			GOLF POWER COMPANY
	2		Before the Florida Public Service Commission Prepared Direct Testimony of
	_		James O. Vick
	3		Docket No. 110007-EI
	4		August 26, 2011
	5	Q.	Please state your name and business address.
	6	A.	My name is James O. Vick, and my business address is One Energy
	7		Place, Pensacola, Florida, 32520.
	8		
	9	Q.	By whom are you employed and in what capacity?
	10	A.	I am employed by Gulf Power Company as the Director of Environmental
	11		Affairs.
	12		
	13	Q.	Mr. Vick, will you please describe your education and experience?
	14	A.	I graduated from Florida State University, Tallahassee, Florida, in 1975
	15		with a Bachelor of Science Degree in Marine Biology. I also hold a
	16		Bachelor's Degree in Civil Engineering from the University of South Florida
	17		in Tampa, Florida. In addition, I have a Masters of Science Degree in
	18		Management from Troy State University, Pensacola, Florida. I joined Gulf
	19		Power Company in August 1978 as an Associate Engineer. I have since
	20		held various engineering positions with increasing responsibilities such as
	21		Air Quality Engineer, Senior Environmental Licensing Engineer, and
	22		Manager of Environmental Affairs. In 2003, I assumed my present
6	23		position as Director of Environmental Affairs.
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1	Q.	What are your responsibilities with Gulf Power Company?
2	A.	As Director of Environmental Affairs, my primary responsibility is
3		overseeing the activities of the Environmental Affairs section to ensure the
4		Company is, and remains, in compliance with environmental laws and
5		regulations, i.e., both existing laws and such laws and regulations that
6		may be enacted or amended in the future. In performing this function, I
7		have the responsibility for numerous environmental activities.
8		
9	Q.	Are you the same James O. Vick who has previously testified before this
0		Commission on various environmental matters?
1	A.	Yes.
2		
13	Q.	Mr. Vick, what is the purpose of your testimony?
14	Α.	The purpose of my testimony is to support Gulf Power Company's
15		projection of environmental compliance costs recoverable through the
16		Environmental Cost Recovery Clause (ECRC) for the period from January
17		2012 through December 2012.
18		
19	Q.	Have you prepared an exhibit that contains information to which you will
20		refer in your testimony?
21	A.	Yes, my exhibit consists of the Plant Crist NPDES Permit.
22		Counsel: We ask that Mr. Vick's exhibit
23		consisting of the plant Crist NPDES Permit
24		be marked as Exhibit No (JOV-1).

25

- 1 Q. Mr. Vick, please identify the capital projects included in Gulf's ECRC projection filing.
- Α. The environmental capital projects for which Gulf seeks recovery through 3 the ECRC are described in Schedules 3P, 4P, and 5P. I am supporting 4 5 the expenditures, clearings, retirements, salvage and cost of removal 6 currently projected for each of these projects and the costs for emission allowances. Mr. Dodd compiled these schedules and has calculated the 7 8 associated revenue requirements for Gulf's requested recovery. Of the projects shown on Mr. Dodd's schedules, there are six projects that were 9 previously approved by the Commission with activities that have projected 10 capital expenditures during 2012. Five of the projects are related to Gulf's 11 existing Air Quality programs: the Crist 5, 6, & 7 Precipitator Projects, 12 Crist FDEP Agreement for Ozone Attainment, the CAIR/CAMR/CAVR 13 Compliance Program, Seasonal NOx Allowances, and Annual NOx 14 Allowances. The Smith Reclaimed Water Project is also projected to have 15 capital expenditures during 2012. 16

17

- 18 Q. Mr. Vick, please describe the project included in the 2012 projection for (Line Item 1.2) the Crist 5, 6, & 7 Precipitator Projects.
- 20 A. The Plant Crist Unit 6 precipitator project was originally undertaken in the
 21 early 1990's and approved for environmental cost recovery in Docket No.
 22 930613-EI. Inspections of the Crist Unit 6 precipitator have indicated the
 23 precipitator internals will need to be replaced. Plant Crist will complete
 24 detailed design and award the construction bid package in 2011 and the

25

j		major equipment is expected to be delivered in the Fall of 2011. This
2		project is expected to be completed in the Spring of 2012. The projected
3		2012 expenditures for this line item are \$25 million.
4		
5	Q.	Mr. Vick, please describe the capital project included in Gulf's Crist FDEP
6		Agreement for Ozone Attainment (Line item 1.19) that will impact the
7		2012 projected ECRC revenue requirements.
8	Α.	Gulf plans to replace one layer of the Plant Crist Unit 7 SCR catalyst
9		during 2012. The projected 2012 expenditures for this line item are \$1.8
10		million.
11		
12	Q.	Mr. Vick, please describe the capital projects included in Gulf's
13		CAIR/CAMR/CAVR Compliance Program (Line Item 1.26) that will impact
14		the 2012 projected ECRC revenue requirements.
15	A.	For the purpose of the 2012 projection of ECRC revenue requirements in
16		Mr. Dodd's testimony, \$229 million is projected to be cleared to plant-in-
17		service for the CAIR/CAMR/CAVR Compliance Program. The projected
18		expenditures are primarily related to the completion of the Plant Crist Unit
19		6 SCR that will be placed-in-service during the Spring of 2012. Also, as
20		part of the Crist Scrubber project, costs related to the Plant Crist Unit 6
21		and 7 turbine upgrades will be placed in-service in 2012.
22		
23	Q.	Mr. Vick, are you including the purchase of allowances in your 2012

Yes, we are currently projecting the need to purchase additional annual

projection filing?

24

25

A.

and seasonal NOx allowances under the CAIR replacement rule, the Cross-State Air Pollution Rule (CSAPR), during 2012. Gulf's compliance strategy continues to include possible forward contracts, swaps, and spot market purchases of allowances depending on market prices.

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- 6 Q. Mr. Vick, please provide an update on the Smith Reclaimed Water Project (Line item 1.17).
 - The Smith Reclaimed Water Project is part of the Smith Water Conservation and consumptive use efficiency program required by the Plant Smith consumptive water use permit. Gulf must determine a suitable method to dispose of beneficially used reclaimed water prior to agreeing to accept reclaimed water from suppliers in the Bay County area. Gulf is continuing to investigate the feasibility of utilizing an underground injection well to dispose of used reclaimed water at Plant Smith. Based on the findings of geophysical logs, testing of the deep subsurface intervals later this year and preliminary testing of the upper formation materials, Gulf will make a final determination on whether to move forward with the Plant Smith Reclaimed Water project. If it is determined that the project should be pursued, additional activities such as the installation of additional shallow well(s), monitoring well(s) and the initiation of design of support equipment for the injection of spent fluids into the subsurface would take place. The support equipment necessary for this activity would include but not be limited to the injection pump system, tanks, and piping systems. The projected 2012 expenditures for this line item are \$3.5 million.

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1	Q.	Mr. Vick, are there any other capital projects that you would like to
2		discuss?

Yes, as discussed in the 2011 Compliance Plan Update, if the Utility MACT requirements expected to be released in November 2011 are consistent with the proposed rule, Gulf Power may be required to install additional emission control equipment as early as 2015. Even with a possible one-year extension of the compliance deadline it will be difficult if not impossible to install all of the necessary controls in time. To attempt to install additional controls, such as baghouses, by 2015-2016, Gulf Power would need to begin making capital expenditures in 2012. Gulf projects expenditures of approximately \$25 million in 2012 for compliance activities related to the Utility MACT rule. This project qualifies for AFUDC treatment and therefore is not included in Gulf's projected 2012 ECRC factor. The Utility MACT rule should be final in late 2011 and at that time, Gulf will review the final rule to determine the most effective compliance strategy.

Α.

How do the Environmental Operation and Maintenance (O&M) activities
listed on Schedule 2P of Mr. Dodd's Exhibit compare to the O&M activities
approved for cost recovery in past ECRC proceedings?

A. All of the O & M activities listed on Schedule 2P have been approved for recovery through the ECRC in past proceedings, except for the Impoundment Integrity Inspections project that is included in the previously approved General Water Quality Program, Line Item 1.6.

1	Q.	Please describe the O&M activities included in the air quality category that
2		have projected expenses during 2012.

There are five O&M activities included in the air quality category that have projected expenses in 2012. On Schedule 2P, Air Emission Fees (Line Item 1.2), represents the expenses projected for the annual fees required by the Clean Air Act Amendments (CAAA) of 1990 that are payable to the FDEP and Mississippi Department of Environmental Quality. The expenses projected for the 2012 recovery period total \$825,374. Included in the air quality category, Title V (Line Item 1.3) represents projected ongoing expenses associated with implementation of the Title V permits. The total 2012 estimated expenses for the Title V Program are \$121,936.

On Schedule 2P, Asbestos Fees (Line Item 1.4) consists of the fees required to be paid to the FDEP for asbestos abatement projects. The expenses projected for the recovery period total \$1,400.

Emission Monitoring (Line Item 1.5) on Schedule 2P reflects an ongoing O&M expense associated with the Continuous Emission Monitoring equipment as required by the CAAA. These expenses are incurred in response to EPA's requirements that the Company perform Quality Assurance/Quality Control (QA/QC) testing for the CEMS, including Relative Accuracy Test Audits (RATAs) and Linearity Tests. The expenses expected to be incurred during the 2012 recovery period for these activities total \$640,443.

The FDEP NOx Reduction Agreement (Line Item 1.19) includes

O&M costs associated with the Plant Crist Unit 7 SCR and the Crist Units

Α.

4 through 6 Selective Non-Catalytic Reduction (SNCR) projects that were included as part of the 2002 agreement with FDEP. This line item includes the cost of anhydrous ammonia, urea, air monitoring, and general O&M expenses related to the activities undertaken in connection with the agreement. Gulf was granted approval for recovery of the costs incurred to complete these activities in FPSC Order No. PSC-02-1396-PAA-EI in Docket No. 020943-EI. The projected expenses for the 2012 recovery period total \$1,673,050.

