

**FACT SHEET
FOR
STATE OF FLORIDA
DOMESTIC WASTEWATER FACILITY PERMIT**

August 16, 2007

PERMIT NUMBER: FL0031801

PA FILE NUMBER: FL0031801-003-DW1P/NR

FACILITY NAME: Bayou Marcus Water Reclamation Facility

FACILITY LOCATION: Pensacola
Escambia County

NAME OF PERMITTEE: Emerald Coast Utilities Authority

PERMIT WRITER: Jonathan May

1. INTRODUCTION

The applicant, Emerald Coast Utilities Authority, applied on April 4, 2006, to the Department of Environmental Protection for a permit to operate an existing 8.2 MGD annual average daily flow (AADF) permitted capacity activated sludge wastewater treatment facility with effluent discharge to a receiving wetlands to Perdido Bay (Class III waters). The mode of treatment operation of the wastewater treatment plant (WWTP) is conventional plug flow. The treatment facility is an extended aeration advanced domestic WWTP. The WWTP consist of pretreatment processes that include influent pumping with four (4) submersible pumps and four (4) raw wastewater rotary fine mesh drum screens. The biological treatment process include bioreactors - oxidation ditches (two parallel four-stage EIMCO carrousel aeration basins with anoxic with caustic soda addition, oxic, anoxic with alum addition and re-aeration chambers), three (3) secondary clarifiers. Secondary effluent management include four (4) parallel dual media (gravel/sand) effluent filters, two (2) parallel ultraviolet irradiation disinfection channels, effluent lift station with four (4) submersible pumps which pumps the effluent to the Bayou Marcus wetlands and two (2) turbine pumps for reuse water. An 8.2 MG lined rejects holding pond is provided with recirculation.

The biosolids management facilities include one (1) circular plant tankage (aerated sludge holding tank) for sludge processing with four (4) cells, One (1) rotary drum thickener, secondary scum and return activated sludge (RAS) pumping, waste activated sludge (WAS) pumping, rotary drum thickener to thicken sludge and facilities to transfer the thickened sludge to a tanker truck. All residual solids generated at the Bayou Marcus plant are transported by ECUA-owned and operated trucks, to the Main Street plant for treatment in one of two sludge dryers, at that plant, resulting in a Class AA residuals.

The surface water discharge is an existing total permitted discharge of 8.2 MGD AADF from the WWTP discharge to the Northern portion (642 acres) of the receiving wetlands and Southern receiving wetlands (350 acres). The portioned discharge capacity of the Northern portion of the receiving wetlands is 5.3 MGD AADF. The portioned discharge capacity of the Southern portion of the receiving wetlands is 2.9 MGD AADF. The receiving wetlands are classified as Class III surface waters and discharge Perdido Bay is classified as a Class III surface water.

This permitting action is the re-issuance of a wastewater permit renewal to authorize continued operation of the existing 8.2 MGD permitted capacity wastewater treatment facility and discharge to the northern portion (642 acres) of the receiving wetland discharge. In addition, this permit re-authorizes and allows expansion of the discharge structure for the southern portion (350 acres) of the receiving wetlands (Zones 10 thru 13) in accordance with Department permit DC17-240168 (initially issued on June 15, 1994), FL0031801-001-DW1P/NR (issued October 26 2001), FL0031801-002-DW1/MR (issued February 18, 2004) and approved plans prepared by BCM Engineers, Inc. and certified by Robert C. Borneman, P.E., which were submitted to the Department on December 27, 1993, January 24, February 25, March 2 and April 1994.

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The facility is located at latitude 30°26'10" N, longitude 87°19'45" W at 305 Fayal Drive, Pensacola, FL 32526 in Escambia County.

The Department has permitting jurisdiction under Sections 403.087, Florida Statutes and Florida Administrative Code Rules 62-4, 62-600, 62-601, 62-302, 62-611, 62-620, 62-640 and 62-699. The project is not exempt from permitting procedures. The Department has determined that a wastewater permit is required for the proposed activities.

