

Georgia Department of Natural Resources

Environmental Protection Division • Watershed Protection Branch

4220 International Parkway • Suite 101 • Atlanta • Georgia 30354

(404) 675-6232; Fax (404) 675-6247

Judson H. Turner, Director

October 15, 2013

MEMORANDUM

TO: Bruce Foisy, District Manager
Coastal District

FROM: Jennifer Goodman *JG*
Environmental Engineer

RE: Draft NPDES Permit No. GA0037648
Sterling Creek Water Reclamation Facility (WRF)
Richmond Hill, Bryan County

Enclosed are copies of the rationale and the draft permit for the referenced facility. Please review the draft permit and provide us with any comments you have concerning the permit modification.

Below we have included a section to indicate whether the permit is acceptable as drafted or if you have comments. When your review of the draft permit is complete, please complete the section below, initial this memorandum and return it to me. Instead of returning this memo, you may provide your comments to me through e-mail at Jennifer.Goodman@dnr.state.ga.us.

DISTRICT OFFICE REVIEW COMMENTS (PLEASE CHECK THE APPROPRIATE BOX)

NO COMMENTS, ISSUE THE PERMIT AS DRAFTED

DATE: _____ INITIALS _____

THE DISTRICT HAS COMMENTS OR CONCERNS ON THE DRAFT PERMIT.

COMMENTS:

Georgia Department of Natural Resources

Environmental Protection Division • Watershed Protection Branch

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(404) 675-6232; Fax (404) 675-6247

Judson H. Turner, Director

October 15, 2013

Mr. Chris Thomas, Chief
Pollution Control & Implementation Branch
US EPA, Region IV
The Sam Nunn Federal Center
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8960

RE: City of Richmond Hill- Sterling Creek
Water Reclamation Facility (WRF)
Draft NPDES Permit No. GA0037648
Richmond Hill, Bryan County

Dear Mr. Thomas:

In accordance with the Memorandum of Agreement, we are transmitting one copy of the above-referenced draft NPDES permit, as well as additional supporting documentation. If you have comments or questions concerning any of the attached material, please contact Ms. Jennifer Goodman at 404.675.1740 or Jennifer.Goodman@dnr.state.ga.us.

Sincerely,



Gigi Steele, Manager
Municipal Permitting Unit

GMS/jmg
Enclosure(s)

cc: EPA -- Mr. Marshall Hyatt (email)

Georgia Department of Natural Resources

Environmental Protection Division • Watershed Protection Branch

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(404) 675-6232; Fax (404) 675-6247

Judson H. Turner, Director

October 15, 2013

Honorable Harold Fowler, Mayor
City of Richmond Hill
Post Office Box 250
Richmond Hill, GA 31324

RE: City of Richmond Hill- Sterling Creek
Water Reclamation Facility (WRF)
Draft NPDES Permit No. GA0037648
Richmond Hill, Bryan County
Ogeechee River Basin

Dear Mayor Fowler:

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 reissuance of a National Pollutant Discharge Elimination System (NPDES) permit in accordance with the Georgia Water Quality Control Act and the Federal Clean Water Act.

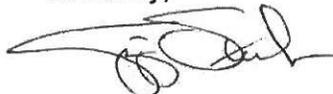
Before issuing the permit, you must post a public notice for 30 days in a conspicuous location at City Hall and publish this notice for one day in one or more newspapers of general circulation in the area affected by the discharge. When deciding whether to publish in one or more newspapers, please ensure that the notice will be published in all affected jurisdictions.

The cost of publishing the public notice is the responsibility of the City. Within ten days of receiving this draft permit, please send a letter to our office stating where and what date the notice was posted and published. The letter should be signed by an authorized representative of the City of Richmond Hill. At the end of the 30-day public notice comment period, EPD will make a determination on the issuance of the NPDES permit.

Enclosed is an attachment 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. Please complete and sign the attachment which summarizes the revisions and send it back along with the Public Notice verification.

Enclosed are copies of the public notice, fact sheet, and the draft NPDES permit. If you have comments or questions concerning any of the attached material, please contact Ms. Jennifer Goodman at 404.675.1740 or Jennifer.Goodman@dnr.state.ga.us.

Sincerely,



Gigi Steele, Manager
Municipal Permitting Unit
Wastewater Regulatory Program

GMS/jmg

Attachment A
Revisions to the City of Richmond Hill Sterling Creek WRF
Permit No. GA0037648

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

Part I.A.

- Removed Coastal Georgia Water and Wastewater Plan requirements since they have been met

Part I.A.6.

- Added Urban Water Reuse permit language

Part I.B.1.

- Sample locations for Flow, BOD, TSS, and Ammonia have been revised to include Outfalls 2 & 5 with influent and effluent sampling
- Added monitoring requirements for Total Recoverable Copper
- Added monitoring requirements for Total Stream Hardness
- Added monitoring requirements for Total Recoverable Mercury
- Added monitoring requirements for Effluent Testing Data

Part I.B.2.

- Added 3.0 MGD permit limits

Part I.B.3.

- Added 4.0 MGD permit limits

Part I.B.4.

- Added 1.0 MGD Urban Water Reuse permit limits

Part I.C.8.

- Added language for an approved Watershed Protection Plan

Part I.C.9.

- Added language for B.2 and B.3 for Chronic Whole Effluent Toxicity testing

Part I.C.11.

- Added language for monitoring Total Recoverable Copper
- Added language for monitoring Total Recoverable Mercury

Part I.C.12.

- Added language for monitoring Effluent Testing Data

Part II.A.6.

- Added operator certification requirements for reuse system

Boilerplate Modifications

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

- Part I.A.1.a. Percent Removal language
- Part I.A.1.i. Sample Submittals
- Part I.A.3. Sludge Monitoring Requirements
- Part I.C.3. Sufficiently Sensitive Test Methods
- Part I.C.9. Chronic Whole Effluent Toxicity
- Part I.C.10. Long-Term Biochemical Oxygen Demand
- Part II.A.11. Major Spill Definition

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

PUBLIC NOTICE

NOTICE OF MODIFICATION OF 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 modification of an NPDES permit for the following applicant, subject to specific pollutant limitations and special conditions:

City of Richmond Hill, P.O. Box 250, Richmond Hill, Georgia 31324, NPDES Permit No. GA0037648, for the Sterling Creek Water Reclamation Facility (WRF) located at 1701 Elbow Swamp Road, Richmond Hill. 1.5 MGD of treated wastewater is being discharged to Elbow Swamp to Sterling Creek tributary to the Ogeechee River Basin. The permit contains effluent limitations for an expansion to 3.0 MGD and also for an expansion to 4.0 MGD with up to 1.0 MGD for urban water reuse.

Only the conditions subject to modification are open to public comment. 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.state.ga.us, 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 Modification –City of Richmond Hill Sterling Creek Water Reclamation Facility (Bryan County)" in the subject line to ensure that your comments will be forwarded to the appropriate staff. A public hearing may be held where the EPD Director finds a significant degree of public interest in a proposed permit. Additional information regarding public hearing procedures is available by writing the Environmental Protection Division.

The permit application, draft permit, and other information are available for review at 4220 International Parkway, Suite 101, Atlanta, Georgia, 30354 between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For additional information contact: Jane Hendricks, Wastewater Regulatory Program at (404) 362-2680.