Α.

Q. What O&M activities are included in the water quality category?

General Water Quality (Line Item 1.6), identified in Schedule 2P, includes costs associated with Soil Contamination Studies, Dechlorination, Groundwater Monitoring, Surface Water Studies, the Cooling Water Intake Program, the Impaired Waters Rule, and Storm Water Maintenance. The expenses expected to be incurred during the projection period for this line item totals \$898,066 which includes \$127,000 for the new Impoundment Integrity Inspection project discussed below.

The Plant Crist NPDES permit renewal issued during January of 2011, provided as Schedule 1 of my Exhibits, requires that a qualified person with knowledge and training in impoundment integrity inspect all ash impoundments at Plant Crist annually. The permit requires that summarized findings of all monitoring activities, inspections, and corrective actions pertaining to the impoundment integrity, and operation and maintenance of all impoundments must be documented and kept onsite and made available to FDEP inspectors. All findings and corrective

1		actions related to impoundment integrity at Plant Crist must be complied
2		with per the permit condition.
3		
4	Q.	What other O&M activities are included in the water quality category?
5		Groundwater Contamination Investigation (Line Item 1.7) was previously
6		approved for environmental cost recovery in Docket No. 930613-El. This
7		line item includes expenses related to substation investigation and
8		remediation activities. Gulf has projected \$2,083,868 of incremental
9		expenses for this line item during the 2012 recovery period.
10		Line Item 1.8, State National Pollutant Discharge Elimination
11		System (NPDES) Administration, was previously approved for recovery in
12		the ECRC and reflects expenses associated with NPDES annual fees for
13		Gulf's three generating facilities in Florida. These expenses are expected
14		to be \$34,500 during the projected recovery period.
15		Finally, Line Item 1.9, Lead and Copper Rule, was also previously
16		approved for ECRC recovery and reflects sampling, analytical, and
17		chemical costs related to the lead and copper drinking water quality
18		standards. These expenses are expected to total \$16,480 during the
19		2012 projection period.
20		
21	Q.	What activities are included in the environmental affairs administration
22		category?
23	A.	Only one O&M activity is included in this category on Schedule 2P (Line
24		Item 1.10) of Mr. Dodd's exhibit. This line item refers to the Company's

25

Witness: James O. Vick

Environmental Audit/Assessment function. This program is an on-going

1		compliance activity previously approved for ECRC recovery. Expenses
2		totaling \$7,000 are expected during the 2012 recovery period.
3		
4	Q.	What O&M activities are included in the general solid and hazardous
5		waste category?
6	A.	This solid and hazardous waste activity involves the proper identification,
7		handling, storage, transportation, and disposal of solid and hazardous
8		wastes as required by federal and state regulations. The program
9		includes expenses for Gulf's generating and power delivery facilities. This
10		program is a previously approved program that is projected to incur
11		incremental expenses totaling \$457,994 in 2012.
12		
13	Q.	Are there any other O&M activities that have been approved for recovery
14		that have projected expenses?
15	A.	There are five other O&M activities that have been approved in past
16		proceedings which have projected expenses during 2012. They are the
17		Above Ground Storage Tanks program, the Sodium Injection System, the
18		CAIR/CAMR/CAVR Compliance Program, Crist Water Conservation, and
19		Emission Allowances.
20		
21	Q.	What O&M activities are included in the Above Ground Storage Tanks line
22		item?
23	A.	Above Ground Storage Tanks (Line Item 1.12) includes maintenance
24		activities and fees required by Florida's above ground storage tank
25		

1	regulation, Chapter 62 Part 762, F.A.C.	Expenses totaling \$162,457 a	₃re
2	projected to be incurred during 2012.		

3

- 4 Q. What activity is included in the Sodium Injection line item?
- 5 A. The Sodium Injection System (Line Item 1.16) was originally approved for
 6 inclusion in the ECRC in Order No. PSC-99-1954-PAA-EI. The activities
 7 in this line item involve sodium injection to the coal supply that enhances
 8 precipitator efficiencies when burning certain low sulfur coals at Plant Crist
 9 and Plant Smith. Expenses totaling \$74,000 are projected to be incurred
 10 during 2012 for this line item.

11

- Q. What activities are included in the CAIR/CAMR/CAVR Compliance Program (Line Item 1.20)?
- 14 A. This line item includes O&M expenses associated with the capital projects
 15 approved for ECRC recovery under the CAIR/CAMR/CAVR Compliance
 16 Program. The projected 2012 expenses for this line item total
 17 approximately \$16.4 million which includes \$7.9 million for limestone costs
 18 associated with operation of the Plant Crist scrubber.

19

- Q. What activities are included in the Crist Water Conservation line item (Line Item 1.22)?
- 22 A. The Crist Water Conservation line item includes general O&M expenses
 23 associated with the Plant Crist reclaimed water system, such as piping
 24 and valve maintenance and pump replacements. Expenses totaling
 25 \$156,000 are projected to be incurred during 2012 for this line item.

1	Q.	Please describe the emission allowance line items 1.24 through 1.26.
2	A.	These line items include projected allowance expenses for Gulf's
3		generation. Line Items 1.24 and 1.25 include projected expenses for
4		annual and seasonal NOx allowances of \$103,671 and \$1,719,025
5		respectively. Line Item 1.26 includes \$716,998 of projected expenses for
6		SO ₂ allowances.
7		
8	Q.	Do each of the capital projects and O&M activities that have
9		projected costs in 2012 meet the ECRC statutory guidelines?
10	Α.	Yes. The projects included in Gulf's 2012 ECRC projection filing meet the
11		requirements of the ECRC statute and are consistent with the
12		Commission's precedents regarding environmental cost recovery. Each of
13		the capital projects and O&M activities set forth in Mr. Dodd's schedules
14		include only prudent costs that are not recovered through some other cost
15		recovery mechanism or base rates. The projected environmental costs
16		are necessary to achieve and/or maintain compliance with environmental
17		laws, rules, and regulations.
18		
19	Q.	Mr. Vick, does this conclude your testimony?
20	A.	Yes.
21		
22		
23		
24		
25		



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Docket No. 110007-EI
Plant Crist NPDES Permit
Exhibit JOV-1, Page 1 of 63
Rick Scott
Governor

Jennifer Carroll Lt. Governor

Herschel Vinyard, Jr. Secretary

NOTICE OF PERMIT

CERTIFIED MAIL RETURN RECEIPT REQUESTED

In the Matter of an Application for Permit by:

Gulf Power Company James O. Vick One Energy Place Pensacola, Florida 32520

PA File No. FL0002275-013-IW1S Escambia County Crist Electric Generating Plant NPDES Permit No. FL0002275

Enclosed is Permit Number FL0002275 to operate the Crist Electric Generating Plant, issued under Chapter 403, Florida Statutes.

Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any.

Any party to this order (permit) has the right to seek judicial review of the permit action under Section 120.68, Florida Statutes, by the filing of a notice of appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when this document is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Director

Division of Water Resource Management

2600 Blair Stone Road

Tallahassee, FL 32399-2400

(850) 245-8336

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 01-26-2011 to the listed persons.

[Clerk Stamp]

FILING AND ACKNOWLEDGMENT

FILED, on this date, under section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Shirley Shields 01-26-2011 Clerk Date

Certified copies furnished to:

Mark Nuhfer, NPDES Permitting Section, EPA Region 4, Atlanta, GA Chairman, Board of Escambia County Commissioners Susan Kennedy, Q.E.P., Gulf Power Company Mike Markey, Gulf Power Company

Copies furnished by intradepartmental mail to:

David Morres, P.E., DEP Pensacola
Bill Armstrong, P.E., DEP Pensacola
Kim Allen, DEP Pensacola
Dawn Templin, P.E. DEP Pensacola
Nancy Ross, DEP Tallahassee
Michael Tanski, DEP Tallahassee
Justin Wolfe, Esq., DEP Tallahassee

Docket No. 110007-EI Plant Crist NPDES Permit Exhibit JOV-1, Page 3 of 63

STATE OF FLORIDA INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMITTEE:

Gulf Power Company

PERMIT NUMBER:

FL0002275 (Major) FL0002275-013-IW1S

FILE NUMBER: **ISSUANCE DATE:**

January 28, 2011 **EXPIRATION DATE:** January 27, 2016

RESPONSIBLE OFFICIAL:

James O. Vick One Energy Place Pensacola, Florida 32520 (850) 444-6429

FACILITY:

Crist Electric Generating Plant End of Pate Road, off Ten Mile Road Pensacola, FL 32414 Escambia County

Latitude: 30° 33' 54.57" N

Longitude: 87° 13' 33.41" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.) and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

FACILITY DESCRIPTION:

This facility consists of seven coal-fired steam electric generating units (Units 1-7). Units 1-3 are currently retired and Units 4-7 are in use. The total nameplate capacity is 930 megawatts (MW) with a gross generation capacity of 994 MW. Units 4 and 5 use once-through cooling water (OTCW) for condenser cooling. A once-through helper cooling tower located at the discharge canal may be operated during the summer months (based on discharge temperature) to lower the temperature of the combined once-through cooling water discharge.

The closed-loop cooling tower systems for Units 6 and 7 use either reclaimed water from the Emerald Coast Utilities Authority (ECUA) Central Water Reclamation Facility (CWRF), FLA559351, or water from the Escambia River as makeup water. When river water is used as makeup for the Units 6 and 7 cooling towers, blowdown is discharged to the ash pond. When reclaimed water from ECUA is used as makeup for the Units 6 and 7 cooling towers, a portion of the blowdown (spent reclaimed water) from the cooling towers is used as process water for the flue gas desulfurization (FGD) system, and the remaining portion is returned to the headworks of the ECUA CWRF via the sanitary sewer collection system. During cooling tower outages, reclaimed water is used in the Units 4 and 5 OTCW systems.

