.2)
Total Suspended Solids	90 (34.1)	120 (42.6)
Ammonia, as N	Report	Report
Fecal Coliform Bacteria (#/100mL)	200	400
Total Residual Chlorine	0.011	0.011

Discharge to Cat Creek: (Continued)

Parameter	Discharge limitations, mg/L unless otherwise specified
pH, Minimum – Maximum (Standard Unit)	6.0 – 8.5
Dissolved Oxygen, Daily minimum	Report
Total Phosphorus	Report
Ortho-phosphate	Report
Organic Nitrogen	Report
Total Kjeldahl Nitrogen	Report
Nitrate-Nitrite as N	Report

4.2 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.

Priority Pollutant Scans are not required for facilities with design flows less than 1 MGD; therefore, an evaluation was not completed on priority pollutants.

4.3 Whole Effluent Toxicity

Only facilities with design flows greater than 1.0 MGD are required to perform and submit WET tests; therefore, no WET tests were submitted with the application and annual WET testing requirements have not been included in the draft permit.

4.4 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).

4.5 Conventional Pollutants

Pollutants of Concern	Basis
pH	Using a 7Q10 flow of 0.078 cfs, the Instream Waste Concentration (IWC) percentage for Cat Creek under B.1.a. and B.1.b. effluent limitations was determined to be 66%. When a stream has an IWC percentage of greater than 50%, a maximum pH limit of 8.5 shall be used. Because the IWC percentage for the City of Ray City WPCP is greater than 50%, a maximum pH limit of 8.5 has been used. This maximum pH limit has been reduced from 9.0 SU. DMR data for 2016 and 2015 were analyzed and the plant operator was contacted, and it was determined that the facility cannot immediately meet the reduced maximum pH limit; therefore, a compliance schedule has been included in the permit.
5-Day Biochemical Oxygen Demand	The monthly average BOD_5 effluent limitation of 30 mg/L was determined through the use of a Steady-State Dissolved Oxygen Georgia DOSAG Model and has been maintained in the draft permit. Refer to WLA in *Appendix A* for model inputs.
Total Suspended Solids	The limit of 90 mg/L is based on secondary standards (technology-based effluent limit) and has been maintained in the draft permit.
Fecal Coliform	The limit of 200 #/100 mL included in the permit is based on the Instream Water Quality Standards described in Section 3.1.
Dissolved Oxygen	DO monitoring has been included in the draft permit in order to implement EPA's Aquatic Life Ambient Water Quality Criteria for Ammonia-Freshwater 2013 and satisfy the DO TMDL in the Suwannee River basin.

4.6 Nonconventional Pollutants

Pollutants of Concern	Basis
Total Residual Chlorine	A limit of 0.011 mg/L has been maintained in the permit. Refer to Section 4.8.3. below for calculations and explanation.
Total Phosphorus (TP)	In accordance with EPD Strategy for Addressing Phosphorus in NPDES Permitting (Strategy), Total Phosphorus monitoring has been included in the draft permit under B.1. effluent limitations.
Ortho Phosphate, Total Kjeldahl Nitrogen, Organic Nitrogen, Nitrate/Nitrite	Ortho-phosphate, organic nitrogen, nitrate-nitrite, and Total Kjeldahl Nitrogen (TKN) monitoring is required for stream modeling purposes, to determine nutrient speciation, and for future nutrient planning. It has been determined that results from 4 samples per year (one per quarter) are sufficient.
Ammonia	A monitoring requirement for ammonia has been included in the draft permit. The proposed monitoring in the draft permit implements U.S. EPA's Aquatic Life Ambient Water Quality Criteria for Ammonia-Freshwater 2013 and the DO TMDL in the Suwanee River Basin.

4.7 Toxics & Manmade Organic Compounds (126 priority pollutants and metals)

Priority Pollutant Scans are required only for facilities with design flows greater than 1.0 MGD. The Ray City WPCP does not have a design flow greater than 1.0 MGD; therefore, a Reasonable Potential (RP) Analysis was not completed.

