APPLICATION FOR A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TREATED WASTEWATER INTO WATERS OF THE STATE OF GEORGIA

Technical Contact: Johanna Smith
Wastewater Regulatory Program
404-656-6937

Permit is: (Check one)

1. New Issuance
2. Revocation/Reissuance with no significant modifications
3. Revocation/Reissuance with modifications
4. Modifications only

Permit No.: GA0021521

1. SYNOPSIS OF APPLICATION

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

1.1. Name and Address of Applicant:
Brunswick-Glynn County Joint Water and Sewer Commission
2909 Newcastle Street
Brunswick, GA 31520
(Glynn County)

1.2. Facility Name & Location:
St. Simons Island WPCP
601 Palmetto Street
St. Simons Island, GA 31522
(Glynn County)

1.3. Design Capacity:
4.0 MGD
1.4. Receiving Water(s):

Dunbar Creek tributary to the Frederica River tributary to Atlantic Ocean (Satilla River Basin)

1.5. Description of the Wastewater Treatment Plant:

Screening, grit removal, aeration, clarification, filtration, ultraviolet disinfection, post-aeration.

Sludge is digested, thickened and dewatered using a belt filter press. Sludge is transported to the Broadhurst Environmental Landfill for disposal.

1.6. Description of the Discharge (as reported by applicant):

*Outfall # 001:*

Latitude: 31.187102° N          Longitude: -81.386111° W

<table>
<thead>
<tr>
<th>Effluent characteristics</th>
<th>Maximum daily value</th>
<th>Average daily value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow (MGD)</td>
<td>6.579</td>
<td>3.004</td>
</tr>
<tr>
<td>BOD₅ (mg/L)</td>
<td>10</td>
<td>2.94</td>
</tr>
<tr>
<td>TSS (mg/L)</td>
<td>43</td>
<td>1.94</td>
</tr>
<tr>
<td>Fecal Coliform Bacteria (#/100mL)</td>
<td>2380*</td>
<td>56</td>
</tr>
<tr>
<td>Ammonia</td>
<td>4.99</td>
<td>0.14</td>
</tr>
<tr>
<td>Total Residual Chlorine (mg/L)</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Dissolved Oxygen (mg/L)</td>
<td>10.90</td>
<td>7.58</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen (mg/L)</td>
<td>0.65</td>
<td>0.65</td>
</tr>
<tr>
<td>Nitrate plus Nitrite Nitrogen (mg/L)</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Oil and Grease (mg/L)</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Phosphorus (mg/L)</td>
<td>8.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Total Dissolved Solids (mg/L)</td>
<td>720</td>
<td>720</td>
</tr>
</tbody>
</table>

*The facility is in compliance with its monthly and weekly average limits for these parameters. These are maximum values as reported in the permit application.*
2. PROPOSED EFFLUENT LIMITATIONS

B.1. Discharge to Dunbar Creek – Outfall 001 (31.187102° N, 81.386111° W):

The discharge from the water pollution control plant (WPCP) shall be limited and monitored by the permittee beginning on the effective date of the permit and continuing for 6 months, as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Discharge Limitations mg/L (kg/day) unless otherwise specified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly Average</td>
</tr>
<tr>
<td>Flow (MGD)</td>
<td>4.0</td>
</tr>
<tr>
<td>Five-Day Biochemical Oxygen Demand</td>
<td>5.0 (76)</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>20 (303)</td>
</tr>
<tr>
<td>Ammonia, as N</td>
<td>2.0 (30)</td>
</tr>
<tr>
<td>Fecal Coliform Bacteria (#/100mL)</td>
<td>200</td>
</tr>
<tr>
<td>Enterococci – Geometric Mean (#/100mL)</td>
<td>Report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Discharge limitations, mg/L unless otherwise specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH, Minimum – Maximum (Standard Unit)</td>
<td>6.0 – 9.0</td>
</tr>
<tr>
<td>Dissolved Oxygen, Daily Minimum</td>
<td>6.0</td>
</tr>
<tr>
<td>Total Phosphorus, as P</td>
<td>Report</td>
</tr>
<tr>
<td>Ortho-phosphorus</td>
<td>Report</td>
</tr>
<tr>
<td>Chronic Whole Effluent Toxicity (%)</td>
<td>Report NOEC</td>
</tr>
<tr>
<td>Long-Term Biochemical Oxygen Demand</td>
<td>Report</td>
</tr>
<tr>
<td>Organic Nitrogen</td>
<td>Report</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>Report</td>
</tr>
<tr>
<td>Nitrate-Nitrite as N</td>
<td>Report</td>
</tr>
</tbody>
</table>
B.2. **Discharge to Dunbar Creek – Outfall 001 (31.187102° N, 81.366111° W):**