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

FACT SHEET

Sterling Creek Water Reclamation Facility (WRF) NPDES Permit No. GA0037648

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

Permit is:

- First Issuance
- Reissuance with no significant modifications
- Reissuance with modifications
- Modifications only

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant:

City of Richmond Hill
P.O. Box 250
Richmond Hill, GA 31324

b. Facility Address:

Sterling Creek Water Reclamation Facility
1701 Elbow Swamp Road
Richmond Hill, GA 31324
(Bryan County)

c. Type of Facility:

Aerated pond system with a constructed wetland system

d. Design Capacity of Facility:

| | | |
|------|-----------------|-------------------------|
| B.1. | 1.5 MGD | Current Permitted Flow |
| B.2. | 3.0 MGD | Proposed Permitted Flow |
| B.3. | 4.0 MGD | Proposed Permitted Flow |
| B.4. | 1.0 MGD (REUSE) | Proposed Permitted Flow |

e. Applicant's Receiving Water:

Elbow Swamp to Sterling Creek tributary

f. River Basin:

Ogeechee

g. Description of Wastewater Treatment Facility:

Current Facility (1.5 MGD): The City's Sterling Creek WRF consists of screening, four (4) cell aerated lagoons, overland flow panels, constructed wetlands, and final discharge through six outfalls.

Outfalls: The outfalls under the B.1. limitations (1.5 MGD) will be reconfigured from outfalls #1-6 to #2 and #5.

Outfall 2-- Latitude: 31°54'14.17" N and Longitude: 81°18'41.22" W
Outfall 5-- Latitude: 31°54'14.12" N and Longitude: 81°18'35.89" W

Proposed Expansion (3.0 MGD/4.0 MGD): Remove the existing overland flow fields and constructed wetlands from the treatment process, and replace these processes with an activated sludge system with a membrane bioreactor system. Improvements to the existing plant will include the addition of influent fine screening and grit removal, magnetic flow meter for flow measurement, biological treatment and solids separation through membrane bioreactor technology, UV disinfection, flow monitoring, and a transfer pump station.

Sludge: MBR sludge thickener, sludge pump, belt press, and then hauled to a land fill.

The existing facility will remain in operation until the new facility is online. Following operation of the new facility (expansion), the old plant will no longer be utilized for treatment of wastewater. The lined aerated lagoons may be utilized in the future for reuse water storage. The overland flow fields will be abandoned. The constructed wetlands system will remain and be irrigated using effluent from the new facility.

Proposed 1.0 MGD of Urban Water Reuse: Reuse water will be utilized as much as possible in plant to reduce the demand for potable water. A pressurized reuse water piping system will be provided and serve influent screen spray nozzles, cleaning of septage receiving station, belt filter press nozzles, and hose bibs throughout the plant site.

Reuse water will be discharged into the two wetland trains to help support and maintain the existing vegetation and wildlife. Reuse water will not be allowed to overflow out of the constructed wetlands.

h. Description of Discharges (as reported by applicant):

Outfall Serial No. 2 (1B-1) and No. 5 (2B-2)

| <u>Parameter</u> | <u>Reported Value</u> |
|-------------------------|-----------------------|
| Average Flow | 1.44 MGD |
| BOD ₅ | 8.5 mg/L |
| TSS | 9.3 mg/L |
| Fecal Coliform Bacteria | N/A |

2. BACKGROUND INFORMATION

Facility

The City of Richmond Hill currently operates a wastewater treatment system that consists of an aerated pond that discharges to overland flow fields before final treatment using constructed wetlands. The facility has a permitted capacity of 1.5 MGD and Richmond Hill is requesting to increase its permitted discharge flow to 3.0 and 4.0 MGD, respectively.

Receiving Water

The Richmond Hill constructed wetlands treatment system currently has six discharge locations into Elbow Swamp. Elbow Swamp is drained by Sterling Creek, which is a tributary to the Ogeechee River. Sterling Creek, from its confluence with the Ogeechee River upstream into Elbow Swamp, is a tidally-influenced fresh to brackish water system that has been significantly modified to provide drainage to the adjacent upland areas. The watershed area upstream from the wetlands discharge is approximately 22 square miles, the net tidal flow is 2.1 cubic feet per second (cfs), the 7Q10 streamflow rate is estimated to be 0 cfs, and the average annual streamflow is estimated to be 16 cfs. Since surface water flows are low, the significant source of surface water exchange is due to tidally induced flows that extend into Elbow Swamp.

Using information provided in the February 1, 2010 report, "Elbow Swamp Dilution Capacity in Support of Waste Load Allocation", EPD has determined the dilution provided by the tidal exchange in Elbow Swamp at the existing discharge location. The tidal exchange volume available for dilution is equivalent to 1.38 MGD (2.13 cfs) at the existing outfall locations (#2 and #5). Using the existing outfalls and the proposed 3.0 and 4.0 MGD effluent flow rates, dilution factors of 1.5 and 1.3, respectively, have been calculated.

3. BASIS FOR FINAL EFFLUENT LIMITS AND PERMIT CONDITIONS

The effluent limitations are based on the revised wasteload allocation (WLA) dated April 12, 2013. The 7Q10 is 0 cubic feet per second (cfs). The Instream Wastewater Concentrations (IWCs) at 3.0 and 4.0 MGD are 68% and 74%, respectively. The WLA complies with all applicable TMDLs.

B.1. Proposed Effluent Limitations:

| <u>Constituent/Parameter</u> | <u>Permit Limit (Monthly Avg.)</u> |
|------------------------------------|------------------------------------|
| | mg/L |
| Influent Flow (MGD) | 1.50 |
| Effluent Flow (MGD) | Report |
| Biochemical Oxygen Demand (5-day) | |
| May-October | 5.0 |
| November-April | 15 |
| Total Suspended Solids | |
| May-October | 20 |
| November-April | 30 |
| Ammonia (as N) | 1.9 |
| Fecal Coliform Bacteria (#/100 mL) | Report |
| Total Phosphorus (as P) | Report |

| <u>Constituent/Parameter</u> | <u>Permit Limit (Monthly Avg.)</u> mg/L |
|-----------------------------------------------|--------------------------------------------|
| pH (standard units) | 6.0-9.0 |
| Dissolved Oxygen (minimum) | Report |
| Chronic Whole Effluent Toxicity (WET) | Report NOEC |
| Long-Term Biochemical Oxygen Demand | Report |
| Total Recoverable Copper | Report |
| Total Stream Hardness (as CaCO ₃) | Report |
| Total Recoverable Mercury | Report |
| Effluent Testing Data | Report |

B.2. Proposed Effluent Limitations:

| <u>Constituent/Parameter</u> | <u>Permit Limit (Monthly Avg.)</u> mg/L |
|------------------------------------------------|--------------------------------------------|
| Effluent Flow (MGD) | 3.0 |
| Carbonaceous Biochemical Oxygen Demand (5-day) | 5.0 |
| Ammonia (as N) | |
| May-October | 2.2 |
| November-April | 2.4 |
| Total Suspended Solids | 20 |
| Fecal Coliform Bacteria (#/100ml) | 200 |
| Total Phosphorus (as P) | Report |

| <u>Constituent/Parameter</u> | <u>Permit Limit (Monthly Avg.)</u> mg/L |
|---------------------------------------|--------------------------------------------|
| pH (standard units) | 6.0-8.0 |
| Dissolved Oxygen (minimum) | 5.0 |
| Chronic Whole Effluent Toxicity (WET) | Report NOEC |
| Long-Term Biochemical Oxygen Demand | Report |
| Effluent Testing Data | Report |