2. **SYNOPSIS OF APPLICATION**

a. **Chronology of Application**

Application Date: April 4, 2006
Additional Information: N/A
Public Notice Date: Needed

b. **Type of Facility**

Domestic Wastewater Treatment Plant
Publicly-owned treatment works
Standard Industrial Classification Code: 4952

c. **Facility Capacity**

Existing Design Capacity:	8.2	MGD	AADF
Proposed Increase in Design Capacity:	0.0	MGD	AADF
Proposed Total Design Capacity:	8.2	MGD	AADF
Existing Permitted Capacity:	8.2	MGD	AADF
Proposed Increase in Permitted Capacity:	0.0	MGD	AADF
Proposed Total Permitted Capacity:	8.2	MGD	AADF

d. **Description of Effluent or Reclaimed Water Discharges (as reported by applicant)**

1) Outfall Serial Number D-002

Annual Average Daily Flow (MGD): 8.2 MGD

pH Range (Standard Units): 6.0 – 8.5

Pollutants which are present in significant quantities or which are subject to effluent or reclaimed water limitations are as follows:

Parameters	Reported Data	
	Maximum Daily Discharge	Average Daily Discharge
Flow Rate, MGD	8.148	5.23
Fecal Coliform Bacteria, #/100mL	450	8.6
pH (Minimum), su	6.7	-
pH (Maximum), su	7.5	-
CBOD5, mg/L	7.0	1.3

Parameters	Reported Data	
	Maximum Daily Discharge	Average Daily Discharge
Total Suspended Solids, mg/L	52.6	1.9
Ammonia Nitrogen, mg/L	0.84	0.13
TKN, mg/L	5.1	1.06
Nitrate + Nitrite, mg/L	2.7	0.607
Total Phosphorus, mg/L	0.77	0.21
Dissolved Oxygen, mg/L	6.7	-
Total Nitrogen, mg/L	5.6	1.7
Total Dissolved Solids, mg/L	434	361
Oil & Grease, mg/L	1.2	1.0

3. PROPOSED EFFLUENT OR RECLAIMED WATER LIMITATIONS

Surface Water Outfall Serial Number D-002:

Parameters	Effluent or Reclaimed Water Limitations					
	Units	Maximum/ Minimum	Annual Average	Monthly Average	Weekly Average	Single Sample
Total Flow from WWTP	MGD	Maximum	8.2	-	-	-
Carbonaceous Biochemical Oxygen Demand (5 day)	mg/L	Maximum	5.0	6.3	7.5	10.0
Total Suspended Solids	mg/L	Maximum	5.0	6.3	7.5	10.0
pH	s.u.	Range	-	-	-	6.0 to 8.5
Fecal Coliform Bacteria	#/100 mL	Maximum	See below			
Copper, Total Recoverable	mg/L	Maximum	See below			
Zinc, Total Recoverable	ug/L	Maximum	See below			
Total Nitrogen	mg/L	Maximum	3.0	3.8	4.5	6.0
Total Phosphorus	mg/L	Maximum	1.0	1.3	1.5	2.0
Dissolved Oxygen	mg/L	Minimum	-	-	-	5.0
Ultraviolet Light Intensity	mW/cm2	Maximum	Report	Report	Report	Report
Ammonia Nitrogen	mg/L	Maximum	1.6	2.0	2.4	3.2
Wastewater Transmittance	%	Maximum	-	-	-	Report
UV Dosage	mWs/cm2	Maximum	-	-	-	25 (Min)
7-day Chronic Static Renewal - Daphnia (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	-	-	-	NOEC> 100%
7-day Chronic Static Renewal - Fathead Minnow (<i>Pimephales promelas</i>)	% effluent	Minimum	-	-	-	NOEC> 100%

D-002:

The arithmetic mean of the monthly fecal coliform values collected during an annual period shall not exceed 200 per 100 mL of reclaimed water sample. "Arithmetic mean" means the value computed by dividing the sum of a set of terms by the number of terms. The geometric mean of

the fecal coliform values for a minimum of 10 samples of reclaimed water, each collected on a separate day during a period of 30 consecutive days (monthly), shall not exceed 200 per 100 mL of sample. No more than 10 percent of the samples collected (the 90th percentile value) during a period of 30 consecutive days shall exceed 400 fecal coliform values per 100 mL of sample. Any one sample shall not exceed 800 fecal coliform values per 100 mL of sample. Note: To report the 90th percentile value, list the fecal coliform values obtained during the month in ascending order. Report the value of the sample that corresponds to the 90th percentile (multiply the number of samples by 0.9). For example, for 30 samples, report the corresponding fecal coliform number for the 27th value of ascending order. [62-600.440(4)(c), 12-24-96]

Total recoverable zinc (Zn) shall be monitored monthly and reported on a Discharge Monitoring Report (DMR), form DEP 62-620.910(10). The applicable water quality criterion for Zinc (Zn) are calculated using the equation below.

The daily maximum limitation for total recoverable zinc (Zn) shall not exceed the amount resulting from the following equation:

$$\text{ug/l Zn} \leq e^{(0.8473[\text{LnH}] + 0884)} \quad [\text{Rules 62-302.300, 62-302(24), 62-302.530(40), 62-302.530(71).FAC}]$$

The term “LnH” is the natural logarithm of the total hardness, expressed as mg/l CaCO₃. The total hardness and the above recoverable metals shall be monitored concurrently. The total hardness value resulting from monitoring requirements of Part I.A.1. shall be used to determine the zinc and copper limits. The equations can only be applied for hardness in the range of 25 to 400 mg/l as CaCO₃. If the effluent analysis reveals a total hardness less than 25 mg/l CaCO₃ or greater than 400 mg/l CaCO₃, use 25 mg/l or 400 mg/l respectively, for the total hardness in the equations to calculate each total recoverable metal limitation. [Rule 62-302.530 FAC]

Total recoverable copper (Cu) shall be monitored monthly and reported on a Discharge Monitoring Report (DMR), form DEP 62-620.910(10). The applicable water quality criterion for copper (Cu) are calculated using the equation below.

The daily maximum limitation for total recoverable copper (Cu) shall not exceed the amount resulting from the following equation:

$$\text{ug/l Cu} \leq e^{(0.8545[\text{LnH}] - 1.702)}$$

[Rules 62-302.300, 62-302.530(24), 62-302.530(40), 62-302.530(71).FAC]

The daily maximum limits calculated above are final limits. Concentrations measured in any effluent sample that exceed those values derived using the equations above shall be considered a violation the conditions of this permit and will be subject to enforcement actions pursuant to Chapter 403 , Florida Statutes, and Chapter 62-620, Florida Administrative Code. [Rule 62-620.620 FAC]

The WQBEL Level I Study was conducted pursuant to Rules 62-600.430 and 62-650, Florida Administrative Code (F.A.C.). The WQBEL Level I Study confirmed the previous final effluent limits for this receiving wetland permit of:

Flow	8.2 MGD	(Annual Average)
CBOD ₅	5 mg/L	(Annual Average)
TSS	5 mg/L	(Annual Average)
TN	3 mg/L	(Annual Average)
Ammonia Nitrogen	1.6 mg/L	(Annual Average)
TP	1 mg/L	(Annual Average)
DO	5 mg/L	(minimum)

It is recommended that the Level I WQBEL documentation be accepted for the renewal of this permit. The proposed permit has a re-opener clause (Condition I.D.10) that will reopen the permit to adjust effluent limitations or monitoring requirements should future wasteload allocation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement.

Effluent Testing Information - Applicants is required to provide data from a minimum of three samples taken within four and one-half years prior to the date of the permit application. Values must be representative of the seasonal variation in the discharge from each outfall or represent best engineering estimates for proposed treatment or disposal systems. Existing data may be used, if available, in lieu of sampling done solely for the purpose of this application.