The discharge from the water pollution control plant (WPCP) shall be limited and monitored by the permittee beginning 6 months after the effective date of the permit and continuing until the expiration date of the permit, as follows:

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<tr>
<td>Enterococci – Geometric Mean (#/100mL)</td>
<td>35</td>
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3. BASIS FOR FINAL EFFLUENT LIMITS AND PERMIT CONDITIONS

The effluent permit limitations in the draft permit are based on the July 15, 2016 wasteload allocation.

3.1. Technology Based Effluent Limitation Calculations (i.e. Flow, BOD\textsubscript{5} and TSS):

Weekly average flow (MGD):

\[ Q_{\text{Weekly}} = Q_{\text{Monthly (MGD)}} \times 1.25 \quad \text{MGD} \]

Weekly average concentration (mg/L):

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

Monthly average mass loading (Kg/day):

\[ M_{\text{Monthly}} = \frac{Q_{\text{Monthly (gal/day)}} \times [C]_{\text{Monthly (mg/L)}} \times 8.34 \times 10^{-6}}{2.2 \ (\text{lbs/Kg})} \quad \text{Kg/day} \]

Weekly average mass loading (Kg/day):

\[ M_{\text{Weekly}} = \frac{Q_{\text{Weekly (gal/day)}} \times [C]_{\text{Monthly (mg/L)}} \times 8.34 \times 10^{-6}}{2.2 \ (\text{lbs/Kg})} \quad \text{Kg/day} \]

3.2. Georgia’s 303(d) List

The facility discharges to Dunbar Creek between Maple Street and the Frederica River on Georgia’s 2014 Integrated 305(b)/303(d) List. The status of this stretch is listed as pending the results of natural dissolved oxygen (DO) levels in the stream. No TMDLs apply.

3.3. Determination of Effluent Limitations

Permit limits are based on water quality based effluent limitations as well as technology based effluent limitations. Limits in this permit are mostly water quality based, which is the more stringent option.

The water quality based limits were determined using the uncalibrated steady-state dissolved oxygen Georgia Estuary model. A critical water temperature of 28 °C, freshwater flow of 0.1 cfs, tidal dispersion coefficient of 0.5 mi\textsuperscript{2}/day, and salinity of 1,000-10,000 mg/L were used to determine that the predicted minimum dissolved oxygen concentration is 3.9 mg/L, occurring 1.0 mile downstream from the discharge. The natural dissolved oxygen concentration at this location is estimated to be 4.2 mg/L with an allowable minimum dissolve oxygen concentration of 3.8 mg/L.

3.4. Fecal Coliform

In 1986, EPA recommended the use of E. coli for fresh waters and enterococci...
for fresh and marine waters (criteria set at 33/100mL in freshwater and 35/100mL in marine water) as indicator organisms for determining the potential for illness in recreational waters. In 2000, the Beaches Environmental Assessment and Coastal Health (BEACH) Act was passed and required each state and territory with coastal recreation waters to adopt into their water quality standards bacteria criteria that are "as protective of human health as" EPA's 1986 bacteria criteria. In accordance with the BEACH Act, a monthly average enterococci limit of 35/100 mL has been included in the permit to replace the previous fecal coliform limit of 200/100 mL. Additionally, a weekly average limit of 130/100 mL has been included in accordance with Rule 391-3-6-.03(6)(b)(1).

Furthermore, a 2016 draft TMDL for Enterococci has been considered in the replacement of the Fecal Coliform limit in the permit with an Enterococci limit.

3.5. pH

The modeled dilution of the discharge to Dunbar Creek was determined to be 8.7%, equivalent to a dilution factor of approximately 1:11.5. This equates to a 7Q10 flow of 65 cfs, which results in an Instream Waste Concentration (IWC) percentage for Dunbar Creek of 8.7%. 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 St. Simons Island WPCP is less than 50%, a maximum pH limit of 9.0 has been used.