B.3. Proposed Effluent Limitations:

| <u>Constituent/Parameter</u> | <u>Permit Limit (Monthly Avg.)</u> mg/L |
|------------------------------------------------|--------------------------------------------|
| Effluent Flow (MGD) | 4.0 |
| Carbonaceous Biochemical Oxygen Demand (5-day) | 5.0 |
| Ammonia (as N) | |
| May-October | 1.9 |
| November-April | 2.1 |
| Dissolved Oxygen | 5.0 |
| Total Suspended Solids | 20 |
| Fecal Coliform Bacteria (#/100ml) | 200 |
| Total Phosphorus (as P) | Report |

| <u>Constituent/Parameter</u> | <u>Permit Limit (Monthly Avg.)</u> mg/L |
|---------------------------------------|--------------------------------------------|
| pH (standard units) | 6.0-8.0 |
| Dissolved Oxygen (minimum) | 5.0 |
| Chronic Whole Effluent Toxicity (WET) | Report NOEC |
| Long-Term Biochemical Oxygen Demand | Report |
| Effluent Testing Data | Report |

B.4. Proposed Effluent Limitations (Urban Water Reuse):

| <u>Constituent/Parameter</u> | <u>Permit Limit (Monthly Avg.)</u> mg/L |
|------------------------------------------------|--------------------------------------------|
| Influent Flow (MGD) | 1.0 |
| Carbonaceous Biochemical Oxygen Demand (5-day) | 5.0 |
| Total Suspended Solids | 5.0 |
| Fecal Coliform Bacteria (#/100ml) | 23 |
| Turbidity (NTU) | 3.0 |

Technology Based Effluent Limitation Calculations
(i.e. Flow, BOD₅ and TSS):

Limitation Calculations:

| |
|-------------------------------------------|
| Q = Flow C = Concentration M = Mass |
|-------------------------------------------|

Weekly average flow (MGD):

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

Weekly average concentration (mg/L):

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

Monthly average mass loading (Kg/day):

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

Weekly average mass loading (Kg/day):

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

Please note that the loadings will increase for Ammonia and Total Suspended Solids based on the increase of flow from 1.5 MGD to 3.0 MGD and 4.0 MGD.

Water Quality Based Effluent Limitations:

Total Residual Chlorine (TRC)

A total residual chlorine permit limit is not required if the facility employs a method of disinfection other than chlorine such as ozone or ultra-violet (UV) disinfection. The City of Richmond Hill's Sterling Creek Water Reclamation Facility uses UV disinfection.

Priority Pollutants

The permittee submitted three (3) Priority Pollutant scans (PPS) with the permit application. The PPS were dated May 2009, March 2010, and May 2010. The results of the reasonable potential analysis are discussed below.

a. Non-Metals

No constituents were detected in the priority pollutant scans.

b. Metals

Total recoverable copper was detected in the scans dated May 2009 and May 2010. Based upon the evaluation of these priority pollutant scans, the instream concentrations for copper were greater than 50% of the applicable instream criteria. Therefore there is reasonable potential for copper to cause or contribute to a water quality standards violation in the receiving stream based on a stream hardness of 25 mg/L. The draft permit contains a 12-month monitoring requirement for total recoverable copper and total stream hardness. The permittee must monitor the total recoverable copper one day a month for a period of twelve months after the issuance date of the permit. The results shall be reported on the Discharge Monitoring Reports submitted by the permittee. EPD will review the monitoring results after twelve months of monitoring. Should the results indicate that this chemical constituent is present at levels of concern, EPD may reopen the permit to include chemical specific limits for total recoverable copper.

Chronic Whole Effluent Toxicity (WET)

The permittee submitted the results of eight (8) WET tests conducted from December 2008-December 2011.

Based on the "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, the No Observed Effluent Concentration (NOEC) was less than the Instream Wastewater Concentration (IWC) of 69.8% and chronic toxicity is predicted. However, Elbow Swamp and Sterling Creek are tidally influenced water bodies. The results for the submitted WET tests are questionable because the permittee used a test for freshwater organisms. In order to obtain valid and sound data, the permittee shall conduct 4 WET tests using "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms", 3rd Edition, U.S. EPA, 821-R-02-014, October 2002 within the first year after permit issuance.

The draft permit contains limitations for a facility expansion. The permittee must conduct 4 quarterly WET tests during the first year after receiving authorization from EPD to discharge at 3.0 MGD and 4.0 MGD.

EPD is now requiring annual WET monitoring for all facilities with a permitted discharge of 1.0 MGD or greater. Therefore, at a minimum, the permittee will be required to conduct annual WET testing.

Mercury Analysis

The permittee's laboratory utilized EPA's Method 245.1 for the analysis of mercury. However, EPA's Method 1631E is the most sufficiently sensitive method for the analysis of mercury. The draft permit includes revised monitoring procedure language stating that the permittee must use the most sufficiently sensitive EPA method. Part I.C.11. in the draft permit states that the permittee must conduct three total recoverable mercury analyses concurrently with total stream hardness during the first year of issuance of the permit, with the first test being conducted within 90 days from the date of the permit issuance.

Permit Requirements Based on EPD Policy:

Watershed Assessment's Protection Plan

The City of Richmond Hill's watershed protection plan was approved on November 20, 2012. This Plan will provide essential long-term water quality and biological monitoring necessary to continually evaluate the overall health of the water bodies within the City's service area watershed. It also encourages the implementation of best management practices that will provide future protection of these resources.

It was stated in the Watershed Protection Plan that several of the sample sites for the long-term monitoring are located on tidally-influenced reaches of streams. Note that fish assessments are not required at these sample locations because metrics for coastal Georgia have yet to be developed. However, macroinvertebrate and habitat assessments should be performed at the sites as described in the Protection Plan.

An Annual Report of several required items are to be submitted by June 30th of each year.

Long-Term BOD Testing

Long-Term Biochemical Oxygen Demand testing is being included for municipal wastewater treatment facilities that have a permitted capacity of 1 MGD or greater. The draft permit includes a requirement for the permittee to perform a 120-day Long-Term Biochemical Oxygen Demand test on the final effluent once during permit cycle. The sample used for laboratory analysis should be collected during the period June 1 through September 30. The results of this test should be provided to the EPD prior to permit renewal.

Other Permit Requirements and Considerations:

Total Phosphorus

Effluent monitoring requirements are recommended for total phosphorus due to the discharge to a tidal freshwater wetland. The permittee has elected to opt out of numerical permit limits for phosphorus in a letter dated April 23, 2010 to Jeff Larson of EPD as allowed in the Strategy for addressing Phosphorus Loadings in State Waters. Therefore, the draft permit requires phosphorus monitoring.

According to the Strategy for addressing Phosphorus Loadings in State Waters, once standards are set, permits will be revised to include upcoming requirements. Permittees that opt out of the proactive limits will be expected to meet the resulting nutrient permit limits very quickly, and should not expect to be placed on an extended schedule to come into compliance.

Biochemical Oxygen Demand

The biochemical oxygen demand limitations in the draft permit are as follows:

- B.1. 5 mg/L (May- October)
- 15 mg/L (November- April)

Under the B.2. and B.3. effluent limitations, the permit will have limits for carbonaceous biochemical oxygen demand (CBOD₅) at the request of the permittee.

- B.2. 5.0 mg/L
- B.3. 5.0 mg/L
- B.4. 5.0 mg/L (Urban Water Reuse)

Ammonia

The allowable effluent ammonia concentration is based on the allowable instream toxicity concentration during critical conditions. The critical condition for ammonia toxicity was considered to be periods when stream inflow to Elbow Swamp is zero, and tidal exchange in the vicinity of the discharge is the only form of dilution. A seasonal permit limit structure was used for ammonia in order to provide flexibility during colder months when ammonia treatment is less efficient, water temperatures are cooler, and allowable effluent concentrations can be higher.