4.8 Calculations for Water Quality Based Effluent Limits

4.8.1. Instream Waste Concentration (IWC)

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

$$IWC = \frac{0.15}{0.15 + 0.078}$$

$$IWC = 66\%$$

4.8.2. Biochemical Oxygen Demand (5-day)

Effluent Limits are based on the dissolved oxygen sag (DOSAG) modeling results in the Wasteload Allocation dated April 12, 2017.

- ***Weekly Average Flow***

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

$Q_{Weekly} = 0.1\ (MGD) \times 1.25$

$Q_{Weekly} = 0.125\ MGD$

Q = Flow
C = Concentration
M = Mass

- ***Weekly Average Concentration***

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

$[C]_{Weekly} = 30\ (mg/L) \times 1.5$

$[C]_{Weekly} = 45\ mg/L$

- ***Monthly Average Mass Loading***

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

$$= \frac{0.1 \times 30 \times 8.34}{2.2}$$

$= 11.4\ Kg/day$

- ***Weekly average mass loading***

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

$$= \frac{0.125 \times 30 \times 8.34}{2.2}$$

$= 14.2\ kg/day$

4.8.3. Total Residual Chlorine (TRC)

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

$$= \frac{(0.15 + 0.078) \times 0.011}{0.15}$$

$$= 0.02 \text{ mg/L}$$

The TRC limit of 0.011 mg/L in the current permit was calculated using an assumed 7Q10 of 0.0 cfs. Updated flow data from USGS station 023177483 indicates that the estimated annual 7Q10 at the discharge location of the Ray City WPCP is 0.078 cfs. Furthermore, the revised 7Q10 value of 0.078 cfs was used in the development of the updated effluent limitations for the City of Ray City WPCP, and the TRC limit was recalculated to be 0.02 mg/L. In order to prevent backsliding, the previously calculated limit of 0.011 mg/L has been maintained in the permit.

A two-year compliance schedule was added to the current permit to allow time for any necessary upgrades to the facility in order to meet the new limit, and the term of the compliance schedule has passed; therefore, the TRC compliance schedule has been removed from the permit.

4.8.4. Ammonia Toxicity Analysis

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

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

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

The ammonia effluent limit is then calculated as follows:

$$[NH_3]_{\text{Effluent}} = \frac{\left(Q_{\text{Effluent}}\,(ft^3/sec) + 7Q10\,(ft^3/sec)\right) \times CCC\,(mg/L) - 7Q10(ft^3/sec) \times [NH_3]_{\text{Stream Background}}\,(mg/L)}{Q_{\text{Effluent}}\,(ft^3/sec)}$$

4.8.5. Metals

EPA Form 2A for renewal of an NPDES permit requires that all applicants submit the following information:

- pH (minimum – maximum)
- Flow Rate
- Temperature (Winter, Summer)
- BOD
- Fecal Coliform
- Total Suspended Solids

The Form also requires the following information of all applicants with flows greater than 0.1 MGD:

- Ammonia, as N
- Total Residual Chlorine (TRC)
- Dissolved Oxygen
- Total Kjeldahl Nitrogen (TKN)
- Nitrate-Nitrite as N
- Oil and Grease
- Total Phosphorus
- Total Dissolved Solids

Metals analyses are not required by Form 2A for the City of Ray City WPCP; metals analysis was not performed.

4.9 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.

4.9.1. Secondary and Equivalent to Secondary Treatment Standards

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 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH.

4.9.2. 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	6.0-9.0	

EPD has also established a maximum (technology-based) effluent limit of 0.5 mg/L for TRC.

Permit limits are based on water quality-based effluent limitations (WQBELs) as well as technology-based effluent limitations (TBELs). The proposed limits in this draft permit are based on the more stringent option of the two.

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

After preparing and evaluating 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]
Five-Day Biochemical Oxygen Demand	**30**	30
Total Suspended Solids	**-**	**90**
pH	**6.0 – 8.5**	6.0 – 9.0
Ammonia	**Monitor**	None
Total Residual Chlorine	**0.011**	0.5

[1] Effluent limits in bold were included in the permit. Refer to Sections 4.5, 4.6, 4.7, and 4.8 above for more information.

5.0 Other Permit Requirements and Considerations

5.1 Total Hardness:

No hardness-based metals monitoring is required at the Ray City WPCP; therefore, hardness monitoring has not been included in the permit.