3.6. Water Quality Based Effluent Limitations

a) Chronic Whole Effluent Toxicity (WET)

Chronic WET testing measures the effect of wastewater on indicator organisms' growth, reproduction, and survival. Effluent toxicity is predicted when the No Observable Effect Concentrations for a test organism is less than the facility's Instream Wastewater Concentration. WET testing also requires a measure of test sensitivity known as the Percent Minimum Significant Difference (PMSD). See Table 6 below from Section 10.2.8.3 p. 52 of EPA 821-R-02-013 for PMSD variability criteria.
PMSD must be calculated for each species tested as follows:

\[
PMSD = \frac{\text{Minimum Significant Data (MSD)}}{\text{Control mean}} \times 100\%
\]

EPD evaluates WET tests submitted to determine whether toxicity has been demonstrated. The effluent discharge for the St. Simons Island WPCP will not be considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the greatest possible Instream Wastewater Concentration (IWC) of 8.7% for the 4.0 MGD discharge. 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.

Results analysis:

i. In WET test #1 (June 2013), the PMSD for Mysid survival and growth (10.60%) was below EPA’s Test Variability Criteria. The PMSD for the Inland Silverside survival and reproduction (8.5%) was also below EPA’s Test Variability Criteria. Such tests should be considered sufficiently sensitive to detect toxic effects on growth or reproduction.

   The reported NOEC for Mysid and Inland Silverside was 40%, which is greater than or equal to the facility’s NOEC (8.7%). Therefore, chronic toxicity of the facility’s effluent was not present. Even though the PMSD is lower than the lower bound variability for both species, toxicity is not present in the effluent. Therefore, chronic toxicity is not predicted.

ii. In WET test #2 (June 2014), the PMSDs for Inland Silverside survival and growth (13.3%) and Mysid survival and growth (14.7%) were both within EPA’s Test Variability Criteria. Such tests should be considered sufficiently sensitive to detect toxic effects on growth or reproduction.

   The reported NOEC for Inland Silverside and Mysid was 40%, which is greater than or equal to the facility’s NOEC. Therefore, chronic toxicity is not predicted and the WET test is valid.
iii. In WET test #3 (June 2015), the PMSDs for Inland Silverside survival and growth (27.2%) and Mysid survival and growth (23.6%) were both within EPA’s Test Variability Criteria. The reported NOEC for Inland Silverside and Mysid was 17%, which is greater than or equal to the facility's NOEC. Therefore, chronic toxicity is not predicted and the WET test is valid.

iv. In WET test #4 (June 2016), the PMSDs for Inland Silverside survival and growth (22.5%) and Mysid survival and growth (26.6%) were both within EPA’s Test Variability Criteria. The reported NOEC for Inland Silverside and Mysid was 17%, which is greater than or equal to the facility’s NOEC. Therefore, chronic toxicity is not predicted and the WET test is valid.

Proposed monitoring:

EPD is now 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.9 of the permit and/or the permit may be modified to include a chronic WET limit.

b) Priority Pollutants

Non-metals

No non-metals were detected in the Priority Pollutant Scans; therefore, based upon the evaluation of the Priority Pollutant scans, there is no reasonable potential for any non-metals to cause or contribute to a water quality standards violation in the receiving stream. No monitoring requirements for non-metals have been included in the draft permit.

Metals

Metals were evaluated and copper, mercury, and zinc were detected as pollutants of concern. The instream concentrations for copper and zinc were found to be less than the acute and chronic instream criteria concentrations. The instream concentration for mercury was also found to be less than the acute instream criteria concentration; however, the concentration is greater than the chronic instream criteria concentration for mercury. Refer to Attachment B for the metals evaluation. In accordance with EPD reasonable potential procedures, effluent monitoring for mercury has been added to the draft permit. Refer to Parts I.B. and I.C.12. of the draft permit.

After EPD has received at least ten (10) months of mercury monitoring data from the permittee, EPD will evaluate the need for a limit for this pollutant:

• If it is determined that mercury is present in the effluent at levels of concern, EPD may modify the permit to include a limit for this pollutant.