Three seasonal samplings were performed by the applicant. The only parameters of concern was copper and zinc. Copper and zinc were in the previously issued permit and are recommended to remain in this permit due to the results of the three seasonal sampling events. It should be noted that the results for these parameters did not indicate exceedances of the surface criteria but were detected and should be monitored for continued compliance.

Receiving Wetland Monitoring – Monitoring station WIM-05 (N-3) has been deleted. Due to the stated effects of Hurricanes Ivan, Katrina and Dennis on monitoring station WIM-05 (N-3), it will be recommended that this station be deleted from the wetland monitoring requirements. However, the information that was obtained from monitoring station WIM-05 (N-3) has been shifted to another location. Specifically, the requirements for sediment sampling and vegetation & fish sampling. To satisfy these concerns it is recommended that sediment sampling and vegetation & fish sampling be added to monitoring station WIM-06 (N4).

The Receiving Wetland Monitoring plan has also been modified to exclude station WIM-04 (N-2) from further monitoring for chemistry, surface water level and biological sampling. The chemistry and the surface level sampling requirements at station WIM-04 has been moved to station WIM-09 (N-1). In addition, a modification in the ground water well wetland monitoring plan has been modified to exclude intermediate wells MWI-1 and MWI-2. The decision is based on the following:

1. The inaccessibility of station WIM-04.
2. The monitoring for chemistry, surface water and biological sampling will occur at Station WIM-09 and will replace station WIM-04.
3. Well MWI-2 has a problem. The concrete case cap has become undermined and caved into a hole that surrounds most of the steel well case.
4. Wells MWI-1 and MWI-2 are located on a mound that has become an island completely surrounded by standing water. The mound is perforated with holes, caused by a previously residing gopher tortoise; with some of the holes being 3 feet deep. Rain can now penetrate into the MWI-2 packing material surrounding the well causing and possibly contaminate the monitoring well samples.
5. Quality control during the sampling events for the MWI-1 and MWI-2 have become risky due to the remoteness, the muddy conditions, and the real danger of personnel becoming injured from falling into new or existing holes in the mound. Both wells are located together generally in the south –central portion of the northern wetlands.

4. **BASIS FOR EFFLUENT AND RECLAIMED WATER LIMITS AND MONITORING REQUIREMENTS (INCLUDING EFFLUENT MONITORING REQUIREMENTS)**

- a. Outfall D-002 (WWTP to Receiving Wetlands):

Parameter	Limit	Basis	Rationale
Oxygen, Dissolved (DO) (mg/L)	5.0	Single Sample Min.	62-302.530(31) FAC

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Parameter	Limit	Basis	Rationale
Ultraviolet Light Intensity (mW/cm ²)	Report Report Report Report	Annual Average Monthly Average Weekly Average Single Sample Max.	62-302 FAC 62-302 FAC 62-302 FAC 62-302 FAC
Nitrogen, Ammonia, Total as NH ₄ (mg/L as NH ₄)	1.6 2.0 2.4 3.2	Annual Average Monthly Average Weekly Average Single Sample Max.	62-600.740(1)(b)2.a. FAC 62-611.420(3) FAC 62-600.740(1)(b)2.c. FAC 62-600.740(1)(b)2.d. FAC
Phosphorus, Total (as P) (mg/L)	1.0 1.3 1.5 2.0	Annual Average Monthly Average Weekly Average Single Sample Max.	62-611.420(2) FAC 62-600.740(1)(b)2.b. FAC 62-600.740(1)(b)2.c. FAC 62-600.740(1)(b)2.d. FAC
Nitrogen, Total (mg/L)	3.0 3.8 4.5 6.0	Annual Average Monthly Average Weekly Average Single Sample Max.	62-611.420(2) FAC 62-600.740(1)(b)2.b. FAC 62-600.740(1)(b)2.c. FAC 62-600.740(1)(b)2.d. FAC
Ammonia, Total (mg/L)	2.0	Monthly Average	62-611.420(3) FAC
7-day Chronic Static Renewal - Pimephales promelas (% effluent)	NOEC < 100%	Single Sample Min.	62-302.530(21) FAC
7-day Chronic Static Renewal – Ceriodaphnia dubia (% effluent)	NOEC < 100%	Single Sample Min.	62-302.530(21) FAC
pH (s.u.)	6.0 to 8.5	Minimum and Maximum	62-302.530(52) FAC
Coliform, Fecal (#/100ml)	200 200 400 800	Annual Average Monthly Average 90 th Percentile Single Sample Max.	62-600.440(4)(c)1. FAC 62-600.440(4)(c)2. FAC 62-600.440(4)(c)3. FAC 62-600.440(4)(c)4. FAC
Solids, Total Suspended (mg/L)	5.0 6.3 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample Max.	62-611.420(2) FAC 62-600.740(1)(b)2.b. FAC 62-600.740(1)(b)2.c. FAC 62-600.740(1)(b)2.d. FAC
BOD, Carbonaceous 5 day, 20C (mg/L)	5.0 6.3 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample Max.	62-611.420(2) FAC 62-600.740(1)(b)2.b. FAC 62-600.740(1)(b)2.c. FAC 62-600.740(1)(b)2.d. FAC
Flow, in conduit or thru treatment plant (MGD)	8.2	Annual Average	62-600.400(3)(b) FAC
Copper, Total Recoverable, (mg/L)	$\text{Cu} \leq e$ (0.8545 ¹ lnH) – 1.702)	Single Sample Max.	62-302.530(24) FAC
Zinc, Total Recoverable, (ug/L)	$\text{Zn} \leq e$ (0.8473 ¹ lnH) + 0884)	Single Sample Max.	62-302.530(71) FAC