5.2 Industrial Pre-treatment Program (IPP)

The City of Ray City does not have an approved IPP; therefore language has been included in the draft permit to reflect this.

5.3 Sludge Management Plan (SMP)

The City of Ray City WPCP disposes of sludge produced at the facility in a landfill. In accordance with 391-3-6-.17(4), "If a facility intends to utilize land application or intends to sell or give sludge away as a means of sludge handling, the facility shall submit a Sludge Management Plan (SMP) to the EPD for approval." Because the facility sends its sludge to a landfill, an SMP is not required and this language has not been included in the permit.

5.4 Metropolitan North Georgia Water Planning District Applicability

The City of Ray City is located in Berrien County, which is not within the Metropolitan North Georgia Water Planning District.

5.5 Service Delivery Strategy

The City of Ray City is in compliance with the Department of Community Affairs approved Service Delivery Strategy.

5.6 Compliance Schedules

A 24-month Compliance Schedule for pH has been included to allow the permittee to meet the new pH limit included under B.1.b. effluent limitations.

The Compliance Schedule for Total Residual Chlorine in the current permit has been removed.

5.7 Long Term $BOD_{120\text{-day}}$

For a facility with a capacity of 1 MGD or greater, it is recommended that a 120-day long-term biochemical oxygen demand test be performed once during the permit period prior to renewal. The test should be performed on an effluent sample collected during the period from July 1 to September 30. The results of this test should be provided to the Georgia Environmental Protection Division prior to the renewal of the permit.

The Ray City WPCP does not have a capacity of 1 MGD or greater; therefore, this requirement has not been included in the permit.

5.8 Anti-Backsliding

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

6.0 REPORTING

6.1 Compliance Office

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

Georgia Environmental Protection Division
Southwest District – Albany Office
2024 Newton Road
Albany, Georgia 31701

6.2 E-Reporting

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

7.0 REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

8.0 PERMIT EXPIRATION

The permit will expire five years from the effective date.

9.0 PERMIT CHANGES

Changes between the draft permit and the current permit are listed below:

Part I.B.

- ☐ Removed Effluent Testing Data monitoring requirements
- ☐ Added monitoring requirements for Total Phosphorus, Ortho-Phosphate, Total Kjeldahl Nitrogen, Organic Nitrogen, and Nitrate-Nitrite as N. (Part I.B.1.)
- ☐ Added monitoring requirements for Ammonia as N and Dissolved Oxygen
- ☐ Reduced maximum pH limit from 9.0 to 8.5 SU

Part I.C.

- ☐ Removed TRC Compliance Schedule (Part I.C.8.)
- ☐ Removed Effluent Testing Data section (Part I.C.9.)
- ☐ Added pH Compliance Schedule

10.0 PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

10.1 Comment Period

The Georgia Environmental Protection Division (EPD) proposes to issue an 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.

10.2 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.

10.3 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.

10.4 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

10.5 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.

APPENDIX A

National Pollutant Discharge Elimination System
Wasteload Allocation Form

Part I: Background Information

WLA Request Type:	Reissuance ☒	Expansion ☐	Relocation ☐	New Discharge ☐	
Facility Name:	Ray City WPCP	County:	Berrien	WQMU:	0904
NPDES Permit No.:	GA0033553	Expiration Date:	6/14/2017	Outfall Number:	001
Receiving Water:	Cat Creek	River Basin:	Suwannee	10-Digit HUC:	0311020303
Discharge Type:	Domestic ☒	Industrial ☐	Both ☐	Proportion (D:I):	Flow(s) Requested (MGD): 0.1
Industrial Contributions Type(s):					

Treatment Process Description: **Influent bar screen, a three-celled aerated waste stabilization pond, chlorination and de-chlorination**

Additional Information: (history, special conditions, other facilities): **Effluent limitations are based on the facility design. 1st reissuance WLA**

Requested by:	Johanna Smith	Title:	EE	Program:	WRP
Telephone:	404-656-6937			Date:	1/11/2017

Part II: Receiving Water Information

Receiving Water: **Cat Creek to the Withlacoochee River** Designated Use Classification: **Fishing**

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

Total Maximum Daily Load: Yes ☒ No ☐ Parameter(s): **DO** WLA Complies with TMDL Yes ☒ No ☐

The Georgia EPD developed a TMDL for DO in the Suwannee River Basin in 2001, which recommended a 38% reduction in load allocations to nonpoint sources to meet natural water quality standard for Cat Creek. Facilities with a design flow of 0.1 MGD or less were not included in the TMDL WLAs.