• If it is demonstrated that mercury in the effluent has no potential to cause or contribute to a water quality standards violation in the receiving stream,
EPD will notify the permittee in writing to allow the permittee to cease sampling for mercury.

3.7. Permit Requirements Based on EPD Policy:

a) Ammonia

The existing ammonia limit of 2.0 mg/L has been maintained in the permit. This ammonia limit meets the 2013 Aquatic Life Ambient Water Quality Criteria for Ammonia.

b) Total Recoverable Copper

The current permit contains a reporting requirement for Total Recoverable Copper for ten (10) months in accordance with EPD's reasonable potential procedures. St. Simons Island submitted Total Residual Copper data to fulfill this requirement in 2012, as well as within the Priority Pollutant Scans submitted with the permit application. The data was evaluated, and the instream concentrations for copper were found to be less than the acute and chronic instream criteria concentrations. Therefore, the monitoring requirement for Total Residual Copper has been removed from the permit.

c) Total Residual Chlorine (TRC)

The St. Simons Island WPCP uses ultraviolet (UV) for disinfection; therefore, a total residual chlorine (TRC) limit has not been included in the permit.

d) Long-Term BOD

For facilities with a capacity of 1.0 MGD or greater, a 120-day long-term BOD test should be performed on an effluent sample collected during the critical period from June 1 through September 30; therefore, long-term BOD testing has been included in the permit. See Part I.C.10. of the draft permit.

e) Watershed Protection Plan (WPP)

St. Simons Island has an approved Watershed Assessment (WA) and an approved Watershed Protection Plan (WPP). Language to reflect these approved plans has been included in the permit. See Part I.C.8. of the draft permit.

3.8. Other Permit Requirements and Considerations:

a) Total Phosphorus and Ortho-Phosphorus Monitoring

Total Phosphorus and Ortho-phosphorus monitoring are required for stream modeling purposes. It has been determined that results from 12 samples per year will be sufficient; therefore, monitoring requirements for Ortho-Phosphorus have been included in the draft permit, and the monitoring frequency for Total Phosphorus has been reduced from three days/week to one day/month.
b) **Organic Nitrogen, Total Kjeldahl Nitrogen, and Nitrate as N Monitoring**

Organic Nitrogen, Total Kjeldahl Nitrogen, and Nitrate as N monitoring is required for modeling purposes in the Satilla River Basin. The data will be used for nutrient criteria development. It has been determined that results from 12 samples per year (i.e., one sample/month) will be sufficient. Monitoring requirements for these parameters have been included in the draft permit.

c) **Industrial Pre-treatment Program (IPP)**

The St. Simons Island has an approved IPP; therefore, language has been included in the draft permit to reflect this.

d) **Sludge Management Plan (SMP)**

Sludge is digested, thickened and dewatered using belt filter presses. St. Simons Island does not have an approved Sludge Management Plan; therefore, this language has not been included in the permit.

e) **Service Delivery Strategy**

St. Simons Island and Glynn County are in compliance with the Department of Community Affairs (DCA) Service Delivery Strategy.

f) **Anti-Backsliding**

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

4. **REPORTING**

On December 21, 2015, the U.S. Environmental Protection Agency (EPA) promulgated the NPDES Electronic Reporting Rule (E-Rule) in 40 CFR 127 to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to electronic data reporting systems (NetDMR & Net) for NPDES permits instead of submitting written paper reports such as your Discharge Monitoring Reports (DMRs). In accordance with 40 CFR 122.41(i)(4)(i), as of December 21, 2016, the DMR and supporting documents for the facility must be electronically using the NetDMR system. The St. Simons Island WPCP is currently using NetDMR. Your facility has been assigned to the following office for compliance:

Georgia Environmental Protection Division  
Coastal District – Brunswick Office  
400 Commerce Center Drive  
Brunswick, Georgia 31523

5. **REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS**

Not applicable
6. **EFFECTIVE DATE OF PROPOSED EFFLUENT LIMITS AND COMPLIANCE SCHEDULE**

   The effluent limitations will become effective immediately upon EPD written authorization to commence operation.

7. **PERMIT EXPIRATION**

   The permit will expire five years from the effective date.

8. **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 - 8.5.

