

National Pollutant Discharge Elimination System Wasteload Allocation Form

Part I: Background Information			
WLA Request Type:	Reissuance <input checked="" type="checkbox"/>	Expansion <input type="checkbox"/>	Relocation <input type="checkbox"/> New <input type="checkbox"/>
Facility Name:	Hahira WPCP	County:	Lowndes WQMU: 0905
NPDES Permit No.:	GA0037974	Expiration Date:	6/30/2022 Outfall Number: 001
Receiving Water:	Tributary to Franks Creek	River Basin:	Suwannee 10-Digit HUC: 0311020405
Discharge Type:	Domestic	Flow(s) Requested (MGD):	0.275
Ecoregion:	L4 – 65h, Tifton Upland		
Additional Information: (history, special conditions, other facilities):		The City requested WLA evaluation in 2020 to relocate and expand its treatment system to Franks Creek or to another tributary to Franks Creek with an annual discharge.	
Requested by:	Benoit Cause	Program:	WRP Date: 4/19/2024

Part II: Receiving Water Information			
Receiving Water:	Trib. to Franks Creek to Little River to Withlacoochee River	Designated Use Classification:	Fishing
Integrated 305(b)/303(d) List:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Support: <input type="checkbox"/> Not Support: <input checked="" type="checkbox"/>	Criteria: Dissolved Oxygen, Ammonia Tox.
Total Maximum Daily Load:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Parameter(s): (DO)	WLA Complies with TMDL: Yes <input type="checkbox"/> No <input type="checkbox"/>
The receiving stream is on 2020 GA 305(b)/303(d) list as not supporting its designated use, impaired by DO and ammonia toxicity. TMDL for DO will be drafted by 2026. Current ammonia limit has been revised through this NPDES permit reissuance to address the ammonia toxicity issue and meet instream water quality criteria.			

Part III: Water Quality Model Review Information			
Model Type:	Uncalibrated <input type="checkbox"/>	Calibrated <input checked="" type="checkbox"/>	Verified <input type="checkbox"/> Cannot be Modeled <input type="checkbox"/>
Field Data:	None <input type="checkbox"/>	Fair <input checked="" type="checkbox"/>	Good <input type="checkbox"/> Excellent <input type="checkbox"/>
Model and Field Data Description: Steady-state dissolved oxygen Georgia DOSAG model for cold weather discharge (November-April)			
Critical Water Temperature:(°C):	18	Drainage Area (mi ²):	0.93 Mean annual streamflow at discharge (cfs): 0.83
7Q10 Yield (cfs/mi ²):	0.0064	Velocity (range fps):	0.3 – 0.4 30Q3 streamflow at discharge (cfs): 0.02
Effluent Flow Rate (cfs):	0.42	IWC (%):	99 7Q10 streamflow at discharge (cfs): 0.006
Slope (range - fpm):	2 – 13	K1: 0.15 K3: 0.02 K2: 3 - 5	1Q10 streamflow at discharge (cfs): 0.003
SOD: 0.8	Escape Coef. (ft ⁻¹): 0.11	f-Ratio BOD _t /BOD ₅): 2.8	*Background Hardness (as CaCO ₃): See L4-65h
Under cold weather conditions, the predicted minimum DO concentration is 5.5 mg/L, occurring approx. 0.7 miles downstream from the discharge location at the confluence with Franks Creek.			
*Average hardness value is 68 mg/L at WQ station RV_09_16324, approx. 0.2 miles downstream from the discharge.			

Part IV: Recommended Permit Limitations and Conditions (mg/L as a monthly average except as noted)										
Rationale:	Same as current <input type="checkbox"/> Revised <input checked="" type="checkbox"/> New <input type="checkbox"/>									
Location:	Unnamed Tributary to Franks Creek									
Effluent Flow Rate (MGD)	BOD ₅	NH ₃ -N	DO (minimum)	E Coli (No./100ml)	pH (std. units)	TRC (daily max.)	Total Nitrogen	Total Phosphorus	TKN, Nitrite-Nitrate, Organic N, Ortho P	
0.275	20	1.0	5.0	126	6.0 – 8.5	0.01	20	3.6	Monitor	
Additional Comments:										
<ul style="list-style-type: none"> • Priority pollutants permit limits, aquatic toxicity testing requirements, and other parameters required by categorical effluent guidelines or identified during review of permit application are to be determined by WRP. • The receiving stream is impaired for DO, a reduced BOD₅ limit and a new DO limit are recommended. • The receiving stream is impaired for ammonia toxicity, the revised ammonia limit meets US EPA's Aquatic Life Ambient Water Quality Criteria for Ammonia-Freshwater 2013 under 30Q3 streamflow during cold weather when the discharge is allowed. • TRC limit applies only when chlorine is used at the facility. • New nitrogen and phosphorus limits are recommended to meet Florida's instream nutrient criteria. • Effluent monitoring for TKN, nitrate-nitrite, and organic nitrogen is recommended. Nitrogen constituents should be analyzed from the same sample. Organic nitrogen should be calculated as TKN minus NH₃. 										
Prepared by:	Lucy Sun <i>LS</i>	Date:	4/19/2024	Reviewed by:	Josh Welte <i>JW</i>	Date:	19.Apr.24			

Part V: Program Manager Comment	
<div style="text-align: center;"> </div> <p>Elizabeth Booth</p>	Date: 08/20/2024