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b. Outfall D-003 (Within and From Receiving Wetlands to Class III):

Parameter	Limit	Annual Average	Rationale
Nitrogen, Total (mg/L)	3.0	Annual Average	62-611.450(1) FAC
Total Nitrogen, Ammonia, unionized (as N) (mg/L)	0.02	Annual Average	62-611.450(1) FAC
Phosphorus, Total (as P) (mg/L)	0.2	Annual Average	62-611.450(1) FAC
Stream Stage (feet)	Report	Single Sample Max.	62-611 FAC & BPJ
Water Level at samp. collection time (feet)	Report	Single Sample Max.	62-611 FAC & BPJ
Solids, Total Suspended (mg/L)	Report	Single Sample Max.	62-600.440(5)(f)3. FAC
Coliform, Fecal (#/100ml)	Report	Single Sample Max.	62-600.440(5)(f)2. FAC
pH (s.u.)	Report	Minimum and Maximum	62-302.530(52) FAC
Temperature, Water (deg C)	Report	Single Sample Max.	62-611.700(1) FAC
Oxygen, Dissolved (DO) (mg/L)	Report	Single Sample Min.	62.611.700(1) FAC
Nitrogen, Total Kjeldahl as N (mg/L as N)	Report	Single Sample Max.	62.611.700(1) FAC
BOD, Carbonaceous 5 day, 20C (mg/L)	Report	Single Sample Max.	62-600.740(1)(b)2.d. FAC
Specific conductance, Field (umhos/cm)	Report	Single Sample Max.	62-611.700(1) FAC
NO2+NO3, Total 1 DET. as N (mg/L as N)	Report	Single Sample Max.	62-611.700(1) FAC
Sulfide (mg/L as S)	Report	Single Sample Max.	62-611.700(1) FAC
Sulfate, Total as SO4 (mg/L as SO4)	Report	Single Sample Max.	62-611.700(1) FAC
Chlorophyll-A, Phytoplankton, Fluorometric Method (mg/cu. meter)	Report	Single Sample Max.	62-611.700(1) FAC
Nitrogen, Ammonia, Total as NH3 (mg/L as N)	Report	Single Sample Max.	62-611.700(1) FAC
Flow Readings (MGD)	Report	Continuous	62-611.700(1) FAC

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c. Other Limitations and Monitoring Requirements:

Parameter	Limit	Basis	Rationale
Solids, Total Suspended (mg/l)	Report	Monthly Average	62-601.300(1) FAC
BOD, Carbonaceous 5 day, 20C (mg/l)	Report	Monthly Average	62-601.300(1) FAC
Percent Capacity, (TMADF/Permitted Capacity) x 100 (%)	Report	Monthly Average	62-600.405(4) FAC
Monitoring Frequency and Sample Type	-	All Parameters	62-601 FAC & 62-699 FAC and/or BPJ of permit writer
Sampling Location	-	All Parameters	62-601, 62-610.412, 62-610.463(1), 62-610.568, 62-610.613 FAC and/or BPJ of permit writer

5. **BACKGROUND**

A review of Bayou Marcus Water Reclamation Facility's files has revealed the following background information:

Domestic Wastewater Permit FL0031801 was issued on June 10, 1996. The expiration date is June 1, 2001. On October 26, 2006, the Department conducted a Compliance Sampling Inspection (CSI) of the E.C.U.A. Bayou Marcus Water Reclamation Facility. The facility was operating satisfactorily at the time of the inspection. All areas evaluated during the inspection were rated in compliance. The only exception was Operation & Maintenance (minor), Effluent Quality (out of compliance) and Groundwater (minor):

Operation & Maintenance (minor): According to facility records staffing requirements are being met. The weir plates on Clarifier #2 need to be repaired or replaced. Two of the facility's sand filters were not in operation and this was noted in the previous inspection. Immediate steps should be taken to repair or replace the sand filters.

Effluent Quality (out of compliance): DMR's were reviewed for the months of December 2005 – July 2006 and the following excursions were noted:

Date	Parameter	Result	Limit
12 – 7 - 2005	TSS (Max.)	12.8 mg/L	10 mg/L
12 – 11 - 2005	TSS (Max.)	51.6 mg/L	10 mg/L
12 – 2005	TSS (Wk. Avg.)	13.6 mg/L	7.5 mg/L
2 – 7 - 2006	TSS (Max.)	33.8 mg/L	10 mg/L
2 – 2006	TSS (Wk. Avg.)	8.1 mg/L	7.5 mg/L
2 – 6 - 2006	Copper	14 ug/L	12 ug/L

Groundwater (minor): Groundwater monitoring reports (GMR's) were reviewed for the 4th quarter of 2005 – 2nd quarter of 2006 and the following excursions were noted:

Date	Well #	Parameter	Result	Limit
10 – 4 – 2005	MWC-9	TDS	2,740 mg/L	500 mg/L
10 – 4 – 2005	MWC-9	Chloride	1,700 mg/L	250 mg/L
10 – 4 – 2005	MWC-10	TDS	2,006 mg/L	500 mg/L

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10 – 4 – 2005	MWC-10	Chloride	1,165 mg/L	250 mg/L
2 – 25 - 2005	MWC-9	TDS	742 mg/L	500 mg/L
2 – 25 - 2005	MWC-9	Chloride	405 mg/L	250 mg/L
2 – 25 - 2005	MWC-10	TDS	536 mg/L	500 mg/L
2 – 25 - 2005	MWC-10	Chloride	265 mg/L	250 mg/L
6 – 1 - 2006	MWC-9	TDS	555 mg/L	500 mg/L
2 – 1 - 2007	MWC-9	TDS	789 mg/L	500 mg/L
2 – 1 - 2007	MWC-9	Chloride	370 mg/L	250 mg/L

Facility noted that the above wells were submerged by Hurricane Katrina. Therefore, it can be assumed that the high TDS & chloride was caused by Hurricane Katrina and no corrective action is warranted.

Toxicity testing on the final effluent has been conducted from 1/11/2001 to 1-/17/2005 in accordance with the requirements of the operating permit. During this time, the permittee has successfully passed all toxicity tests with the following exceptions:

3/15/2001	Ceriodaphnia dubia	25 % (survival)	25 % (reproduction)	test failure
3/26/2001	Ceriodaphnia dubia	32 % effluent, follow-up diazinon toxicity confirmed		

9/9/2003 Test data not interpretable due to biological interference with both test species. A retest was conducted 9/23/2003 which both species passed.