   3. 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.

   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 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.

9. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a) Comment Period

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

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

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 the person listed as the technical contact above at 404-656-6937.

b) 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 EPD.comments@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 NPDES 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.

c) 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 it is determined 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.

d) 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:


e) 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.
STATE OF 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,

Brunswick-Glynn County Joint Water & Sewer Commission
2909 Newcastle Street
Brunswick, Georgia 31520

is authorized to discharge from a facility located at

St. Simons Island
Water Pollution Control Plant (WPCP)
601 Palmetto Street
St. Simons Island, Georgia 31522
(Glynn County)

to receiving waters

Dunbar Creek tributary to the Frederica River
(Satilla 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 April 1, 2016, 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 XXXXXXXXX XX, 2016.

This permit and the authorization to discharge shall expire at midnight, XXXXXXXX XX, 2021.

Issued this XX day of XXXXXXXX, 2016.

DRAFT

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 carbonaceous biochemical oxygen demand (CBOD₅) 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-.061 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 13 subsamples collected at least once every 2 hours for at least 24 hours and shall be composited proportionately to flow.
STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

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 1.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 other 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 quality or quantity 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. Discharge to Dunbar Creek – Outfall 001 (31.187102° N, 81.386111° W):

The discharge from the water pollution control plant (WPCP) shall be limited and monitored by the permittee beginning on the effective date of the permit and continuing for 6 months, as follows:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Discharge Limitations mg/L (kg/day) unless otherwise specified</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly Average</td>
<td>Weekly Average</td>
</tr>
<tr>
<td>Flow (MGD)</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Five-Day Biochemical Oxygen Demand</td>
<td>5.0 (76)</td>
<td>7.5 (95)</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>20 (303)</td>
<td>30 (379)</td>
</tr>
<tr>
<td>Ammonia, as N</td>
<td>2.0 (30)</td>
<td>3.0 (38)</td>
</tr>
<tr>
<td>Fecal Coliform Bacteria (#/100mL)</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Enterococci – Geo Mean (#/100mL) (1)</td>
<td>Report</td>
<td>Report</td>
</tr>
</tbody>
</table>

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<tr>
<td></td>
<td>Measurement Frequency</td>
<td>Sample Type</td>
</tr>
<tr>
<td>pH, Minimum – Maximum (Standard Unit)</td>
<td>6.0 – 9.0</td>
<td>Seven Days/Week</td>
</tr>
<tr>
<td>Dissolved Oxygen, Daily Minimum</td>
<td>6.0</td>
<td>Seven Days/Week</td>
</tr>
<tr>
<td>Total Phosphorus, as P (2)</td>
<td>Report</td>
<td>One Day/Month</td>
</tr>
<tr>
<td>Ortho-phosphorus (3)</td>
<td>Report</td>
<td>One Day/Month</td>
</tr>
<tr>
<td>Chronic Whole Effluent Toxicity (%) (3)</td>
<td>Report NOEC</td>
<td>Annually</td>
</tr>
<tr>
<td>Long Term Biochemical Oxygen Demand (4)</td>
<td>Report</td>
<td>See Below</td>
</tr>
<tr>
<td>Organic Nitrogen (5) (6)</td>
<td>Report</td>
<td>One Day/Month</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen (6)</td>
<td>Report</td>
<td>One Day/Month</td>
</tr>
<tr>
<td>Nitrate-Nitrite as N (9)</td>
<td>Report</td>
<td>One Day/Month</td>
</tr>
<tr>
<td>Total Recoverable Mercury (7)</td>
<td>Report</td>
<td>See Below</td>
</tr>
</tbody>
</table>

(1) Refer to Part I.C.11. Enterococci Compliance Schedule
(2) Refer to Part I.C.9. Total Phosphorus and Ortho-phosphorus must be analyzed from the same sample.
(3) Refer to Part I.C.9. Chronic Whole Effluent Toxicity
(4) Refer to Part I.C.10. Long Term Biochemical Oxygen Demand
(5) Organic Nitrogen = TKN – Ammonia
(6) Organic Nitrogen, Nitrate-Nitrite as N, and Total Kjeldahl Nitrogen must be analyzed from the same sample.
(7) Refer to Part I.C.12. Total Recoverable Mercury
B.2. Discharge to Dunbar Creek – Outfall 001 (31.187102° N, 81.386111° W):

The discharge from the water pollution control plant (WPCP) shall be limited and monitored by the permittee beginning 6 months after the effective date of the permit and continuing until the expiration date of the permit, as follows:

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<td>pH, Minimum – Maximum (Standard Unit)</td>
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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 developed a watershed protection plan and the plan 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.