The monthly average effluent ammonia permit limits for the existing discharge location for May through October are 2.2 mg/L and 1.9 mg/L for effluent flow rates of 3.0 MGD and 4.0 MGD, respectively. The monthly average effluent ammonia permit limits for the existing discharge location for November through April are 2.4 mg/L and 2.1 mg/L for effluent flow rates of 3.0 and 4.0 MGD, respectively.

pH

The pH limits established in the wasteload allocation developed for the B.2. and B.3. effluent limitations sets lists the pH limit as 6.0 – 8.0 standard units (SU).

Total Suspended Solids

The current permit limitations (B.1.) includes seasonal limits for TSS of 20 mg/L and 30 mg/L corresponding to the May through October and November through April periods, respectively, with the expansions the TSS permit limit will be 20 mg/L year round. The urban water reuse permit limit for TSS is 5 mg/L.

Fecal Coliform Bacteria

There is no fecal coliform bacteria limit for the B.1. effluent limitations since the facility is constructed wetlands. However, after the expansion to 3.0 MGD and 4.0 MGD, in which the facility will have a direct discharge, the effluent monthly average fecal coliform bacteria permit limit will be 200 colonies per 100 milliliters according to the EPD's permitting guideline for fecal coliform bacteria. The compliance monitoring point for fecal coliform bacteria will be after the aerated pond and before the discharge.

The effluent monthly average fecal coliform bacteria permit limit for the 1.0 MGD urban water reuse is 23 colonies per 100 milliliters according to EPD's permitting guidelines for Water Reclamation and Urban Water Reuse.

Instream Monitoring

Instream water quality monitoring is required upstream and downstream from the discharge. Since the receiving water is characterized by naturally low dissolved oxygen (DO) concentrations during part of the year, the purpose of the instream monitoring is to help establish the stream's natural conditions and evaluate the effect of the discharge. Instream monitoring includes water temperature, DO concentration, pH, ammonia concentration, and total phosphorus concentration. Monitoring of Elbow Swamp and Sterling Creek must be performed immediately upstream from the discharge, and downstream at Harris Road and Bryan Neck Road. Monitoring shall be performed once per week throughout the year and during the ebb slack tide.

305(b)/303(d) Listed Waters

Elbow Swamp is not listed on Georgia's 2010 Integrated 305(b)/303(d) list.

Total Maximum Daily Loads

There are no Total Maximum Daily Loads (TMDL) that would affect the WLA for this facility.

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. Some limits are more stringent than in the previous permit.

Service Delivery Strategy

The City of Richmond Hill is in compliance with the approved Service Delivery Strategy for Bryan County.

Approved Industrial Pretreatment Program

The City does not have an approved Industrial Pretreatment Program.

Salt Water Intrusion and Reuse Customer Base

The City of Richmond Hill submitted the required documentation in 2008 and 2009 for the Coastal Georgia Water & Wastewater Plan for Managing Salt Water Intrusion and Reuse Customer Base. The City has complied with the condition of the current permit to provide a plan and schedule to EPD by June 30, 2012 that establishes policies, ordinances and measures necessary to promote reuse and to establish a reuse customer base; therefore, the language was taken out of the draft permit.

Sludge

Sludge is sent to an approved solid waste landfill for disposal.

Antidegradation Report (Antideg) and Environmental Information Document (EID)

EPD received a copy of the proof of advertising and the public comments received during the public meeting for the Antideg and EID. The submittal included comments received at the public meeting that appeared to be adequately addressed. EPD concurred with the Antideg and EID for an expansion from 1.5 MGD to 3.0 MGD and 4.0 MGD with a 1.0 MGD urban water reuse limit on June 1, 2011.

Design Development Report (DDR)

EPD concurred with the DDR for an expansion from 1.5 MGD to 3.0 MGD and 4.0 MGD with 1.0 MGD urban water reuse limit on August 9, 2012.

4. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

5. EFFECTIVE DATE OF PROPOSED EFFLUENT LIMITS AND COMPLIANCE SCHEDULE (if applicable)

The effluent limitations will become effective immediately upon permit issuance.

WATER QUALITY STANDARDS AND EFFLUENT STANDARDS APPLIED TO THE DISCHARGE

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

6. 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 Department of Natural Resources
Environmental Protection Division
Watershed Protection Branch
Wastewater Regulatory Program
4220 International Parkway, Suite 101
Atlanta, Georgia 30354

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 EPD.comments@dnr.state.ga.us, within 30 days of the factsheet date. 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.

b. 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.

The permit application, draft permit; comments received and other information are available for review at the Wastewater Regulatory Program, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354 between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday.

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. Notice of issuance or denial will be circulated to those persons or groups who participated in the hearing; to those persons or groups who submitted written comments to the Director on the proposed permit within thirty (30) days from the date of the public notice of the application for permit; and to all persons or groups included on the EPD mailing list.

c. 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.

d. Issuance of the Permit When No Public Hearing is Held

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 circulated to those persons who submitted written comments to the Director on the proposed permit within thirty (30) days from the date of the public notice of such proposed permit; and to all persons or groups included on the EPD mailing list.

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.

GA EPD - Wastewater Regulatory Program - Municipal Permitting Unit

Date: 12/12/2012
 Reviewer: Jennifer Goodman

Facility: Richmond Hill- Sterling Creek WRF
 NPDES Permit: GA0037648

Stream Data:

| | | |
|----------------------------|------|--------------------|
| Receiving stream Hardness: | 25 | mg/L |
| Upstream TSS: | 10 | mg/L |
| 7Q10: | 0.0 | ft ³ /s |
| | 0 | gal/day |
| 1Q10: | 0.00 | ft ³ /s |
| | 0 | gal/day |

Effluent Data:

| | | |
|--------------------------|-----------|---------|
| Flow | 1,500,000 | gal/day |
| TSS | 9.67 | mg/L |
| Instream TSS: | 9.67 | mg/L |
| Acute Dilution factor: | 1.00 | |
| Chronic Dilution factor: | 1.00 | |

Water Quality Criteria:

| | | |
|--------------------------------------|------------|--------------------|
| Mean annual streamflow at discharge: | 16.00 | ft ³ /s |
| | 10,340,352 | gal/day |
| Dilution factor: | 1.000 | |

Acute Water Quality Criteria (WQC_{Acute})

| Metal | K _{FD} | α | f _b | Maximum effluent C _T (μg/L) | Instream C _D (μg/L) | WQC _{Acute} (μg/L) | Action needed? |
|--------------|-----------------|--------|----------------|----------------------------------------|--------------------------------|-----------------------------|----------------|
| Arsenic | 4.80.E+05 | -0.729 | 0.00 | 0.0 | 0.00 | 340.00 | no |
| Cadmium | 4.00.E+06 | -1.131 | 0.000 | 0.0 | 0.00 | 0.52 | no |
| Chromium III | 3.36.E+06 | -0.930 | 0.00 | 0.0 | 0.00 | 183.07 | no |
| Chromium VI | 3.36.E+06 | -0.930 | 0.00 | 0.0 | 0.00 | 16.00 | no |
| Copper | 1.04.E+06 | -0.744 | 0.35 | 6.2 | 2.16 | 3.64 | yes |
| Lead | 2.80.E+06 | -0.800 | 0.00 | 0.0 | 0.00 | 13.88 | no |
| Mercury | 2.91.E+06 | -1.136 | 0.00 | 0.0 | N/A | 1.40 | no |
| Nickel | 4.90.E+05 | -0.572 | 0.00 | 0.0 | 0.0 | 144.92 | no |
| Zinc | 1.25.E+06 | -0.704 | 0.00 | 0.0 | 0.0 | 36.20 | no |