WASTEWATER TREATMENT:

Non-process, once-through cooling water from Units 4 and 5 discharges to the Escambia River, a Class III fresh water. All treated and untreated industrial process wastewater is discharged to the ash pond or via underground injection (permit number IW0085658). Wastewater streams that discharge to the ash pond include: ash sluice water, overflow from the bottom ash dewatering bins, neutralized demineralizer regeneration wastewater, cooling tower blowdown, boiler blowdown, floor drainage, auxiliary equipment cooling water and seal water, coal pile runoff, yard sump discharge, and treated metal cleaning wastewater. The wastewater streams listed above that have the potential to contain oil are first routed through the oil skimmer pond prior to discharge to the ash pond. All domestic wastewater generated at the facility is collected and piped to Emerald Coast Utilities Authority (ECUA) sanitary sewer collection system.

Combustion By-Products management areas and their wastewater treatment.

Ash Landfill: on-site 78-acre solid waste management facility

Fly Ash Storage Area Bottom Ash Storage Area.

Docket No. 110007-EI Plant Crist NPDES Permit Exhibit JOV-1, Page 4 of 63

PERMITTEE:

Gulf Power Company

FACILITY:

Crist Electric Generating Plant

PERMIT NUMBER: EXPIRATION DATE:

FL0002275 (Major) January 27, 2016

Surface water runoff from the on-site solid waste management facility shall be collected into the stormwater pond which discharges through evaporation and percolation to groundwater or by a pipeline to the recycling cooling tower basin for Units 6 or 7.

Gypsum Storage Areas 1 and 2

The gypsum slurry is conveyed to either the new onsite lined gypsum storage area or the new gypsum dewatering system. Gypsum slurry that is transported to the storage area is stacked in piles. The gypsum solids will build up on the piles with the water separating from the solids by gravity. The produced water will be pumped into the return water pond.

Gypsum slurry that is routed to the gypsum dewatering system will be separated into two separate streams. One, referred to as filter cake, will contain mostly solids gypsum with little water while the other, referred to as filtrate, will be mostly water with little gypsum solids. The filter cake will be stored onsite until it is either loaded onto barges that are moored on Governor's Bayou or loaded to other types of transporters for delivery to wall board manufacturers. Gypsum determined not to meet the wall board manufacturing specifications may be marketed for agricultural use as authorized by the Florida Department of Agriculture and Consumer Services (FDACS) or other uses as authorized by the appropriate authorizing agency. The filtrate will be pumped to the return water pond.

Pumps will withdraw water from the return water pond to the return water tank for reuse back into the FGD system.

There are no surface water discharges associated with either the lined gypsum storage area or the gypsum dewatering system.

REUSE OR DISPOSAL:

Surface Water Discharge D-010: An existing 274 MGD maximum permitted discharge to Escambia River, Class III Fresh Waters, (WBID 10F). The point of discharge is located approximately at latitude 30° 33′ 40″ N, longitude 87° 13′ 10″ W.

Internal Outfall I-150: An existing permitted discharge to the on-site ash pond.

Internal Outfall I-170: An existing permitted discharge to the on-site ash pond.

Internal Outfall I-180: An existing permitted discharge to the intake tunnel for use as once-through cooling water.

Internal Outfall I-1C0: An existing permitted discharge to the main discharge canal prior to Outfall D-010.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in this Cover Sheet and Part I through Part IX on pages 1 through 35 of this permit.

PERMITTEE: FACILITY:

Gulf Power Company

Crist Electric Generating Plant

PERMIT NUMBER: EXPIRATION DATE:

FL0002275 (Major) January 27, 2016

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Surface Water Discharges

During the period beginning on the issuance date and lasting through the expiration date of this permit, the
permittee is authorized to discharge once-through non-contact cooling water, restricted supply of reclaimed
water from ECUA, and ash pond overflow from Outfall D-010 to Escambia River. Such discharge shall be
limited and monitored by the permittee as specified below and reported in accordance with Permit Condition
I.D.3.:

			Effl	uent Limitations	Mon	toring Require	ments	
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Fiow	MGD	Max Max	Report Report	Daily Average Daily Maximum	Daily; 24 hours	Calculated	FLW-1	
Temperature (F), Water	Deg F	Min	94.0	Daily Average	Continuous	Calculated	EFF-1	See I.A.4
рН	s.u.	Міп Мах	6.0 8.5	Daily Minimum Daily Maximum	Weekly	Grab	EFF-1	
Oxidants, Total Residual	mg/L	Max Max	0.01 0.01	Monthly Average Daily Maximum	Weekly	Multiple Grab ¹	EFF-1	See I.A.5, I.A.6
Total Residual Oxidants (TRO) Discharge Time	min/ day/ unit	Max Max	120 120	Monthly Average Daily Maximum	Quarterly	Meter	EFF-1	See I.A.5, I.A.6
Oil and Grease	mg/L	Max Min	5.0 5.0	Monthly Average Daily Maximum	Quarterly	Grab	EFF-1	
Arsenic, Total Recoverable	ug/L	Max Max	50.0 50.0	Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See I.A.8
Cadmium, Total Recoverable	ug/L	Max		Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF+1 INT-I	See 1.A.7, 1.A.8
Chromium, Hexavalent Total Recoverable	ug/L	Max Max	11 11	Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See I.A.8, I.A.9
Copper. Total Recoverable	ug/L	Max		Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See I.A.7, J.A.8
Iron, Total Recoverable	mg/L	Max Max	1.0 1.0	Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See I.A.8
Lead. Total Recoverable	ug/L	Max		Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See I.A.7, I.A.8
Mercury. Total Recoverable	ug/L	Max Max	0.012 0.012	Monthly Average Daily Maximum	Quarterly	Grab	EFF-1 INT-1	See J.A.8
Nickel, Total Recoverable	ug/L	Max		Monthly Average Daily Maximum	Annually	24-hr TPC	EFF-1 INT-1	See I.A.7, I.A.8
Selenium. Total Recoverable	ug/L	Max Max	5.0 5.0	Monthly Average Daily Maximum	Annually	24-hr TPC	EFF-1 INT-1	See I.A.8
Zinc, Total Recoverable	ug/L	Max		Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See 1.A.7, 1.A.8
Hardness. Total (as CaCO3)	mg/L	Max	Report	Single Sample	Quarterly	24-hr TPC	EFF-1	
Alpha, Gross Particle Activity	pCi/L	Max Max	15.0 15.0	Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See I.A.8
Radium 226 + Radium 228, Total	pCi/L	Max Max	5.0 5.0	Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1 INT-1	See I.A.8

¹ Multiple grahs for Total Residual Oxidants shall consist of grab samples collected at approximately the beginning of the period of expected oxidant discharge and once every 15 minutes thereafter until the end of the period of expected oxidant discharge.

Docket No. 110007-El Plant Crist NPDES Permit Exhibit JOV-1, Page 6 of 63

PERMITTEE: FACILITY:

Gulf Power Company

Crist Electric Generating Plant

PERMIT NUMBER:

FL0002275 (Major) January 27, 2016

EXPIRATION DATE:

			Effl	uent Limitations	Moni	itoring Require	ments	
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Chronic Whole Effluent Toxicity, 7-Day IC25 (Ceriodaphnia dubia/ Mysidopsis bahia)	percent	Min	100	Single Sample	Quarterly	24-hr TPC	EFF-1	See I.A.13
Chronic Whole Effluent Toxicity, 7-Day IC25 (Pimephales promelas/ Menidia beryllina)	percent	Min	100	Single Sample	Quarterly	24-hr TPC	EFF-1	See I.A.13

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.1, and as described below:

Monitoring Site Number	
	Description of Monitoring Site
FLW-1	Flow from condenser inlets.
EFF-1	Immediately upstream of the underflow at Thompson's Bayou.
INT-1	Intake to condensers.

- 3. The discharge shall not contain components that settle to form putrescent deposits or float as debris, scum, oil, or other matter. [62-302.500(1)(a)]
- 4. Pursuant to Condition I.A.1, the Maximum Daily Average temperature shall not exceed 94 °F over a 24 hour period as measured at EFF-1. However, the cooling towers for Units 1-5 shall be placed in full operation (defined as both booster pumps and all available fans, but not less than seven) as expeditiously as possible (but, in no case, no later than 45 minutes) after the discharge temperature exceeds 97.0°F as a 60 minute rolling average as measured at EFF-1(updated not less than every 15 minutes).

The permittee shall maintain and operate the facilities so as to achieve compliance; however, failure to achieve compliance with this requirement does not constitute violation of this permit if due to mechanical malfunctions of pumps, fans, and/or other cooling tower components beyond the normal control of the permittee. Failure to have two booster pumps and all available fans (but not less than seven) when required shall be reported to the Department's Northwest District Office via telephone not later than the next business day and, in writing, within five business days of the occurrence. The reports shall provide all relevant information including, but not necessarily limited to, causes, temperatures, and period(s) of exceedance(s), plant loadings, unit(s) in operation, and remedial action taken.