Part III: Water Quality Model Review Information

Model Type: Uncalibrated ☐ Calibrated ☒ Verified ☐ Cannot be Modeled ☐ Model Length (mi): **8.3**

Field Data: None ☐ Fair ☒ Good ☐ Excellent ☐

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

Critical Water Temperature:(°C):	28	Drainage Area (mi^2):	42.8				Mean annual streamflow at discharge (cfs):	36.6
7Q10 Yield (cfs/mi^2):	0.002	Velocity (range fps):	0.33				30Q3 streamflow at discharge (cfs):	0.38
Effluent Flow Rate (cfs):	0.15	IWC (%):	66				7Q10 streamflow at discharge (cfs):	0.078
Slope (range - fpm):	4.7 - 6.0	K1:	0.15 / 0.02	K3:	0.4	K2: 2.8 - 3.6	1Q10 streamflow at discharge (cfs):	0.052
SOD:	0.5	Escape Coef. (ft^{-1}):	0.11	f-Ratio BOD_u/BOD_5):	1.5		Background Hardness (as $CaCO_3$)(mg/L):	18

The predicted minimum DO is 3.9 mg/L, occurring approximately 2.7 miles downstream from the discharge. The predicted natural DO at this location is 4.28 mg/L, with an allowable minimum DO of 3.85 mg/L (90 percent of the natural DO concentration) according to the Georgia EPD's DO permitting strategy.

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

Rationale: Same as current ☐ Revised ☒ New ☐

Location: **Cat Creek**

Effluent Flow Rate (MGD)	BOD_5	NH_3-N	DO (minimum)	TSS	TRC (daily max.)	Fecal Coliform (No./100ml)	pH (std. units)	Total Phosphorus Ortho-Phosphorus	TKN Nitrite - Nitrate Organic Nitrogen
0.10	30	Monitor	Monitor	90	0.02	200	6.0 – 8.5	Monitor	Monitor

Additional Comments:

- **Priority pollutants permit limits, aquatic toxicity testing requirements, and other parameters required by categorical effluent guidelines are to be determined by WRP.**
- **When the instream wastewater concentration is 50% or greater, the effluent pH permit limit range of 6.0 to 8.5 standard units is recommended in accordance with the GA EPD's permitting guideline for effluent pH.**
- **Effluent monitoring for total phosphorus, ortho-phosphorus, TKN, nitrate-nitrite, and organic nitrogen are recommended. TKN, nitrate-nitrite, and organic nitrogen should be analyzed from the same effluent sample. Total phosphorus and ortho-phosphorus should be analyzed from the same effluent sample. Nutrient monitoring data will be used to determine nutrient speciation and the nutrient loads being discharged into waters entering Florida.**
- **To implement EPA's Aquatic Life Ambient Water Quality Criteria for Ammonia-Freshwater 2013 and the DO TMDL in the Suwannee River Basin, monitoring for the effluent ammonia and DO are recommended.**

Prepared by: Lucy Sun LS Date: 4/11/2017 | Reviewed by: Josh Welte JW Date: 12-APR-17

Part V: Program Manager Comment

Elizabeth G. Booth

Elizabeth Booth Date: 4/12/17

PERMIT NO. GA0033553
Issuance Date: XXXXX XX, 201X

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

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,

City of Ray City
P.O. Box 128
Ray City, Georgia 31645

is authorized to discharge from a facility located at

City of Ray City
Water Pollution Control Plant (WPCP)
Park Street
Ray City, Georgia 31645
(Berrien County)

to receiving waters

Cat Creek
(Suwannee 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 14, 2017, 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 XXXXXX XX, 201X. This permit and the authorization to discharge shall expire at midnight, XXXXX XX, 202X.

STATE OF GEORGIA
CONSTITUTION
WISDOM
JUSTICE
MODERATION
1776

_____
Director
Environmental Protection Division

PART I

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

The Federal Act referred to is The Clean Water Act.