Chronic Water Quality Criteria (WQC_{Chronic})

| Metal | K _{FD} | α | f _D | Average effluent C _T (μg/L) | Instream C _D (μg/L) | WQC _{Chronic} (μg/L) | Action needed? |
|--------------|-----------------|--------|----------------|----------------------------------------|--------------------------------|-------------------------------|----------------|
| Arsenic | 4.80.E+05 | -0.729 | 0.00 | 0.0 | 0.0 | 150.00 | no |
| Cadmium | 4.00.E+06 | -1.131 | 0.000 | 0.0 | 0.0 | 0.09 | no |
| Chromium III | 3.36.E+06 | -0.930 | 0.00 | 0.0 | 0.0 | 23.81 | no |
| Chromium VI | 3.36.E+06 | -0.930 | 0.00 | 0.0 | 0.0 | 11.00 | no |
| Copper | 1.04.E+06 | -0.744 | 0.35 | 4.0 | 1.4 | 2.74 | yes |
| Lead | 2.80.E+06 | -0.800 | 0.00 | 0.0 | 0.0 | 0.54 | no |
| Mercury | | | 0.00 | 0.0 | 0.0 | 0.012 | no |
| Nickel | 4.90.E+05 | -0.572 | 0.00 | 0.0 | 0.0 | 144.92 | no |
| Zinc | 1.25.E+06 | -0.704 | 0.00 | 0.0 | 0.0 | 36.50 | no |

$$f_D = \frac{1}{1 + K_{FD} \times TSS_{Instream} (mg/L)^{1.12} \times 10^{-6}}$$

$$Instream C_D = \frac{Effluent C_T (mg/L) \times f_D}{DF} \quad mg/L$$

Total Recoverable Effluent Limit

| Metal | C _S (μg/L) | Chronic C _T (μg/L) | Chronic C _T (Kg/day) | Acute C _T (μg/L) | Acute C _T (Kg/day) |
|--------------|-----------------------|-------------------------------|---------------------------------|-----------------------------|-------------------------------|
| Arsenic | 0.0 | N/A | N/A | N/A | N/A |
| Cadmium | 0.0 | N/A | N/A | N/A | N/A |
| Chromium III | 0.0 | N/A | N/A | N/A | N/A |
| Chromium VI | 0.0 | N/A | N/A | N/A | N/A |
| Copper | 0.0 | 7.84 | 0.045 | 10.41 | 0.059 |
| Lead | 0.0 | N/A | N/A | N/A | N/A |
| Mercury | 0.0 | N/A | N/A | N/A | N/A |
| Nickel | 0.0 | N/A | N/A | N/A | N/A |
| Zinc | 0.0 | N/A | N/A | N/A | N/A |

$$(1) \quad Acute C_T = \frac{\frac{WQC_{Acute} \times (Q_1 + 1Q10) - (1Q10 \times C_S)}{f_D}}{Q_1}$$

$$Chronic C_T = \frac{\frac{WQC_{Chronic} \times (Q_1 + 7Q10) - (7Q10 \times C_S)}{f_D}}{Q_1}$$

$$(2) \quad Acute C_T = \frac{\frac{WQC_{Acute} \times (Q_1 + 1Q10)}{f_D}}{Q_1}$$

$$Chronic C_T = \frac{\frac{WQC_{Chronic} \times (Q_1 + 7Q10)}{f_D}}{Q_1}$$

NOTES:

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

Water Quality Criteria (WQC)

| Nonmetal | Maximum effluent C _T (μg/L) | Instream Concentration (μg/L) | WQC (μg/L) | WQC/2 (μg/L) | Action needed? |
|----------|----------------------------------------|-------------------------------|------------|--------------|----------------|
| | | 0.00 | | 0 | no |

$$Dilution Factor = \frac{Mean annual streamflow at discharge \left(\frac{gal}{day} \right) + Flow \left(\frac{gal}{day} \right)}{Flow \left(\frac{gal}{day} \right)}$$

NOTES:

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

PERMIT NO. GA0037648

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance 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 Richmond Hill
Post Office Box 250
Richmond Hill, Georgia 31324

is authorized to discharge from a facility located at

Richmond Hill Sterling Creek
Water Reclamation Facility
1701 Elbow Swamp Road
Richmond Hill, Georgia 31324
(Bryan County)

to receiving waters

Elbow Swamp to Sterling Creek tributary to the Ogeechee River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.

This permit shall become effective on XXXXXX.

This permit and the authorization to discharge shall expire at midnight, XXXXXX.



Issued on XX day of XXXXXX.

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Director,
Environmental Protection Division

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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 (BOD₅) 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. Part B.1.- For BOD₅, total suspended solids, ammonia, and phosphorus, a grab sample shall be taken at each outfall discharging during the collection period and will vary according to the number of terraces in operation.

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For priority pollutants, a grab sample shall be taken at each outfall. The resulting samples will represent the facility's outfalls discharging during the collection period and will vary according to the number of terraces in operation.

The "grab samples" obtained in items above shall be composited according to the respective outfall flow, to obtain one combined sample representing the total facility discharge.

- h. Part B.2. - 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.

Part B.3. - 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.

- i. 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 $\pm 10\%$ 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.

- j. If secondary flow instruments malfunction or fail to maintain calibration as required in I.A.1.i., the flow shall be computed from manual measurements taken at the times specified for the collection of composite samples.
- k. Quarterly analyses required in I.B. shall be performed during each quarter and submitted in March, June, September, and December. Results of analyses required twice per year will be submitted in June and December. Results of analyses required annually will be submitted in June.
- l. 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

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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).

Pond treatment systems are required to report the total quantity of sludge removed from the facility only during the months that sludge is removed.

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) 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;

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- 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.

6. URBAN WATER REUSE

a. DEFINITIONS

1. Designated User or User: any site or facility where reclaimed water is beneficially used under a contract with the permittee. User may also be defined as the customer to be supplied with reclaimed water who has a written user agreement with the permittee. In addition, a designated user may also be a purveyor that provides reclaimed water to other customers.
2. Non-restricted Access: landscaped areas where reclaimed wastewater is used for irrigation purposes and public access cannot be controlled and adequate buffer zones cannot be maintained. Reclaimed wastewater used to irrigate non-restricted access areas must be treated to advanced limits with disinfection.
3. Preapplication Treatment System: the wastewater treatment facility which reduces high strength organic waste to low levels prior to application to the sprayfield area. The preapplication treatment system can consist of a mechanical plant or a pond system.
4. Restricted Access: landscaped areas where reclaimed wastewater is used for irrigation purposes and public access is restricted to specific and controlled periods of time. Reclaimed wastewater used to irrigate restricted access areas must be pretreated to secondary levels and receive disinfection.
5. Sprayfield: the wetted area of the land application site, excluding the buffer zone.
6. Urban Water Reuse: the use of reclaimed water as a substitute for other water sources for the beneficial irrigation of areas that may be accessible to the public. This includes areas such as golf courses, residential and commercial landscaping, parks, athletic fields, roadway medians, and landscape impoundments.
7. Reject Water: treated wastewater that is diverted from reuse customers because it does not meet the 3 NTU turbidity criteria due to a disinfection system failure, or has to be diverted due to a failure to meet 100#/100 ml on a single fecal coliform test.