- 5. Neither Free Available Oxidants nor Total Residual Oxidants shall be discharged for more than two hours per day from the main condensers serving Units 4-5.
- 6. Limitations and monitoring requirements for Total Residual Oxidants shall be applicable for any week in which either:
 - a. The once-through cooling water intake is chlorinated; or
 - b. An oxidant (e.g., chlorine or Nalco Actibrom 7342) is used in the cooling towers for Units 6 and 7 and the blowdown is discharged to surface waters of the state.
- 7. The limit for "Cadmium, Total Recoverable", "Copper, Total Recoverable", "Lead, Total Recoverable", "Nickel, Total Recoverable", and "Zinc, Total Recoverable" shall be calculated using the following equation(s):

$$\begin{split} Cd &\leq e^{(0.7409[\ln H]-4.719]} \\ Cu &\leq e^{(0.8545[\ln H]-1.702)} \end{split}$$

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$$\begin{split} Pb &\leq e^{(1.273[\text{inH}]-4.705)} \\ Ni &\leq e^{(0.846[\text{inH}]+0.0584)} \\ Zn &\leq e^{(0.8473[\text{inH}]+0.884)} \end{split}$$

Total hardness shall be measured at the time of the effluent sample. The "ln H" means the natural logarithm of total hardness expressed as mg/L of CaCO₃. For metals criteria involving equations with hardness, the hardness shall be set at 25 mg/L if actual hardness is <25 mg/L and set at 400 mg/L if actual hardness is >400 mg/L.

The measured effluent value shall be recorded on the DMR in the parameter row for "Cadmium, Total Recoverable, Copper, Total Recoverable, Lead, Total Recoverable, Nickel, Total Recoverable, and Zinc, Total Recoverable (effluent)." The calculated effluent limit shall be recorded on the DMR in the parameter row for "Cadmium, Total Recoverable, Copper, Total Recoverable, Lead, Total Recoverable, Nickel, Total Recoverable, and Zinc, Total Recoverable (calculated limit)." Compliance with the effluent limitation is determined by calculating the difference between the measured effluent value and the calculated. The compliance value shall be recorded on the DMR in the parameter row for "Cadmium, Total Recoverable, Copper, Total Recoverable, Lead, Total Recoverable, Nickel, Total Recoverable, and Zinc, Total Recoverable (effluent minus calculated limit)." The compliance value shall not exceed 0.00. [62-302.530(15), 62-302.530(39), 62-302.530(39), 62-302.530(44), and 62-302.530(70)]

- 8. The actual limits for Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Zinc, Gross Alpha, and Combined Radium shall be the water quality standard set forth in 62-302.530, F.A.C. for Class III fresh waters (as provided in Conditions I.A.1 and I.A.7), or the concentration of the intake cooling water, whichever is greater. If the Outfall D-010 composite sample exceeds the intake concentration (and the intake concentration exceeds the water quality standard), a minimum of five (5) additional subsamples shall be measured from the original intake and outfall composites and a "student's t-test" shall be run on these additional subsamples comparing discharge concentrations with the intake concentrations; unless the discharge concentration exceeds the intake concentration at the 95% confidence level, the facility shall be in compliance with the limitation.
- The permittee may sample and analyze for total recoverable Chromium in lieu of Chromium VI; however, if the
 total recoverable chromium result exceeds 11.0 µg/l then the permittee shall resample and Chromium VI
 analysis shall be performed and reported.
- 10. The permittee shall maintain the current intake through-screen velocity such that the existing maximum velocity is not exceeded. [C.W.A. 316(b)]
- 11. The permittee shall maintain current traveling screen practices at Units 1 and 2 so as to assure that the screens are cycled twice during each 24 hours of continuous operation unless precluded by repair/maintenance requirements. [C.W.A. 316(b)]
- 12. The permittee shall develop a plan in accordance with the schedule in Condition VI.3 to help return live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens to their natural habitat. Other material shall be removed from the intake screens and disposed of in accordance with all existing Federal, State and/or Local laws and regulations that apply to waste disposal. Such material shall not be returned to the receiving waters. [C.W.A. 316(b)]
- 13. The permittee shall comply with the following requirements to evaluate chronic whole effluent toxicity of the discharge from outfall D-010.
 - a. Effluent Limitation
 - (1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) shall not be less than 100% effluent. [Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]
 - (2) For acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent in any test. [Rule 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]

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b. Monitoring Frequency

- (1) Routine toxicity tests shall be conducted once every three months, the first starting within 60 days of the issuance date of this permit and lasting for the duration of this permit.
- (2) Upon completion of four consecutive, valid routine tests that demonstrate compliance with the effluent limitation in 13.a.(1) above, the permittee may submit a written request to the Department for a reduction in monitoring frequency to once every six months. The request shall include a summary of the data and the complete bioassay laboratory reports for each test used to demonstrate compliance. The Department shall act on the request within 45 days of receipt. Reductions in monitoring shall only become effective upon the Department's written confirmation that the facility has completed four consecutive valid routine tests that demonstrate compliance with the effluent limitation in 13.a.(1) above.
- (3) If a test within the sequence of the four is deemed invalid based on the acceptance criteria in EPA-821-R-02-013, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive valid tests for the purpose of evaluating the reduction of monitoring frequency.

c. Sampling Requirements

- (1) For each routine test or additional follow-up test conducted, a total of three 24-hour composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-013, Section 8.
- (2) The first sample shall be used to initiate the test. The remaining two samples shall be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test
- (3) Samples for routine and additional follow-up tests shall not be collected on the same day.

d. Test Requirements

- (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five test dilutions: 100%, 50%, 25%, 12.5%, and 6.25% final effluent.
- (2) If the composite effluent salinity is less than 1.0 parts per thousand (ppt) measured as conductivity, the permittee shall conduct a daphnid, Ceriodaphnia dubia, Survival and Reproduction Test and a fathead minnow, Pimephales promelas, Larval Survival and Growth Test, concurrently. If the composite effluent sample salinity is greater than or equal to 1 ppm, measured as conductivity, the permittee may conduct 7-day survival and growth chronic toxicity tests with a mysid shrimp, Americamysis (Mysidopsis) bahia, Method 1007.0, and an inland silverside, Menidia beryllina, Method 1006.0, concurrently. When using freshwater species, the permittee should consider whether the salinity of the composite effluent in the second and third sample will continue to be less than 1 ppt.
- (3) All test species, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, EPA-821-R-02-013 if using freshwater species; and Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, 3rd Edition, EPA-821-R-02-014, if using saltwater species. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct chronic toxicity testing in accordance with the revised method.
- (4) (a) If freshwater species are used, the control water and dilution water shall be moderately hard water as described in EPA-821-R-02-013, Section 7.2.3.
 - (b) If saltwater species are used, the control water and dilution water used shall be artificial sea salts as described in EPA-821-R-02-014, Section 7.2. The test salinity shall be determined as follows:
 - i. For the Americamysis bahia bioassays, the effluent shall be adjusted to a salinity of 20 parts per thousand (ppt) with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 20 ppt. If the salinity of the effluent is greater than 20 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
 - ii. For the Menidia beryllina bioassays, if the effluent salinity is less than 5ppt, the salinity shall be adjusted to 5 ppt with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 5 ppt. If the salinity of the effluent is greater than 5 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.

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iii. If the salinity of the effluent requires adjustment, a salinity adjustment control should be prepared and included with each bioassay. The salinity adjustment control is intended to identify toxicity resulting from adjusting the effluent salinity with artificial sea salts. To prepare the salinity adjustment control, dilute the control/dilution water to the salinity of the effluent and adjust the salinity of the salinity adjustment control at the same time and to the same salinity that the salinity of the effluent is adjusted using the same artificial sea salts.

e. Quality Assurance Requirements

- (1) A standard reference toxicant (SRT) quality assurance (QA) chronic toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly chronic toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.
- (2) If the mortality in the control (0% effluent) exceeds 20% for either species in any test or any test does not meet "test acceptability criteria", the test for that species (including the control) shall be invalidated and the test repeated. Test acceptability criteria for each species are defined in EPA-821-R-02-013, Section 13.12 (Ceriodaphnia dubia) and Section 11.11 (Pimephales promelas); and EPA-821-R-02-014, Section 14.12 (Americamysis bahia) and Section 13.12 (Menidia beryllina). The repeat test shall begin within 21 days after the last day of the invalid test.
- (3) If 100% mortality occurs in all effluent concentrations for either test species prior to the end of any test and the control mortality is less than 20% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.
- (4) Routine and additional follow-up tests shall be evaluated for acceptability based on the observed dose-response relationship as required by EPA-821-R-02-013, or EPA-821-R-02-014 Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.

f. Reporting Requirements

- (1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
 - i. Routine and Additional Follow-up Test Results: The calculated IC25 for each test species shall be entered on the DMR.
- (2) A bioassay laboratory report for each routine test shall be prepared according to EPA-821-R-02-013, EPA-821-R-02-014, Section 10, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.
- (3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-013 or EPA-821-R-02-014, Section 10, and mailed within 30 days after the last day of the second valid additional follow-up test.
- (4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
- (5) The same bioassay data shall not be reported as the results of more than one test.
- (6) All bioassay laboratory reports shall be sent to:

Florida Department of Environmental Protection

Northwest District Office

160 Governmental Center

Pensacola, Florida 32502-5794

g. Test Failures

- (1) A test fails when the test results do not meet the limits in 13.a.(1).
- (2) Additional Follow-up Tests:
 - (a) If a routine test does not meet the chronic toxicity limitation in 13.a.(1) above, the permittee shall notify the Department at the address above within 21 days after the last day of the failed routine test and conduct two additional follow-up tests on each species that failed the test in accordance with 13.d.
 - (b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed.

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(c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5%, and 6.25% effluent. The permittee may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be analyzed according to the procedures in EPA-821-R-02-013 or EPA-821-R-02-014, as appropriate.

- (3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 12-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure.
 - (a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
 - (b) The Department shall review and approve the plan before initiation.
 - (c) The plan shall be initiated within 30 days following the Department's written approval of the plan.
 - (d) Progress reports shall be submitted quarterly to the Department at the address above.
 - (e) During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 13.d. Additional follow-up tests are not required while the plan is in progress. Following completion or termination of the plan, the frequency of monitoring for routine and additional follow-up tests shall return to the schedule established in 13.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-013, or EPA-821-R-02-014, as appropriate, a repeat test shall be initiated within 21 days after the last day of the invalid routine test.
 - (f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 13.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests. If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.
- (4) If chronic toxicity test results indicate greater than 50% mortality within 96 hours in an effluent concentration equal to or less than the effluent concentration specified as the acute toxicity limit in 13.(a)(2), the Department may revise this permit to require acute definitive whole effluent toxicity testing.
- (5) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for acute or chronic whole effluent toxicity failures.