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

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

A. SPECIAL CONDITIONS

1. MONITORING

The concentration of pollutants in the discharge will be limited as indicated by the table(s) labeled "Effluent Limitations and Monitoring Requirements." The effluent shall meet the requirements in the table(s) or the condition in paragraph I.A.1.a., whichever yields the higher quality effluent.

a. For 5 day biochemical oxygen demand (BOD_5) and total suspended solids (TSS), the arithmetic mean of the values of the effluent samples collected during a month shall not exceed 15 percent of the arithmetic mean of values for influent samples collected at approximately the same times (85 percent removal). In accordance with Chapter 391-3-6-.06(4)(d) 2., of the State Rules, under certain conditions the 85 percent removal requirement may not be applicable, as specified in 40 CFR 133.

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

c. 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.

d. 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.b. and I.A.1.c.

e. 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.

f. 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.

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

h. 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.

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

j. Some parameters must be analyzed to the detection limits specified by the EPD. These 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. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

B.1.a. Discharge to Cat Creek – Outfall 001 (31.069406° N, 83.206644° W):

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

Parameters	Discharge Limitations mg/L (kg/day) unless otherwise specified		Monitoring Requirements		
	Monthly Average	Weekly Average	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	0.1	0.125	One Day/Week	Instantaneous	Effluent
Five-Day Biochemical Oxygen Demand	30 (11.4)	45 (14.2)	One Day/Week	Grab	Influent & Effluent
Total Suspended Solids	90 (34.1)	120 (42.6)	One Day/Week	Grab	Influent & Effluent
Ammonia, as N	Report	Report	One Day/Week	Grab	Effluent
Fecal Coliform Bacteria (#/100mL)	200	400	Two Days/Month	Grab	Effluent
Total Residual Chlorine [1]	0.011	0.011	One Day/Week	Grab	Effluent

Parameters	Discharge Limitations mg/L unless otherwise specified	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location
pH, Minimum – Maximum (Standard Unit) [2]	6.0 – 9.0	One Day/Week	Grab	Effluent
Dissolved Oxygen, Daily Minimum	Report	One Day/Week	Grab	Effluent
Total Phosphorus, as P [3]	Report	One Day/Quarter	Composite	Effluent
Ortho-phosphate [3]	Report	One Day/Quarter	Composite	Effluent
Organic Nitrogen [4] [5]	Report	One Day/Quarter	Composite	Effluent
Total Kjeldahl Nitrogen [5]	Report	One Day/Quarter	Composite	Effluent
Nitrate-Nitrite as N [5]	Report	One Day/Quarter	Composite	Effluent

(1) The TRC limit is a daily max.
(2) See Part I.C.8. COMPLIANCE SCHEDULE
(3) Total Phosphorus and Ortho-phosphate must be analyzed from the same sample.
(4) Organic Nitrogen = TKN – Ammonia
(5) Organic Nitrogen, Nitrate-Nitrite as N, and Total Kjeldahl Nitrogen must be analyzed from the same sample.

B.1.b. Discharge to Cat Creek – Outfall 001 (31.069406° N, 83.206644° W):

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

Parameters	Discharge Limitations mg/L (kg/day) unless otherwise specified		Monitoring Requirements		
	Monthly Average	Weekly Average	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	0.1	0.125	One Day/Week	Instantaneous	Effluent
Five-Day Biochemical Oxygen Demand	30 (11.4)	45 (14.2)	One Day/Week	Grab	Influent & Effluent
Total Suspended Solids	90 (34.1)	120 (42.6)	One Day/Week	Grab	Influent & Effluent
Ammonia, as N	Report	Report	One Day/Week	Grab	Effluent
Fecal Coliform Bacteria (#/100mL)	200	400	Two Days/Month	Grab	Effluent
Total Residual Chlorine [1]	0.011	0.011	One Day/Week	Grab	Effluent