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b. DESIGNATED USERS

The permittee may provide reuse water to designated users. The permittee may provide reuse water to additional designated users as long as prior written notice is provided to the EPD and a public notice is provided to the community. The additional users list will be considered an addendum to the permit, but the permit will not be reopened to add new designated users. The permittee must keep records of the volume of reuse water provided to each of its designated users.

c. USER AGREEMENT

Any designated user receiving reuse water from the permittee must enter into an agreement with the permittee. At a minimum the agreement must address all items which are in EPD's Guidelines for Water Reclamation and Urban Water Reuse (Section 9.2).

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B.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The discharge from the water pollution control plant shall be limited and monitored by the permittee as follows upon issuance of the permit and continuing until permit expiration or until the EPD provides written approval of completion of construction of the 3.0 MGD upgrade and written authorization to commence operation under Part I.B.2. of the permit has been provided by EPD.

| Parameter | Discharge Limitations mg/L (kg/day) unless otherwise specified | | Monitoring Requirements | | |
|---------------------------------------------------|----------------------------------------------------------------------|-----------------|-------------------------|----------------------|-----------------------------|
| | Monthly Avg. | Weekly Avg. | Measurement Frequency | Sample Type | Sample Location* |
| Flow (MGD) ⁽¹⁾ | 1.5 | 1.88 | Seven Days/Week | Continuous Recording | Influent |
| Flow (MGD) | Report (Report) | Report (Report) | Seven Days/Week | Instantaneous | Outfalls 2 & 5 |
| Biochemical Oxygen Demand (5-day) ⁽²⁾ | | | | | |
| May-October | 5 (28.4) | 7.5 (35.5) | Three Days/Week | Composite | Outfalls 2 & 5 and Influent |
| November-April | 15 (85.3) | 22.5 (106.6) | | | |
| Total Suspended Solids (TSS) ⁽²⁾ | | | | | |
| May-October | 20 (114) | 30 (142) | Three Days/Week | Composite | Outfalls 2 & 5 and Influent |
| November-April | 30 (170) | 45 (213) | | | |
| Ammonia (as N) ⁽²⁾ | 1.9 (10.8) | 2.9 (13.5) | Three Days/Week | Composite | Outfalls 2 & 5 |
| Fecal Coliform Bacteria (#/100 mL) ⁽³⁾ | Report (Report) | Report (Report) | Three Days/Week | Grab | Upstream & Downstream |
| Total Phosphorus (as P) ⁽²⁾ | Report (Report) | Report (Report) | Three Days/Week | Composite | Effluent |

⁽¹⁾ Influent flow rate to the constructed wetlands.

⁽²⁾ Refer to Part I.A.1.g.

⁽³⁾ Fecal Coliform Bacteria shall be monitored upstream of Outfall #2 and downstream of Outfall #5.

*Outfall 2-- Latitude: 31°54'14.17" N and Longitude: 81°18'41.22" W

*Outfall 5-- Latitude: 31°54'14.12" N and Longitude: 81°18'35.89"

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued):

| Parameters | Discharge limitations as specified | Monitoring Requirements | | |
|--------------------------------------------------------------|------------------------------------|-------------------------|-------------|-----------------|
| | | Measurement Frequency | Sample Type | Sample Location |
| pH, Minimum – Maximum (Standard Unit) | 6.0 – 9.0 | Seven Days/Week | Grab | Effluent |
| Dissolved Oxygen, Minimum (mg/L) | Report | Seven Days/Week | Grab | Effluent |
| Chronic Whole Effluent Toxicity (WET) | Report NOEC | Refer to Part I.C.9. | Composite | Effluent |
| Long-Term Biochemical Oxygen Demand | Report | Refer to Part I.C.10. | Composite | Effluent |
| Total Recoverable Copper ⁽¹⁾ | Report | Refer to Part I.C.11. | Composite | Effluent |
| Total Stream Hardness (as CaCO ₃) ⁽²⁾ | Report | Refer to Part I.C.11. | Grab | Ogeechee River |
| Total Recoverable Mercury | Report | Refer to Part I.C.11. | Grab | Effluent |
| Effluent Testing Data (mg/L) | Report | Refer to Part I.C.12. | Grab | Effluent |

⁽¹⁾ Total recoverable copper shall be analyzed to the specific detection limit of 0.005 mg/L.

⁽²⁾ Total hardness samples shall be taken concurrently with the total recoverable metals and shall be sampled on the Ogeechee River upstream of the NPDES discharge.

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B.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The discharge from the water pollution control plant shall be limited and monitored by the permittee as follows effective on the date EPD provides written approval of completion of construction of the 3.0 MGD upgrade and written authorization to commence operation under Part I.B.2. of the permit has been provided by EPD and continuing until permit expiration, or until EPD provides written approval of completion of construction of the 4.0 MGD upgrade and written authorization to commence operation under Part I.B.3. of the permit has been provided by EPD.

| Parameter | Discharge Limitations mg/L (kg/day) unless otherwise specified | | Monitoring Requirements | | |
|---------------------------------------------------------------|----------------------------------------------------------------------|-----------------|-------------------------|----------------------|-----------------------|
| | Monthly Avg. | Weekly Avg. | Measurement Frequency | Sample Type | Sample Location* |
| Flow (MGD) ⁽²⁾ | 3.0 | 3.75 | Seven Days/Week | Continuous Recording | Effluent |
| Carbonaceous Biochemical Oxygen Demand (5-day) ⁽¹⁾ | 5.0 (56.9) | 7.5 (71.0) | Three Days/Week | Composite | Influent and Effluent |
| Ammonia (as N) ⁽¹⁾ | | | | | |
| May-October | 2.2 (25.0) | 3.3 (31.2) | Three Days/Week | Composite | Effluent |
| November-April | 2.4 (27.3) | 3.6 (34.1) | | | |
| Total Suspended Solids (TSS) ⁽¹⁾ | 20 (227) | 30 (284) | Three Days/Week | Composite | Influent and Effluent |
| Fecal Coliform Bacteria (#/100 mL) | 200/100 | 400/100 | Three Days/Week | Grab | Effluent |
| Total Phosphorus ⁽¹⁾ (as P) | Report (Report) | Report (Report) | Three Days/Week | Composite | Effluent |

⁽¹⁾ Refer to Part I.A.1.h.

⁽²⁾ The total combined discharge to the receiving stream and to urban reuse customers shall not exceed 3.0 MGD on a monthly average or 4.0 MGD on a weekly average.

*Influent refers to flow into the wastewater treatment plant.

*Effluent refers to the sample location at the plant after the magnetic flow meter and cascade but prior to being pumped to outfalls #2 and #5.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued):

| Parameters | Discharge limitations as specified | Monitoring Requirements | | |
|-------------------------------------------------|------------------------------------|-------------------------|-------------|-----------------|
| | | Measurement Frequency | Sample Type | Sample Location |
| pH, Minimum – Maximum (Standard Unit) | 6.0 – 8.0 | Seven Days/Week | Grab | Effluent |
| Dissolved Oxygen, Minimum (mg/L) ⁽¹⁾ | 5.0 | Seven Days/Week | Grab | Effluent |
| Chronic Whole Effluent Toxicity (WET) | Report NOEC | Refer to Part I.C.9. | Composite | Effluent |
| Long-Term Biochemical Oxygen Demand | Report | Refer to Part I.C.10. | Composite | Effluent |
| Effluent Testing Data (mg/L) | Report | Refer to Part I.C.12. | Grab | Effluent |

⁽¹⁾ The DO shall be sampled at the outfall with the static aerator.