[62-4.241, 62-620.620(3)]

B. Internal Outfalls

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge ash pond overflow from Internal Outfall I-1C0 to the main discharge canal prior to D-010. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.D.3.:

			1	Effluent Limitations	Monitor	ing Requireme	ents	
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	Report Report	Daily Maximum Monthly Average	Daily, when discharging	Totalizer ²	FLW-3	
Oil and Grease	mg/L	Max	7.0	Monthly Average	Bi-weekly,	Grab	EFF-2	

Recording flow meters and totalizers shall be calibrated at least annually.

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				Effluent Limitations	Monito	ring Requirem	ents	
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
		Max	10.0	Daily Average	every 2 weeks			
Solids, Total Suspended	mg/L	Max Max	30.0 65.0	Monthly Average Daily Average	Weekly, when discharging	24-hr TPC	EFF-2	
Hydrazine	mg/L	Max	300	Instantaneous Maximum	See I.B.3	Multiple Grab	EFF-2	See I.B.3
рН	s.u.	Min Max	6.0 9.0	Daily Minimum Daily Maximum	Weekly, when discharging	Grab	EFF-2	

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.1Error! Reference source not found, and as described below:

Monitoring Site Number	
	Description of Monitoring Site
FLW-3	Flow from ash pond discharge weir.
EFF-2	Ash pond discharge weir.

3. The monitoring frequency for hydrazine shall be three times per cold dump discharge event when the amount of residual hydrazine in the boiler water discharged into the ash pond during a two day period exceeds the threshold level of 43.2 kg. Grab samples shall be taken at 6, 12, and 24 hours from the time approximately 50 percent of the discharge is complete. The total amount of hydrazine going to the ash pond will be calculated by multiplying the capacity of each boiler being dumped within a two day period by the measured hydrazine residual concentration in that boiler.

For the purposes of this condition, a two day period begins at the start of a boiler discharge to the pond and includes the subsequent 48 hours. Monitoring for hydrazine is not required during a cold dump discharge event provided the total boiler water residual hydrazine amount being discharged is below 43.2 kg. The facility will establish and maintain a log to verify the total residual level being discharged to the ash pond.

A discharge event is defined as a cold dump of a single boiler following cold stand-by status which required hydrazine to be added to the boiler water to achieve concentrations higher than normal for protection of metal surfaces. Boiler blowdown, under normal operating conditions with hydrazine concentrations of 10 to 50 μ g/l, may be discharged without limitations or monitoring requirements for hydrazine.

4. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge metal cleaning wastewater from Internal Outfall I-150 to the ash pond. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition 1.D.3.:

			Efflu	ent Limitations	Monite	oring Requireme	nts	
							Monitoring	
		Max/			Frequency of	Sample	Site	
Parameter	Units	Min	Limit	Statistical Basis	Analysis	Туре	Number	Notes

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			Effl	uent Limitations	Monit	oring Requireme	nts	
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	Report Report	Monthly Average Daily Maximum	Per discharge	Calculated	FLW-4	
Copper, Total Recoverable	mg/L	Max Max	1.0 1.0	Monthly Average Daily Maximum	Per discharge	Time Proportional Composite ³	EFF-3	
Iron, Total Recoverable	mg/L	Max Max	1.0 1.0	Daily Maximum Monthly Average	Per discharge	Time Proportional Composite ³	EFF-3	7
Solids, Total Suspended	mg/L	Max Max	30.0 100.0	Monthly Average Daily Maximum	Per discharge	Time Proportional Composite ³	EFF-3	
Oil and Grease	mg/L	Max Max	15.0 20.0	Monthly Average Daily Maximum	Per discharge	Grab	EFF-3	

5. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.4. and as described below:

Monitoring Site Number	
	Description of Monitoring Site
FLW-4	Flow from metal cleaning treatment pond.
EFF-3	Metal cleaning treatment pond pump discharge.

- 6. Metal cleaning wastes shall mean any chemical cleaning compounds, initial rinse waters following each chemical cleaning, or any other waterborne residues derived from chemical cleaning any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning.
- 7. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge cooling tower blowdown from Internal Outfall I-170 to the ash pond only when river water is used as makeup water for the Units 6 and 7 cooling towers. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.D.3.:

			Effl	uent Limitations	Monito	ring Requireme	ents	
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	Report Report	Monthly Average Daily Maximum	Weekly, when discharging	Calculated	FLW-5	
Total Residual Oxidants Discharge Time	min/day	Max Max	120 120	Monthly Average Daily Maximum	Daily, when discharging	Meter	EFF-1	See I.B.9
Oxidants, Free Available	mg/L	Max Max	0.2 0.5	Monthly Average Daily Maximum	Per occurrence	Grab	OUI-6	See I.B.10
Chromium, Total Recoverable	mg/L	Max Max	0.2 0.2	Monthly Average Daily Maximum	Quarterly, when discharging	Grab	OUI-6	
Zinc, Total Recoverable	mg/L	Max Max	1.0 1.0	Monthly Average Daily Maximum	Quarterly, when discharging	Grab	OUI-6	

³ One aliquot collected immediately after the start of discharge to the ash pond, one aliquot immediately prior to termination of the discharge, and six aliquots collected at approximately equal times in between.

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			Effli	uent Limitations	Monito	ring Requireme	nts	
D		Max/		S	Frequency of	Sample	Monitoring Site	
Parameter	Units	Min	Limit	Statistical Basis	Analysis	Туре	Number	Notes
126 priority pollutants	mg/L	Max Max	<mdl <mdl< td=""><td>Monthly Average Daily Maximum</td><td>Annually</td><td>Grab or Calculation</td><td>OU1-6</td><td>See I.B.11</td></mdl<></mdl 	Monthly Average Daily Maximum	Annually	Grab or Calculation	OU1-6	See I.B.11

8. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.7. and as described below:

Monitoring Site Number	
	Description of Monitoring Site
FLW-5	Flow of reclaimed water pipeline for makeup of Units 6 and 7 cooling towers.
OUI-6	Cooling tower conveyance line, prior to valve that directs blowdown to either the intake
	structure or the ash pond.

- 9. Total Residual Oxidants (TRO) shall not be discharged from Unit 6 and 7 cooling towers for more than two hours per day when river water is used as make-up water.
- 10. Limitations and monitoring requirements for Free Available Oxidants shall be applicable when an oxidant (e.g., chlorine or Nalco Actibrom 7342) is used in the cooling towers for Units 6 and 7 and the blowdown is discharged to the ash pond.
- 11. The permittee shall, within 30 days of permit issuance and yearly thereafter, provide certification that the 126 priority pollutants (as listed in 40 CFR Part 423, Appendix A) are below the method detection limits (MDL) for the applicable analytical methods required under permit Condition I.B.7 in the cooling tower blowdown as a result of the addition of any maintenance chemicals. Compliance shall be demonstrated by one of the three methods:
 - Method 1: Sampling at a frequency of not less than once per year for all priority pollutants referenced above with submission of analysis results with each certification.
 - Method 2: Submission of certification(s) from the manufacturer that each product used contains no priority pollutants. Such submission is required only once for each product used, unless subsequent changes in the product formulation occur or the product is obtained from a different source. Certifications for all products in use shall be maintained on site.
 - Method 3: Calculations to assure that if priority pollutants are contained in any product(s), no discharge of any individual priority pollutant can occur at concentrations greater than detectable levels using analytical methods in 40 CFR Part 136 due to dilution within the cooling water system.

The certification shall be in the following form: "I certify that no priority pollutants at concentrations greater than detectable levels using analytical methods in 40 CFR Part 136 are being discharged from any maintenance chemicals added to the cooling towers. Compliance is demonstrated by Method..."

12. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge ECUA reclaimed water and spent reclaimed water through Internal Outfall I-180 to the intake tunnel for use in the OTCW for Units 4 and 5 during scheduled and unscheduled outages of Unit 6 or Unit 7 cooling towers. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition 1.D.3.:

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> OUI-7 OUI-5

> OUI-6

OUI-7

See I.B.17

Calculated

Weekly, when

discharging

Effluent Limitations Monitoring Requirements Monitoring Max/ Frequency of Sample Site Units Limit Statistical Basis Analysis Type Number Parameter Min Notes 20 Daily Annual Average Max Continuous Totalizer4 FLW-5 Monthly Average Report MGD 855 Annual Maximum Flow Max FLW-6 See LB.15. Monthly Average Continuous Totalizer4 Report Max FLW-7 LB.16 Max Report Daily Maximum FLW-6 Max Report Annual Total Weekly, when Duration of Discharge hr Calculated Monthly Total FLW-7 discharging Max Report Weekly; when OUI-6 Total Residual Oxidants Monthly Average min/ Max 120 Calculated See I.B.21 OUI-7 Discharge Time 120 Daily Maximum discharging day Max Weekly, when OUI-6 0.2 Monthly Average Max Oxidants, Total Residual Grab mg/L Max 0.5 Daily Maximum discharging OUI-7 Monthly Average OUI-6 Chromium, Total Max 0.2 Quarterly, when See I.B.23 mg/L Grab Recoverable 0.2 Daily Maximum discharging OUI-7 Max OUI-6 1.0 Monthly Average Ouarterly, when Max See I.B.23 Grab Zinc, Total Recoverable mg/L OUI-7 1.0 Daily Maximum discharging Max Report Monthly Average OUI-5 Max Weekly, when Nitrogen, Ammonia, OUI-6 mg/L Max Report Weekly Average Grab discharging Total (as N) OUI-7 Report Daily Maximum Max Monthly Average **OUI-**5 Max Report Weekly, when Nitrogen, Kjeldahl. Total OUI-6 Report Grab Weekly Average mg/L Max discharging (as N) Daily Maximum OUI-7 Report Max OUI-5 Monthly Average Max Report Weekly, when Nitrite plus Nitrate, Total Weekly Average Grab OUI-6 Report mg/L Max (as N) discharging OUI-7 Report Daily Maximum Max 3.75 Monthly Average Max Weekly, when Calculated OUI-5 See I.B.17 Max 4.5 Weekly Average discharging Max 6.0 Daily Maximum mg/L Nitrogen, Total OUI-6 Monthly Average Weekly, when Max Report Grab See I.B.17 discharging OUI-7 Max Report Weekly Average OUI-5 Weekly, when Nitrogen, Total See I.B.17 Grab Monthly Total OUI-6 lb/mth Max Report discharging (Monthly Net Loading) OUI-7 OUI-5 Weekly, when Nitrogen, Total Annual Total Calculated See I.B.17 lb/yr Max Report OUI-6 discharging (Annual Net Loading) OUI-7 0.4 Monthly Average Max Weekly, when See 1.B.18, Grab OUI-5 0.6 Weekly Average Max discharging I.B.19 Phosphorus, Total (as P) mg/L Max 0.8 Daily Maximum Weekly, when OUI-6 See I.B.19 Weekly Average Grab Max Report OUI-7 discharging OUI-5 Weekly, when Phosphorus, Total (as P) OUI-6 lb/mth Monthly Total Grab See I.B.17 Max Report discharging

lb/yr

Max

(Monthly Net Loading)

Phosphorus, Total (as P)

(Annual Net Loading)

Annual Total

Report

⁴ Recording flow meters and totalizers shall be calibrated at least annually

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13. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.B.12. and as described below:

Monitoring Site Number	
	Description of Monitoring Site
FLW-5	Flow of reclaimed water pipeline for makeup of Units 6 and 7 cooling towers.
FLW-6	Flow of reclaimed and spent reclaimed water directed for reuse into the intake tunnel.
FLW-7	Flow of reclaimed and spent reclaimed water directed for reuse into the discharge tunnel.
OUI-5	Reclaimed water pipeline for makeup of Units 6 and 7 cooling towers.
OUI-6	Cooling tower conveyance line, prior to valve that directs blowdown to either the intake structure or the ash pond.
OUI-7	Reclaimed water pipeline prior to discharge into the discharge tunnel.

14. Planned (anticipated) outages shall be scheduled for the months of October through April unless the Department approves otherwise. The permittee shall seek approval from the Department at least 30 days prior to each outage not planned for the months of October through April. The permittee shall submit a request to the Department at the address specified below:

Florida Department of Environmental Protection Industrial Wastewater Section, Mail Station 3545 Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400

- 15. During outages when both Unit 6 and 7 cooling towers are offline, the permittee shall reuse up to 11.5 MGD, with a total maximum of 207 million gallons per year, of reclaimed water from ECUA and spent reclaimed water through Internal Outfall I-180. The term outage includes Unit 6 and 7 cooling towers transitioning from reclaimed water to river water and vice-versa as makeup water.
- 16. During outages when either Unit 6 or 7 cooling tower is off-line, the permittee shall reuse up to 7.4 MGD, with a total maximum of 648 million gallons per year, of reclaimed water from ECUA and spent reclaimed water through Internal Outfall I-180. The term outage includes Unit 6 or 7 cooling tower transitioning from reclaimed water to river water and vice-versa as makeup water.
- 17. The net Total Nitrogen (TN) loading is defined as the pounds of TN discharged at OUI-6 minus the pounds of TN in the makeup water for Units 6 and 7 cooling towers at OUI-5, over a corresponding time period. The permittee shall report the monthly net TN loading, which equals the pounds of TN discharged during a month minus the pounds of TN entering Units 6 and 7 cooling towers during the same month. The annual net TN loading (in pounds per year) on any given month is equal to the monthly TN net loading for that month plus the previous eleven monthly TN loadings and is considered a rolling annual maximum value.
- 18. The permittee shall not add nitrogen or phosphorous containing products to the Unit 6 and 7 cooling towers without Department approval.
- 19. During the first 24 hours of reuse through Internal Outfall I-180 for unscheduled outages, the single sample maximum for Total Phosphorus shall be 2.0 mg/L.
- 20. Unscheduled discharges shall be subject to General Conditions VIII.22 and VIII.23 for bypass and upset.
- 21. Neither Free Available Oxidants nor Total Residual Oxidants shall be discharged for more than two hours per day from the cooling towers for Units 6 and 7 when discharging the blowdown to surface waters of the State.
- 22. Limitations and monitoring requirements for Total Residual Oxidants and Free Available Oxidants shall be applicable when an oxidant (e.g., chlorine or Nalco Actibrom 7342) is used in the cooling towers for Units 6 and 7 and discharging the blowdown to surface waters of the state.
- 23. Limitations and monitoring requirements for Total Recoverable Chromium and Total Recoverable Zinc shall be applicable when discharging the cooling tower blowdown to surface waters of the state.

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24. The permittee shall meet the Department-approved ECUA pretreatment program requirements when discharging to ECUA sanitary sewer system.

C. Underground Injection Control Systems

1. Requirements for the discharge from the FGD scrubber to two Class I injection wells (IW-1 and IW-2) are established under Department UIC Permit Number IW17-0085658-001-UC.

D. Other Limitations and Monitoring and Reporting Requirements

- 1. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this permit shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantitation limits), which is titled "FAC 62-4 MDL/PQL Table (April 26, 2006)" is available at http://www.dep.state.fl.us/labs/library/index.htm. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:
 - a. The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
 - b. The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and
 - c. If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

When the analytical results are below method detection or practical quantitation limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the permittee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. [62-4.246, 62-160]

- 2. The permittee shall provide safe access points for obtaining representative influent and effluent samples which are required by this permit. [62-620.320(6)]
- 3. Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type on DMR	Monitoring Period	Due Date
Monthly or Toxicity	first day of month - last day of month	28th day of following month
Quarterly	January 1 - March 31	April 28
	April 1 - June 30	July 28
	July 1 - September 30	October 28
	October 1 - December 31	January 28

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REPORT Type on DMR	Monitoring Period	Due Date
Semiannual	January 1 - June 30	July 28
	July 1 - December 30	January 28
Annual	January 1 - December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge. The permittee may submit either paper or electronic DMR form(s). If submitting paper DMR form(s), the permittee shall make copies of the attached DMR form(s). If submitting electronic DMR form(s), the permittee shall use a Department-approved electronic DMR system.

The electronic submission of DMR forms shall accepted only if approved in writing by the Department. For purposes of determining compliance with this permit, data submitted in electronic format is legally equivalent to data submitted on signed and certified DMR forms.

The permittee shall submit the completed DMR form(s) to the Department by the twenty-eighth (28th) of the month following the month of operation at the addresses specified below:

Florida Department of Environmental Protection Wastewater Compliance Evaluation Section, Mail Station 3551 Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400

[62-620.610(18)]

4. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Northwest Office at the address specified below:

Florida Department of Environmental Protection Northwest District Office 160 Government Center Pensacola, Florida 32501-5794

Phone Number - (850) 595-8300 FAX Number - (850) 595-8417 (All FAX copies and e-mails shall be followed by original copies.)

[62-620.305]

- 5. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. [62-620.305]
- 6. If there is no discharge from the facility on a day when the facility would normally sample, the sample shall be collected on the day of the next discharge. [62-620.320(6)]
- 7. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. [40 CFR Part 423.12(b)(2)]
- 8. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which ultimately may be released to waters of the State is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes or to the use of herbicides if used in accordance with labeled instructions and any applicable State permit. A permit revision from the Department shall be required prior to the use of any biocide or chemical additive used in the cooling system (except chlorine as authorized elsewhere in this permit) or any other portion of the treatment system which may be toxic to aquatic life. The permit revision request shall include:
 - Name and general composition of biocide or chemical

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b. Frequencies of use

- c. Quantities to be used
- d. Proposed effluent concentrations
- e. Acute and/or chronic toxicity data (laboratory reports shall be prepared according to Section 12 of EPA document no. EPA-821-R-02-012 EP entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, or most current addition.)
- f. Product data sheet
- g. Product label

The Department shall review the above information to determine if a major or minor permit revision is necessary. Discharge associated with the use of such biocide or chemical is not authorized without a permit revision by the Department. Permit revisions shall be processed in accordance with the requirements of Chapter 62-620, F.A.C.

The permittee shall submit the aforementioned information to and obtain written permission from Escambia County Utility Authority (ECUA) to use any biocide or chemical additive in Unit 6 or 7 cooling tower prior to requesting a permit revision from the Department. The permittee shall provide proof of permission from ECUA as part of the permit revision application.