9. CHRONIC WHOLE EFFLUENT TOXICITY

The permittee shall conduct annual chronic whole effluent toxicity (WET) testing. 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., Fathead Minnow, Pimephales promelas) and should include a dilution equal to the facility's instream wastewater concentration (IWC) of 8.7%.

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 8.7%. If substances are measured at levels of concern, then the permittee may be required to perform additional WET tests or the permit may be modified to include chronic WET effluent limitations.

10. LONG TERM BIOCHEMICAL OXYGEN DEMAND

The permittee shall conduct a 120-day long term BOD test once during the permit cycle. The test must be performed on an effluent sample collected during the critical period from June 1 through September 30. The results of this test should be provided to EPD prior to renewal of the permit.

11. ENTEROCOCCI COMPLIANCE SCHEDULE

The permittee shall achieve compliance with the Enterococci limitations specified in Part I.B.2. of this permit in accordance with the following schedule:

a. Beginning on the effective date of the permit, the permittee shall monitor Enterococci as specified in Part I.B.2. The results shall be reported on the Discharge Monitoring Reports submitted by the permittee.

b. Within 6 months of the effective date of the permit, the permittee shall attain compliance with the Enterococci limits in Part I.B.2. of the permit.

12. TOTAL RECOVERABLE MERCURY

After EPD has received ten (10) months of mercury monitoring data from the permittee, EPD will conduct a reasonable potential evaluation. If it is determined that mercury is present in the effluent at levels of concern, EPD may reopen the permit to include a mercury limit. If it is determined that mercury in the effluent has, EPD shall notify the permittee in writing and remove the mercury monitoring requirements in Part I.B. 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. FACILITY OPERATION

The permittee shall 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. CHANGE IN DISCHARGE

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. NONCOMPLIANCE NOTIFICATION

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. ADVERSE IMPACT

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.

"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:

1. Date of the spill or major spill;
2. Location and cause of the spill or major spill;
3. Estimated volume discharged and name of receiving waters; and
4. 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 five (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 exceedance 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:

1. Dissolved Oxygen;
2. Fecal Coliform Bacteria;
3. pH;
4. Temperature; and
5. 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. COMPLIANCE

The permittee must comply with this permit. Any permit noncompliance is a violation of the Federal 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.

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.

2. RIGHT OF 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.

3. SUBMITTAL OF 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. If the permittee determines that any relevant facts were not included in a permit application or that incorrect information was submitted in a permit application or in any report to the EPD, the permittee shall promptly submit the additional or corrected information.

4. TRANSFER OF OWNERSHIP OR CONTROL

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.

5. 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.

6. PERMIT MODIFICATION

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.

7. CIVIL AND CRIMINAL LIABILITY

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

8. 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.

9. EXPIRATION OF PERMIT

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 without written authorization from the EPD. To receive this authorization, the permittee shall
submit the information, forms, and fees required by the EPD no later than 180 days before the expiration date.

10. 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.

11. 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.

12. PREVIOUS PERMITS

All previous State water quality permits issued to this facility for construction or operation are revoked by the issuance of this permit. The permit governs discharges from this facility under the National Pollutant Discharge Elimination System (NPDES).
A. APPROVED INDUSTRIAL PRETREATMENT PROGRAM FOR PUBLICLY OWNED TREATMENT WORKS (POTW)

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 403.6 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:
      1. Interference with the operation of the POTW;
      2. Pass-through of pollutants in violation of this permit;
      3. Municipal sludge contamination; and
      4. 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 previous twelve months, 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 in the newspaper with the largest circulation in the service area in Glynn County, with the first publication due March 2017.
B. APPROVED PRETREATMENT PROGRAM ANNUAL REPORT

1. Within 30 days of the close of the reporting period March through February, with the first report due March 2017 and each March thereafter, 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:
      1. Changes in legal authority;
      2. Changes in local limits;
      3. Changes in the control mechanisms;
      5. A decrease in the frequency of self-monitoring or reporting required of industrial users;
      6. A decrease in the frequency of industrial user inspections or sampling by the POTW;
7. Significant reductions in the program resources including personnel commitments, equipment, and funding levels;
8. Changes in confidentiality procedures; and
9. 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.
Attachment A
St. Simons Island
Water Pollution Control Plant (WPCP)
Permit No. GA0021521

Please note the following changes to the NPDES draft permit. Please review these changes and sign below acknowledging these revisions.