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B.3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The discharge from the water pollution control plant shall be limited and monitored by the permittee as follows effective on the date EPD provides written approval of completion of construction of the 4.0 MGD upgrade and written authorization to commence operation under Part I.B.3. of the permit has been provided by EPD and continuing until permit expiration.

| Parameter | Discharge Limitations mg/L (kg/day) unless otherwise specified | | Monitoring Requirements | | |
|----------------------------------------------------------------|----------------------------------------------------------------------|----------------------------|-------------------------|----------------------|-----------------------|
| | Monthly Avg. | Weekly Avg. | Measurement Frequency | Sample Type | Sample Location* |
| Flow (MGD) ⁽²⁾ | 4.0 | 5.0 | Seven Days/Week | Continuous Recording | Effluent |
| Carbonaceous Biochemical Oxygen Demand (5-day) ⁽¹⁾ | 5.0 (75.8) | 7.5 (94.8) | Three Days/Week | Composite | Influent and Effluent |
| Ammonia (as N) ⁽¹⁾ May-October November-April | 1.9 (28.8) 2.1 (31.8) | 2.85 (36.0) 3.15 (39.8) | Three Days/Week | Composite | Effluent |
| Total Suspended Solids (TSS) ⁽¹⁾ | 20 (303) | 30 (379) | Three Days/Week | Composite | Influent and Effluent |
| Fecal Coliform Bacteria (#/100 mL) | 200/100 | 400/100 | Three Days/Week | Grab | Effluent |
| Total Phosphorus (as P) ⁽¹⁾ | Report (Report) | Report (Report) | Three Days/Week | Composite | Effluent |

⁽¹⁾ Refer to Part I.A.1.h.

⁽²⁾ The total combined discharge to the receiving stream and to urban reuse customers shall not exceed 4.0 MGD on a monthly average or 5.0 MGD on a weekly average.

*Influent refers to flow into the wastewater treatment plant.

*Effluent refers to the sample location at the plant after the magnetic flow meter and cascade but prior to being pumped to outfalls #2 and #5.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued):

| Parameters | Discharge limitations as specified | Monitoring Requirements | | |
|-------------------------------------------------|------------------------------------|-------------------------|-------------|-----------------|
| | | Measurement Frequency | Sample Type | Sample Location |
| pH, Minimum – Maximum (Standard Unit) | 6.0 – 8.0 | Seven Days/Week | Grab | Effluent |
| Dissolved Oxygen, Minimum (mg/L) ⁽¹⁾ | 5.0 | Seven Days/Week | Grab | Effluent |
| Chronic Whole Effluent Toxicity (WET) | Report NOEC | Refer to Part I.C.9. | Composite | Effluent |
| Long-Term Biochemical Oxygen Demand | Report | Refer to Part I.C.10. | Composite | Effluent |
| Effluent Testing Data (mg/L) | Report | Refer to Part I.C.12. | Grab | Effluent |

⁽¹⁾ The DO shall be sampled at the outfall with the static aerator.

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B.4. URBAN WATER REUSE

The discharge from the mechanical treatment system shall not exceed 1.0 MGD on a monthly average or 1.25 MGD on a weekly average. For monitoring purposes, influent shall refer to the influent to the facility and effluent shall refer to the discharge from the mechanical preapplication treatment plant to the above ground storage tank. The mechanical preapplication treatment plant shall be monitored by the permittee for the parameters and at the frequency listed below:

| Parameters | Discharge Limitation Monthly Average, mg/l unless otherwise specified | Monitoring Requirements | | |
|------------------------------------------------|-----------------------------------------------------------------------------|-------------------------|-------------|---------------------|
| | | Measurement Frequency | Sample Type | Sample Location |
| Flow (MGD) ⁽²⁾ | 1.0 | 7 Days/Week | Continuous | Effluent |
| Carbonaceous Biochemical Oxygen Demand (5-Day) | 5.0 | 3 Day/Week | Composite | Influent & Effluent |
| Total Suspended Solids | 5.0 | 3 Day/Week | Composite | Influent & Effluent |
| Fecal Coliform Bacteria (#/100 ml) | 23/100 | 7 Days/Week | Grab | Effluent |
| Turbidity (NTU) ⁽¹⁾ | 3 | 7 Days/Week | Continuous | Effluent |

⁽¹⁾ Continuously recorded turbidity measurements of the discharge from the preapplication treatment plant, prior to filter disinfection, will be required.

The minimum effluent dissolved oxygen shall be 5.0 mg/l or higher and shall be monitored on the final effluent by analyzing grab samples taken daily.

The permittee must keep records of the volume of reuse water provided to each of its customers. A sample shall be taken only when the reuse facility is in operation.

For monitoring purposes, daily shall represent any day that reuse water is provided to Reuse System.

For monitoring purposes, effluent shall be defined as the discharge from the mechanical preapplication treatment plant to the above ground storage tank.

Reclaimed water exceeding 3 NTU is to be considered rejected water (Refer to Part I.A.6.a.7.).

The permittee may provide up to 1.0 MGD of wastewater treated to urban reuse standards to reuse customers.

⁽²⁾ For 3.0 MGD, the total combined discharge to the receiving stream and to urban reuse customers shall not exceed 3.0 MGD on a monthly average or 4.0 MGD on a weekly average.

⁽²⁾ For 4.0 MGD, the total combined discharge to the receiving stream and to urban reuse customers shall not exceed 4.0 MGD on a monthly average or 5.0 MGD on a weekly average.

The permittee must maintain a weir at Outfalls #2 and #5 above the base water level and that includes freeboard for storm water.

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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. REPORTING

All reports or information submitted in compliance with this permit or requested by EPD must be signed and certified by a principal executive officer, elected official, or other authorized representative. Required analytical results obtained by the permittee shall be summarized on a Discharge Monitoring Report form and any additional EPD specified forms. Monitoring results shall be submitted to the EPD postmarked no later than the 15th day of the month following the end of the reporting period. The EPD may require in writing that additional monitoring results be reported. Signed copies of these and all other required reports shall be submitted to:

Environmental Protection Division
Coastal District Office
One Conservation Way
Brunswick, Georgia 31520-8686

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

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frequency on the report. The EPD may require in writing more frequent monitoring, or monitoring of other pollutants not specified in this permit.

6. RECORDS RETENTION

The permittee shall retain records of:

- a. All laboratory analyses performed including sample data, quality control data, and standard curves;
- b. Calibration and maintenance records of laboratory instruments;
- c. Calibration and maintenance records and recordings from continuous recording instruments;
- d. Process control monitoring records;
- e. Facility operation and maintenance records;
- f. Copies of all reports required by this permit;
- g. All data and information used to complete the permit application; and
- h. All monitoring data related to sludge use and disposal.

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

7. PENALTIES

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

8. WATERSHED PROTECTION PLAN

The permittee has a watershed protection plan 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.

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- 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. B.1. CHRONIC WHOLE EFFLUENT TOXICITY

The permittee shall conduct four quarterly WET tests within the first year of issuance with the first test being conducted within 90 days of permit issuance. 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 68%. After 4 quarterly WET tests are conducted, unless notified by EPD, the permittee shall conduct annual WET tests until permit expiration or receiving EPD written authorization to operate at 3.0 MGD (B.2. effluent limitations).