September 2004 testing was not possible due to effects from Hurricane Ivan.

The Capacity Analysis Report has concluded that the annual average flow to the Bayou Marcus WRF should not reach the permitted capacity of 8.2 MGD within the ten years. However, the Southern Wetland (350 acres) is not constructed and the Northern Wetland (only 642 acres). The portioned discharge capacity of the Northern portion of the receiving wetlands is 5.3 MGD AADF. The portioned discharge capacity of the Southern portion of the receiving wetlands is 2.9 MGD AADF. It should be noted that the average daily flow to the Northern Wetland is 5.23 MGD. As such, it is recommended that the permittee be required to do the following:

- o Expand the discharge structure for the southern portion (350 acres) of the receiving wetlands (Zones 10 thru 13) or/and
- o Submit an application to re-rate the northern and/or southern wetlands.

Since time is required to complete the task previously mentioned, an administrative order is attached to allow the permitted to resolve the flow issue to the wetlands.

6. RESIDUALS MANAGEMENT

The residuals are transported to E.C.U.A. Main Street WWTP for proper treatment and disposal.

7. GROUND WATER MONITORING REQUIREMENTS

Ground water monitoring has been carried out as a part of the on-going monitoring of the wetlands. These are all located in the northern distribution area of the wetlands – Zones 1 through 6 and 9 (Zones 7 and 8 have not been constructed). Monitoring wells MW-11 through MW-13 will be installed and monitored when the future construction of the southern distribution area of the wetlands (Zones 10 through 13) has been completed.

Samples have been taken from the ground water monitoring wells on a quarterly basis in accordance with current FDEP permit requirements. The Total Dissolved Solids (TDS) in monitoring wells MW-9 and MW-10 have periodically exceeded the Secondary Drinking Water Standard of 500 mg/L.

8. INDUSTRIAL PRETREATMENT REQUIREMENTS

The permittee has an active, approved industrial pretreatment program. The permit includes standard conditions requiring implementation and enforcement of the existing program.

9. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

No variances were requested for this facility.

**10. NEW OR EXPANDED DISCHARGES TO SURFACE WATERS;
ANTIDEGRADATION REQUIREMENTS**

This is an existing source. Therefore, an antidegradation demonstration is not necessary to re-permit this discharge to existing receiving wetlands.

**11. EFFECTS OF SURFACE WATER DISCHARGE ON THREATENED OR
ENDANGERED SPECIES**

The Department does not anticipate adverse impacts on threatened or endangered species as a result of permit issuance.

12. SCHEDULES FOR IMPROVEMENT ACTIONS, CONSTRUCTION

A compliance schedule for this facility is contained in Administrative Order AO048NW which is hereby incorporated by reference.

The following construction schedule for the facilities shall be followed, unless a minor permit revision is issued to amend the schedule:

Implementation Step		Completion Date
1	Complete construction of discharge structures for the Southern Wetlands.	24 months
2	Begin disposal of reclaimed water to the Southern Wetlands.	24 months
3.	Filter replacement project.	Twelve (12) months from issuance of this permit.

The permitted should demonstrate compliance with the new flow limitation within two years from the date of issuance of this administrative order and the permit (PA FILE No. FL0031801-003-DW1P/NR).

The Bayou Marcus Water Reclamation Facility (WRF) is an existing permitted WRF with a permitted discharge of 8.2 MGD AADF to the Northern portion (642 acres) of the receiving wetlands and Southern receiving wetlands portion (350 acres). The Northern and Southern wetlands permitted capacity has been proportioned by acres in the renewal permit. The proportioned discharge capacity of the Northern portion of the receiving wetlands is 5.3 MGD AADF (642 acres). The proportioned discharge capacity of the Southern portion of the receiving wetlands is 2.9 MGD AADF (350 acres).