- 9. Discharge of uncontaminated storm water, intake screen backwash water, turbine oil cooler water, and hydrogen generator cooler water is permitted without limitations or monitoring requirements, except that there shall be no discharge of floating oil.
- 10. Discharge of any waste resulting from the combustion of toxic, hazardous, or metal cleaning wastes to any waste stream which ultimately discharges to waters of the State is prohibited, unless specifically authorized elsewhere in this permit. The discharge of plant ash transport water, resulting from the combustion of onspecification used oil as authorized under the Resource Conservation and Recovery Act and 40 CFR Part 266, via the ash pond shall be an authorized discharge of this permit.
- 11. The permittee shall not store coal, soil, or other similar erodable materials in a manner in which runoff is uncontrolled, or conduct construction activities in a manner which produces uncontrolled runoff.
- 12. The permittee shall notify the Department and ECUA when directing ECUA reclaimed water or spent reclaimed water for reuse as OTCW during outages, as follows:
 - a. Notify the Department's Northwest District and the Superintendent of ECUA in writing at least seven days before the start date of scheduled outages at the Units 6 or 7 cooling towers.
 - b. Notify the Department's Northwest District and the Superintendent of ECUA of an unscheduled outage as required by Condition X.22.
- 13. The permittee is authorized to utilize the following water treatment chemicals and biocides in the recirculating cooling tower systems for generating Units 6 and 7 and other wastewater streams:

Chemical Name	System Used
Sodium Hypochlorite	Units 6 and 7 Cooling Tower System
Betz Depositrol PY5200	Units 6 and 7 Cooling Tower System
Betz Dearborn AF1440	Units 6 and 7 Cooling Tower System
Ondeo Nalco 9353	Units 6 and 7 Cooling Tower System
Ondeo Nalco 7468	Units 6 and 7 Cooling Tower System
Nalco 73200	Units 6 and 7 Cooling Tower System
Nalco Actibrom 7342	Units 6 and 7 Cooling Tower System
Sulfuric Acid (93% by weight)	Units 6 and 7 Cooling Tower System
Nalsperse 7308	Units 4 & 5, 6 & 7 Service Water Systems

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Chemical Name	System Used
Ferric Chloride	Ash Pond
Nalco Optimer® 7128 @ 0.5 mg/L	Ash Pond
Nalco Cat-Floc 8103 Plus @ 5.0 mg/L	Ash Pond

- 14. The permittee is authorized to use the treatment additive Nalsperse 7308 in the facility's service water systems for Units 4 and 5, and Units 6 and 7. Discharges from the service water systems shall not be concurrent, and not within 48 hours of one another.
- 15. The permittee is authorized to use the treatment additives Nalco Optimer® 7128 and Nalco Cat-Floc 8103 Plus in the facility's ash pond on an intermittent basis for turbidity control. During the first period of usage of each of the two chemicals, the permittee shall:
 - a. Record the amount used and the duration of the chemical application in the ash pond;
 - b. Calculate and record the maximum expected final effluent concentration;
 - c. Perform a chronic toxicity test in accordance with the procedures listed in Condition I.A.13, with the inclusion of the following:
 - (1) The toxicity test shall be performed using effluent from the ash pond containing either chemical, with the appropriate dilution with once-through non-contact cooling water from Units 4 and 5. 24-hour composite sampling of the effluent from the ash pond shall begin when the chemical is expected to be discharged out of the ash pond. The once-through non-contact cooling water used to prepare the dilution may be a grab sample. The dilution shall represent the typical ratio of ash pond water to cooling water contained in the final effluent at Outfall D-001 and shall constitute the 100% effluent sample in the procedures of Condition I.A.13.
 - (2) Results of the toxicity test shall be sent to:

Florida Department of Environmental Protection Industrial Wastewater Section, Mail Station 3545 Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400

II. COMBUSTION BY-PRODUCTS MANAGEMENT REQUIREMENTS

- Combustion by-products produced by the operation of Plant Crist: ash, non-hazardous metal cleaning wastewater sludge, and other solid waste approved by the Department shall be disposed of in the on-site 78-acre solid waste management facility permitted through this permit or to another appropriate solid waste management facility permitted by the Department.
- The disposal of combustion by-products in the on-site solid waste management facility permitted by the this permit shall be in accordance with the construction permit, IC17-031700, issued October 13, 1980, and the requirements of Chapter 62-701, F.A.C., except as modified by <u>Evaluation of Solid Waste Management Practices and Requirements for the Florida Electric Utility Industry</u>.
- 3. A copy of the engineering drawings, plans, reports, construction permit, and supporting information shall be kept at this landfill at all times for reference and inspections.
- 4. In no event shall any solid waste other than combustion by-products or other materials approved by the Department be disposed of on the plant site other than in areas specifically designated in the application. Small amounts of accumulated debris that has been removed from the plant's cooling water intake screens, consisting mainly of vegetation, may be placed in a central location near the ash landfill.
- 5. The solid waste management facility has been and will be constructed in phases.

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6. The final cover system, including the drainage soil, top soil and seeding, shall be completed within 180 days after the final waste deposit date.

- Final closure of the facility shall comply with the provisions of Rules 62-701.600 through 62-701.620, FAC, except
 as modified by <u>Evaluation of Solid Waste Management Practices and Requirements for the Florida Electric Utility
 Industry and any additional requirements in effect at the time wastes cease to be accepted by the facility.
 </u>
- 8. Surface water runoff shall be controlled during operation under this permit and shall comply with Chapter 62-302, F.A.C., at the site boundary. Specifically, surface water runoff from the on-site solid waste management facility shall be collected into the stormwater pond which discharges through evaporation or percolation to groundwater and by a pipeline to the recycling cooling tower basin for Units 6 or 7.

III. GROUND WATER REQUIREMENTS

- 1. The allowable zone of discharge (ZOD) for this permit shall be as follows:
 - a. The horizontal ZOD shall consist of the north, south, and west property lines and the un-submerged land limits to the east as shown on Drawing Number ES1607.dwg, October 23, 2007, as shown in Attachment 2.
 - b. The vertical ZOD shall extend from the land surface down to the top of the low permeability zone at the base of Unit 2 at approximately -10 to -40 feet National Geodetic Vertical Datum (ft. NGVD).
 - c. Compliance with water quality standards of Rule 62-520.420, F.A.C., and as contained in Rule 62-550.310, F.A.C. and Rule 62-550.320, F.A.C. shall be met at and beyond the edges of the ZOD. Compliance with minimum groundwater criteria of Rule 62-520.400, F.A.C. shall be met within and beyond the edge of the ZOD. Surface water criteria in accordance with Rule 62-302.500, F.A.C. and Rule 62-302.530, F.A.C. shall be met beyond the ZOD. [Permit application received Date and subsequent incompleteness information]
- 2. Any new or replacement wells shall be of an appropriate diameter so as to provide reliable and representative water quality results. They shall have appropriate screen length and shall be constructed in accordance with the guidelines provided on Attachment 3. Sieve analyses shall be submitted and shall be used for proper well design. Monitoring wells should be locked to minimize the potential for unauthorized access in accordance with Rule 62-701.510(3)(d).5, F.A.C. Required well construction permits shall be obtained from the Northwest Florida Water Management District. Upon installation and after settling, new wells shall be properly developed. Upon completion of construction of new wells, the lithologic logs, "as-installed" diagrams and descriptions of well development shall be submitted to the Department.

A registered Florida land surveyor shall locate all wells and the coordinates shall be reported in accordance with Rule 62-701.510(3) (d) 1, F.A.C. Existing wells not used in the approved monitoring network for collection of samples or water elevation data shall be properly maintained or shall be properly abandoned in accordance with Rule 62-532.500(4), F.A.C. Appropriate well abandonment permits shall be obtained from the Northwest Florida Water Management District. [Rule 62-701.510(3) (d) 1, F.A.C. and Rule 62-532.500(4), F.A.C.]

3. The water-quality monitoring network shall consist of (47) ground water monitoring wells (3 -background, 24-detection, 10-compliance, 10-Piezometers) and 7-Surface Water Sampling Points. The surface water and groundwater monitoring well network is graphically represented on Attachment 2. The following designations shall be used for groundwater and surface water monitoring identification purposes in all future analysis reports:

a. Ash Landfill

Well Name	Designation	Approximate Location	Test Site Number
MWB-1	Background	Unit 5	9106
MWC-3	Compliance	Unit 5	9107
MWC-4	Compliance	Unit 5	9108
GE-5D	Detection	Unit 5 (Gypsum Area 1)	9109
MWC-7	Compliance	Unit 5	9111
MWC-8	Compliance	Unit 5	9112
MWC-9	Compliance	Unit 5	8942

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Well Name	Designation	Approximate Location	Test Site Number
MWB-2	Background	Unit 2	9113
GW-1S	Background	Unit 2 (Gypsum Area 2)	9114
MWI-1	Detection	Unit 2	9115
MWI-2	Detection	Unit 2	9116
GE-5S	Detection	Unit 2 (Gypsum Area 1)	9117
MWI-4	Detection	Unit 2	9119
MWC-10	Compliance	Unit 2	9118
MWC-11	Compliance	Unit 1	9121
MWC-12	Compliance	Unit 1	9122
MWP-1	Compliance	Unit 1	9123
MWP-2	Compliance	Unit 1	9124
MWP-3	Piezometer	Unit 1	9125
MWP-4	Piezometer	Unit 1	9126
MWP-5	Piezometer	Unit I	9127
MWP-7	Piezometer	Unit 1	9129
MWP-8	Piezometer	Unit 2	9130
MWP-9	Piezometer	Unit 5	9131
MWP-10	Piezometer	Unit 2	9132
MWP-11	Piezometer	Unit 5	9133
MWP-12	Piezometer	Unit 2	9134
MWP-13	Piezometer	Unit 5	9135

b. Gypsum Storage Area 1 and Area 2

Well Name	Designation	Approximate Location	Test Site Number
GW-1S	Background	Unit 2, Gypsum Area 2	9114
GW-2S	Detection	Unit 2, Gypsum Area 2	22847
GW-3S	Detection	Unit 2, Gypsum Area 2	22849
GW-2D	Detection	Unit 5, Gypsum Area 2	22848
GW-3D	Detection	Unit 5, Gypsum Area 2	22850
GW-4S	Detection	Unit 2, Gypsum Area 2	22851
GW-4D	Detection	Unit 5, Gypsum Area 2	22852
GW-5S	Detection	Unit 2, Gypsum Area 2	22853
GW-5D	Detection	Unit 5, Gypsum Area 2	22854
GW-6S	Detection	Unit 2, Gypsum Area 2	22855
GW-6D	Detection	Unit 5, Gypsum Area 2	22856
GE-1S	Detection	Unit 2, Gypsum Area 1	22857
GE-1D	Detection	Unit 5, Gypsum Area 1	22858
GE-2S	Detection	Unit 2, Gypsum Area 1	22859
GE-2D	Detection	Unit 5, Gypsum Area 1	22860
GE-3S	Detection	Unit 2, Gypsum Area 1	22861
GE-3D	Detection	Unit 5, Gypsum Area 1	22862
GE-4S	Detection	Unit 2, Gypsum Area 1	22863
GE-4D	Detection	Unit 2, Gypsum Area 1	22864
GE-5S	Detection	Unit 2, Gypsum Area 1	9117
GE-5D	Detection	Unit 5, Gypsum Area 1	9109
GE-6S	Detection	Unit 2. Gypsum Area 1	22865
GE-6D	Detection	Unit 5. Gypsum Area I	22866

c. Surface Water

Surface Water Name	Designation	Approximate Location	Test Site Number
SW-1	Upgradient	Approx 150 ft W of GW-1S	22867