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 Marine and Estuarine Organisms, 3rd Edition, U.S. EPA, 821-R-02-014, October 2002. Definitive tests must be run on the same samples concurrently using both *Menidia beryllina* (i.e., inland silverside) and *Mysidopsis bahia* (i.e., mysid) and should include a dilution equal to the facility's instream wastewater concentration of 68%.

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 68%. 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.

B.2. CHRONIC WHOLE EFFLUENT TOXICITY

The permittee shall conduct four quarterly Whole Effluent Toxicity (WET) tests during the first year after receiving EPD written authorization to operate at 3.0 MGD (B.2. Effluent Limitations) with the first test being conducted within 90 days of this authorization. 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 68%. If substances are measured at levels of concern, then the permittee shall continue WET monitoring quarterly. If it is demonstrated that toxicity is not present, the permittee shall conduct WET tests annually and the permittee will be responsible for meeting the facility's instream wastewater concentration (IWC) of 68% from that point forward.

The testing must incorporate 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 Marine and Estuarine Organisms, 3rd Edition, U.S. EPA, 821-R-02-014, October 2002. Definitive tests must be run on the same samples concurrently using both *Menidia beryllina* (i.e., inland silverside) and *Mysidopsis bahia* (i.e., mysid) and should include a dilution equal to the facility's instream wastewater concentration of 68%.

B.3. CHRONIC WHOLE EFFLUENT TOXICITY

The permittee shall conduct four quarterly Whole Effluent Toxicity (WET) tests during the first year after receiving EPD written authorization to operate at 4.0 MGD (B.3. Effluent Limitations) with the first test being conducted within 90 days of this authorization. An effluent discharge will not be

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considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the Instream Wastewater Concentration (IWC) of 74%. If substances are measured at levels of concern, then the permittee may be required to perform additional WET tests quarterly or the permit may be modified to include chronic WET effluent limitations. If it is demonstrated that toxicity is not present, the permittee shall submit a request to EPD to reduce the WET monitoring from quarterly to annually. Upon EPD approval, the permittee shall be given permission to conduct WET tests annually and the permittee will be responsible for meeting the facility's instream wastewater concentration (IWC) of 74% from that point forward.

The testing must incorporate 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 Marine and Estuarine Organisms, 3rd Edition, U.S. EPA, 821-R-02-014, October 2002. Definitive tests must be run on the same samples concurrently using both *Menidia beryllina* (i.e., inland silverside) and *Mysidopsis bahia* (i.e., mysid) and should include a dilution equal to the facility's instream wastewater concentration of 74%.

10. LONG-TERM BIOCHEMICAL OXYGEN DEMAND TESTING

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

11. PRIORITY POLLUTANTS

TOTAL RECOVERABLE COPPER

Samples for total recoverable copper and total hardness must be taken concurrently once a month for a period of twelve months beginning 60 days after the issuance of the permit. Total recoverable copper shall be analyzed to the specific detection limit of 5.0 µg/L. Total hardness samples shall be sampled downstream of the NPDES discharge. After the permittee has monitored for total recoverable copper once a month for a period of twelve months after issuance of the permit, EPD will conduct a reasonable potential evaluation. If it is determined that total recoverable copper is present at level of concern, EPD may reopen the permit to include a chemical specific limit. If it is determined that that total recoverable copper is not present at levels of concern, EPD shall notify the permittee in writing that monitoring for total recoverable copper and total recoverable hardness is no longer required.

TOTAL RECOVERABLE MERCURY

The permittee must conduct three total recoverable mercury analyses concurrently with total stream hardness during the first year of issuance of the permit, with the first test being conducted within 90 days from the date of the permit. Sampling for total recoverable mercury must represent seasonal variations. Total recoverable mercury must be analyzed using EPA Method 1631E to the specific detection limit of 0.5 µg/L. If total recoverable mercury is measured at levels of concern, then the permittee may be required to perform additional monitoring or the permit may be modified to include effluent limitations for total recoverable mercury.

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12. EFFLUENT TESTING DATA

The permittee must conduct a minimum of three effluent testing events between the permit effective date and 180 days before the permit expiration date. Each sample shall be analyzed for the following parameters:

1. Kjeldahl nitrogen (as N)
2. Nitrate-nitrite (as N)
3. Oil and grease
4. Total dissolved solids

At least two of these samples must be taken no fewer than four months and no more than eight months apart.

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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.

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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.

a. For reuse plants which do not have automatic diversion:

The operator in responsible charge (ORC) for the facility shall be a Class I Biological Wastewater Operator. On-site operation shall be 24 hours per day, 7 days per week by an on-site operator (OSO) who is certified Class II Biological Wastewater Operator or higher. All Operators (other than the ORC and OSO) shall have a minimum of a Class III Biological Wastewater Operator certification.

b. For reuse plants which have automatic diversion, but do not have an electronic monitoring and alarm system:

The operator in responsible charge (ORC) for the facility shall be a Class I Biological Wastewater Operator. On-site operation shall be by an on-site operator (OSO) who is certified Class II Biological Wastewater Operator or higher for a minimum of 8 hours per day, 7 days per week in conjunction with automatic diversion of reclaimed water that does not meet the turbidity criteria and with the automatic diversion of reclaimed water should any component of the disinfection system fail. All operators (other than the ORC and OSO) shall have a minimum of a Class III Biological Wastewater Operator certification.

c. For reuse plants that have automatic diversion and have an electronic monitoring and alarm system:

The operator in responsible charge (ORC) shall be a Class I Biological Wastewater Operator. On-site operation shall be by an on-site operator (OSO) who is certified Class II Biological Wastewater Operator or higher for a minimum of 4 hours per day, 7 days per week in conjunction with automatic diversion of reclaimed water that does not meet the turbidity criteria and with the automatic diversion of reclaimed water should any component of the disinfection system fail. An operator shall be on call during all periods the plant is unattended and must be able to respond to the plant site within one hour of an alarm. The electronic monitoring and alarm system must record the date and time of all alarms and the date and time of alarm override. All operators (other than the ORC and the OSO) shall have a minimum of a Class III Biological Wastewater Operator certification.

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.

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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 if available, 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

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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 exceedence of effluent limitations described in the definition of "Consistently exceeding effluent limitation" above. As a minimum, the following parameters shall be monitored in the receiving stream:
 1. Dissolved Oxygen;
 2. Fecal Coliform Bacteria;

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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.

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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.

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7. CIVIL AND CRIMINAL LIABILITY

The permittee is liable for civil or criminal penalties for noncompliance with this permit and must comply with applicable State and Federal laws including promulgated water quality standards. The permit cannot be interpreted to relieve the permittee of this liability even if it has not been modified to incorporate new requirements.

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).

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PART III

INDUSTRIAL PRETREATMENT PROGRAM FOR PUBLICLY OWNED TREATMENT WORKS (POTW)

1. The permittee may establish and operate an approved industrial pretreatment program.
2. If the EPD determines that the permittee is required to develop a local industrial pretreatment program, the permittee will be notified in writing. The permittee shall immediately begin development of an industrial pretreatment program and shall submit it to the EPD for approval no later than one year after the notification.
3. During the interim period between determination that a program is needed and approval of the program, all industrial pretreatment permits shall be issued by the EPD.
4. The permittee shall notify the EPD of all industrial users connected to the system or proposing to connect to the system from the date of issuance of this permit.
5. Implementation of the Pretreatment Program developed by the State can be delegated to the permittee following the fulfillment of requirements detailed in 391-3-6-.09 of the Rules and Regulations for Water Quality Control.