Parameters	Discharge Limitations mg/L unless otherwise specified	Monitoring Requirements		
		Measurement Frequency	Sample Type	Sample Location
pH, Minimum – Maximum (Standard Unit) [2]	6.0 – 8.5	One Day/Week	Grab	Effluent
Dissolved Oxygen, Daily Minimum	Report	One Day/Week	Grab	Effluent
Total Phosphorus, as P [3]	Report	One Day/Quarter	Composite	Effluent
Ortho-phosphate [3]	Report	One Day/Quarter	Composite	Effluent
Organic Nitrogen [4] [5]	Report	One Day/Quarter	Composite	Effluent
Total Kjeldahl Nitrogen [5]	Report	One Day/Quarter	Composite	Effluent
Nitrate-Nitrite as N [5]	Report	One Day/Quarter	Composite	Effluent

[1] The TRC limit is a daily max.
[2] See Part I.C.8. COMPLIANCE SCHEDULE
[3] Total Phosphorus and Ortho-phosphate must be analyzed from the same sample.
[4] Organic Nitrogen = TKN – Ammonia
[5] Organic Nitrogen, Nitrate-Nitrite as N, and Total Kjeldahl Nitrogen must be analyzed from the same sample.

C. MONITORING AND REPORTING

1. REPRESENTATIVE SAMPLING

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

2. SAMPLING PERIOD

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

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

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

3. MONITORING PROCEDURES

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

4. RECORDING OF RESULTS

For each required parameter analyzed, the permittee shall record:

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

b. The dates and times the analyses were performed;

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

d. The analytical procedures or methods used; and

e. The results of all required analyses.

5. ADDITIONAL MONITORING BY PERMITTEE

If the permittee monitors required parameters at the locations designated in I.B. more frequently than required, the permittee shall analyze all samples using approved analytical methods specified in I.C.3. The results of this additional monitoring shall be included in calculating and reporting the values on the Discharge Monitoring Report forms. The permittee shall indicate the monitoring frequency on the report. The EPD may require in writing more frequent monitoring, or monitoring of other pollutants not specified in this permit.

6. RECORDS RETENTION

The permittee shall retain records of:

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

b. Calibration and maintenance records of laboratory instruments;

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

d. Process control monitoring records;

e. Facility operation and maintenance records;

f. Copies of all reports required by this permit;

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

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

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

7. PENALTIES

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

8. COMPLIANCE SCHEDULE

The permittee shall achieve compliance with the pH limitation specified in Part I.B.1.b. of this permit in accordance with the following schedule:

a) Beginning on the issuance date of the permit, the permittee shall meet the pH limits in Part I.B.1.a. of the permit. The results shall be reported on the Discharge Monitoring Reports submitted by the permittee.

b) Within 6 months of the issuance date of the permit, the permittee shall submit a report to EPD explaining any modifications needed at the facility that will allow it to meet the pH limit.

c) Within 10 months of the issuance date of the permit, the permittee shall submit plans and specifications for any modifications needed at the facility that will allow it to meet the pH limit.

d) Within 15 months of the issuance date of the permit, the permittee shall begin construction of any modifications needed at the facility to allow it to attain compliance with the pH limit.

e) Within 18 months of the issuance date of the permit, the permittee is to submit a report to EPD regarding the progress made towards completing construction of the plant modifications. The report is to include an estimate of what percentage of the construction is complete and is to describe what work has been completed and what work remains to be completed.

f) The permittee shall attain compliance with the pH limitation in Part I.B.1.b. of the permit within 24 months of the issuance date of the permit.

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

D. REPORTING REQUIREMENTS

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

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

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

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

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

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

   a. Sewage Sludge/Biosolids Annual Program Reports provided that the permittee has an approved Sewage Sludge (Biosolids) Plan;
   b. Pretreatment Program Reports provided that the permittee has an approved Industrial Pretreatment Program in this permit;
   c. Sewer Overflow/Bypass Event Reports;
   d. Noncompliance Notification;
   e. Other noncompliance; and
   f. Bypass

3. OTHER REPORTS

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

4. OTHER NONCOMPLIANCE

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

5. SIGNATORY REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

3. The written authorization is submitted to the Director.

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

d. Any person signing any document under (a) or (b) above shall make the following certification:

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

PART II

A. MANAGEMENT REQUIREMENTS

1. PROPER OPERATION AND MAINTENANCE

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

2. PLANNED CHANGE

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

3. TWENTY-FOUR HOUR REPORTING

If, for any reason the permittee does not comply with, or will be unable to comply with any effluent limitations specified in the permitee'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 IV 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:

1. 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.

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