Emerald Coast Utilities Authority should be allowed a reasonable amount of time to comply with the new flow capacity requirements for the Northern and Southern wetlands. The Southern Wetland (350 acres) is not constructed. Therefore, time is required to do the following:

- o Expand the discharge structure for the southern portion (350 acres) of the receiving wetlands (Zones 10 thru 13) or/and

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- o Submit an application and obtain a Department permit to re-rate the northern and/or southern wetlands.

Under Section 403.0885(2), Florida Statutes, the Department has the power and authority to implement the NPDES program in a manner that is consistent with the Federal Clean Water Act.

The Administrative Order AO048NW states Emerald Coast Utilities Authority shall demonstrate compliance with the new flow limitation within two years from the date of issuance of this administrative order and the permit (PA FILE No. FL0031801-003-DW1P/NR). During the interim time period, the flow limitation annually will be report only.

13. **APPLICABLE RULES**

The following were used as the basis of the permit limitations/conditions:

- | a. | FAC refers to various portions of the Florida Administrative Code.

The effective dates of FAC Rule Chapters cited in the table are as follows:

<table><thead><tr><th><u>Chapter</u></th><th><u>Effective Date</u></th></tr></thead><tbody><tr><td>62-4</td><td>10-22-00</td></tr><tr><td>62-302</td><td>12-26-96</td></tr><tr><td>62-520</td><td>12-09-96</td></tr><tr><td>62-550</td><td>08-01-00</td></tr><tr><td>62-600</td><td>12-24-96</td></tr><tr><td>62-601</td><td>12-24-96</td></tr><tr><td>62-610</td><td>08-08-99</td></tr><tr><td>62-611</td><td>12-26-96</td></tr><tr><td>62-620</td><td>10-23-00</td></tr><tr><td>62-625</td><td>01-08-97</td></tr><tr><td>62-640</td><td>03-30-98</td></tr><tr><td>62-650</td><td>12-24-96</td></tr><tr><td>62-699</td><td>05-20-92</td></tr></tbody></table> | <u>Chapter</u> | <u>Effective Date</u> | 62-4 | 10-22-00 | 62-302 | 12-26-96 | 62-520 | 12-09-96 | 62-550 | 08-01-00 | 62-600 | 12-24-96 | 62-601 | 12-24-96 | 62-610 | 08-08-99 | 62-611 | 12-26-96 | 62-620 | 10-23-00 | 62-625 | 01-08-97 | 62-640 | 03-30-98 | 62-650 | 12-24-96 | 62-699 | 05-20-92 |
|----------------|---|----------------|-----------------------|------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|
| <u>Chapter</u> | <u>Effective Date</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-4 | 10-22-00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-302 | 12-26-96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-520 | 12-09-96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-550 | 08-01-00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-600 | 12-24-96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-601 | 12-24-96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-610 | 08-08-99 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-611 | 12-26-96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-620 | 10-23-00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-625 | 01-08-97 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-640 | 03-30-98 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-650 | 12-24-96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62-699 | 05-20-92 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b. | FS refers to various portions of the Florida Statutes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| c. | CFR refers to various portions of the Code of Federal Regulations, Title 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| d. | BPJ refers to Best Professional Judgment | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

13. **Department CONTACT**

Additional information concerning the permit may be obtained during normal business hours from:

Jonathan May
Engineer IV
Department's Northwest District Office
Florida Dept. of Environmental Protection, 160 Governmental Center
Pensacola, FL, FL 32501 - 5794
Telephone Number: (850) 595-8300, Extension 1167
Fax Number: (850) 595-8393

14. **THE ADMINISTRATIVE RECORD**

The administrative record including application, draft permit, fact sheet, public notice (after release), comments received and additional information is available for public inspection during normal business hours at the location specified in item 13.

15. **PROPOSED SCHEDULE FOR PERMIT ISSUANCE**

Draft permit to Applicant and EPA :	September 12, 2007
Beginning of Proposed Public Comment Period :	September 12, 2007
End of Proposed Public Comment Period :	October 20, 2007
Proposed permit to Applicant and EPA :	October 30, 2007
Notice of Agency Action :	November 30, 2007
Proposed Issuance Date of Permit :	November 30, 2007