Part I.B.
- Added monitoring requirements (I.B.1.) and effluent limitations (I.B.2.) for Enterococci
- Reduced monitoring frequency for Total Phosphorus from Three Days/Week to One Day/Month
- Added monitoring requirements for Total Kjeldahl Nitrogen, Organic Nitrogen, and Nitrate-Nitrite as N.
- Added monitoring requirements for Ortho-Phosphorus.
- Removed monitoring requirement for Total Recoverable Copper
- Added monitoring requirement for Total Recoverable Mercury

Part I.C.
- Modified Watershed Assessment and Watershed Protection Plan language (Part I.C.8.)
- Added Enterococci Compliance Schedule (Part I.C.11.)
- Removed Priority Pollutants (previous Part I.C.11.) and added Total Recoverable Mercury (Part I.C.12.)

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.B.7. Civil and Criminal Liability

Certification Statement:

I certify that I have reviewed the draft NPDES permit package including the changes highlighted in this attachment. The review of these documents has been coordinated with key members of the operational staff and consultants.

Printed Name of Person Signing

Title

Signature ___________________________ Date Attachment Signed ___________________________
### Attachment B

**GA EPD - Wastewater Regulatory Program - Municipal Permitting Unit**

**Date:** 7/15/2016  
**Facility:** St. Simons Island WPCP  
**Reviewer:** Johannes Smith  
**NPDES Permit:** GAA0021521

#### Stream Data:

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</thead>
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<th>fS</th>
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<th>Instream C0 (µg/L)</th>
<th>WQCacute (µg/L)</th>
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<th>fS</th>
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<th>WQCchronic (µg/L)</th>
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#### Total Recoverable Efficient Limit

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<th>Metal</th>
<th>C1 (µg/L)</th>
<th>Chronic C1 (µg/L)</th>
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<th>Acute C1 (µg/L)</th>
<th>Acute C1 (µg/L)</th>
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#### Notes:

1. Chronic and acute total recoverable metal effluent concentration (C0) from EPA 823-8-96-007, June 1996, page 33:
2. Assuming background dissolved metal concentration (C0) in the stream is 0 µg/L, equations above become:

End of report.
ATTACHMENT C

St. Simons Island WPCP
NPDES Permit No. GA0021521

WET TEST PMSD Values

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

<table>
<thead>
<tr>
<th>TABLE 6. VARIABILITY CRITERIA (UPPER AND LOWER PMSD BOUNDS) FOR SUBLETHAL HYPOTHESIS TESTING ENDPOINTS SUBMITTED UNDER NPDES PERMITS.</th>
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<tbody>
<tr>
<td>Test Method</td>
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<tr>
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<tr>
<td><em>Method 1000.0 Fathead Minnow Larval Survival &amp; Growth Tests</em></td>
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<tr>
<td><em>Method 1002.0 Ceriodaphnia dubia (C.dubia) Survival and Reproduction Test</em></td>
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<td><em>Method 1006.0, Inland Silverside Larval Survival and Growth Test</em></td>
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<td><em>Method 1007.0, Mysispectis bahia Survival, Growth, and Fecundity Test</em></td>
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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).

Not toxic if:

NOEC ≥ IWC

IWC = 8.7 %

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<thead>
<tr>
<th>WET Test #1</th>
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<th>MSD</th>
<th>Control Mean</th>
<th>PMSD</th>
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<td></td>
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<td></td>
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Reported NOEC

Below 40 % PASS

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<tr>
<th>WET Test #2</th>
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Reported NOEC

Within 40 % PASS

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Reported NOEC

Within 17 % PASS

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Reported NOEC

Within 17 % PASS

July 2016
Attachment C