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Surface Water Name	Designation	Approximate Location	Test Site Number
SW-2	Down Gradient	Approx 225 ft SSW of GW-2S	22868
SW-3	Down Gradient	Approx 60 ft WSW of GW-3S	22869
SW-4	Down Gradient	Approx 430 ft WNW of GW-4S	22870
SW-5	Down Gradient	Approx 800 ft W of GE-1S	22871
SW-6	Down Gradient	Approx 980 ft NNW of GE-1S	22872
SW-7	Down Gradient	Approx 1,870 ft NE of GE-1S	22873
SW-8	Down Gradient	Approx 270 ft NE of GE-6S	22874

- d. Construction of wells MWI-4 and MWC-7 shall be delayed until disposal of ash begins in Parcel 2 of the Bottom Ash Storage Area. Background well GW-1S shall be installed prior to storage of gypsum in Area 1 or Area 2. All other monitoring wells identified in Gypsum Area 1 shall be installed prior to storage of gypsum in Area 1 and all other monitoring wells identified in Gypsum Area 2 shall be installed prior to storage of gypsum in Area 2. [Rule 62-520, F.A.C.]
- 4. The water-quality monitoring parameters shall consist of groundwater and Surface Water parameters for each area. The following parameters shall be used for groundwater and surface water purposes in all future analysis reports:
 - a. All Ash Landfill groundwater monitoring wells shall be sampled semiannually for parameters listed below:

Field Parameters	Laboratory Parameters
Static water level in wells before purging	Aluminum, Total Recoverable
Specific conductivity	Arsenic, Total Recoverable
PH	Cadmium, Total Recoverable
Dissolved oxygen	Chloride
Turbidity	Chromium, Total Recoverable
Temperature	Copper, Total Recoverable
Oxidation - Reduction Potential	Iron, Total Recoverable
Colors and sheens (by observation)	Lead, Total Recoverable
	Manganese, Total Recoverable
	Mercury, Total Recoverable
	Magnesium, Total Recoverable
	Nickel, Total Recoverable
	Potassium, Total Recoverable
	Selenium, Total Recoverable
	Sodium, Total Recoverable
	Sulfates
	Zinc, Total Recoverable
	Total Dissolved Solids (TDS)
	Total Suspended Solids (TSS)

- b. Compliance wells are exempt from compliance with the groundwater standard for arsenic. Surface Water Monitoring points shall meet the surface water standards as set forth in Chapter 62-302, F.A.C.
- c. Monitoring wells are exempt from compliance with secondary drinking water standards unless the Department determines that compliance with one or more secondary standards is necessary to protect groundwater used or reasonably likely to be used as a potable water source. [62-520.520(1), F.A.C.]
- d. All Gypsum Storage Area groundwater monitoring wells shall be sampled semiannually for parameters listed below:

Field parameters	Laboratory parameters
Static water level in wells before purging	Antimony
Specific conductivity	Arsenic
pH	Calcium
Dissolved oxygen	Magnesium
Turbidity	Mercury

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Field parameters	Laboratory parameters	
Temperature	Potassium	
Oxidation -Reduction Potential	Selenium	
Colors and sheens (by observation)	Sodium	
	Thallium	
	Bicarbonate Alkalinity	
	Bromide (071870)	
	Chloride	
	Sulfates	
	Total Dissolved Solids (TDS)	

Water levels in each monitoring well shall be measured in a single day. During well sampling, water levels shall be measured on the sample day and recorded prior to evacuating the wells or collecting samples. Water level, top of well casing and land surface elevations at each well site, at a precision of plus or minus 0.01 feet NGVD, shall be reported on each analysis report. Prior to sampling, the field parameters of Rule 62-701.730(4) (b) 4, F.A.C., shall be stabilized from each well. Sampling and purging methods in the SOP's, as allowed in Chapter 62-160, F.A.C., must be used.

e. The surface water test sites shall be sampled semiannually for the parameters listed below.

Field Parameters	Laboratory Parameters
pH	Antimony
Turbidity	Arsenic
Temperature	Calcium
Specific Conductivity	Magnesium
Dissolved Oxygen	Mercury
Colors and Sheens (by observation)	Potassium
	Selenium
	Sodium
	Thallium
	Bicarbonate Alkalinity
	Bromide
	Chloride
	Sulfates
	Total Dissolved Solids (TDS)

All analyses of samples shall be conducted using approved State and Federal analytical methods with detection limits at or below the maximum allowable concentrations for all parameters, whenever possible.

Background water quality shall be sampled and analyzed in accordance with the provisions of Rule 62-701.510(6) (b), F.A.C. All background and detection wells shall be sampled and analyzed at least once prior to permit renewal for those parameters listed in Part III.B.4.a., c., and e. above.

A permit modification request to delete specific laboratory or field parameters must contain a demonstration that these parameters are not reasonably expected to be in or derived from the waste which was received or disposed of at the facility.

- 5. Rainfall at the site shall be measured on a daily basis and the results submitted with the semiannual reports.
- 6. An initial baseline sampling event of Gypsum Area 1 wells shall occur prior to placement of gypsum in Area 1 and an initial baseline sampling event of Gypsum Area 2 wells shall occur prior to placement of gypsum in Area 2. Semi-annual sampling for Gypsum Area 1 wells shall begin after gypsum disposal has occurred in Gypsum Area 1. Semi-annual sampling for Gypsum Area 2 wells shall begin after gypsum disposal has occurred in Gypsum Area 2. The results of each set of semiannual groundwater analyses shall be submitted under separate cover, no later than February 15 and August 15 each year, commencing with the August 15, 2009 report. [Rule 62-701.730(4) (b), Rules 62-701.510(6) & (8), F.A.C., and permit application received December 6, 2006 and subsequent incompleteness information]

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The results of each set of semiannual ground water and surface water analyses may be submitted electronically on floppy diskettes or compact disc media readable by a Microsoft Windows computer. The data may be evaluated using ADaPT to conduct data quality review and compliance checking. Electronic laboratory shall may be submitted in a specific format called an Electronic Data Deliverable (EDD). The permittee shall include Form 62-701.900(31), Water Quality Monitoring Certification, hereby adopted and incorporated by reference, with each report certifying that the laboratory results have been reviewed and approved by the permittee. Copies of this form are available from a local District Office or by writing to the Department of Environmental Protection, Solid Waste Section, MS 4565, 2600 Blair Stone 80 Road, Tallahassee, Florida 32399-2400. The website with information on ADaPT can be viewed using the following internet link: http://www.dep.state.fl.us/labs/dqa/adaptedms.htm.

All submittals in response to this specific condition shall be sent both to:

Florida Department of Environmental Protection Northwest District Office 160 Governmental Center Pensacola, Florida 32533

And to:

Florida Department of Environmental Protection Solid Waste Section 2600 Blair Stone Road, MS 4565 Tallahassee, Florida, 32399-2400

The following data fields must be present in the data:	
Analytical Method	Analytical Result
Analytical Result Units	Appropriate Data Qualifiers (as listed in Chapter 62-160, F.A.C.)
Date of Analysis	Date of Preparation (if applicable)
Date of Sampling	Detection Limit of the Analysis
DOH Certification Number of the Laboratory	Facility Identification Number
Matrix (Aqueous, Drinking Water, Saline/Estuarine, or Solids)	Parameter Name (Name of the Compound Analyzed for/Test Performed)
	Test site ID

The submittal shall also include laboratory reports, Chain of Custody sheets, field data sheets, Water Sampling Logs (attached), ground water contour maps, a summary of any water quality standards or minimum criteria that are exceeded and any other required documents. These reports may be submitted electronically in portable document format (PDF) in lieu of a paper copy. If a specific document has a requirement to be signed and sealed, an original signed and sealed paper copy must also be submitted unless it is specifically permitted by law or rule to be signed electronically. [Rules 62-701.510(6) and (8) (a), (b) and (d), F.A.C.]

7. If at any time it is determined that any well in the routine monitoring system is not functioning properly and is not providing representative water quality samples, permittee shall have the wells evaluated, redeveloped, or replaced such that representative samples will be obtained during the next required routine sampling event.

Any well which must be redeveloped should be surged with formation water or a surge block only. Wells which still produce sediment and high turbidity should be considered for replacement. Wells with high turbidity should be evaluated using the procedures called for in Rule 62-520.300(9), F.A.C.

Any well requiring replacement shall be designed, installed and completed in accordance with the suggested practices of document ASTM D5092. [Rule 62-701.510, F.A.C. and Rule 62-520, F.A.C.]

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8. Attachment 4, DEP Form 62-522.900(2), shall be reproduced by permittee and be used for water quality data submittals. A separate report is required for each sampling point. All water quality-monitoring reports required by this permit shall be submitted to:

Department of Environmental Protection Northwest District Office Solid Waste Section 160 Governmental Center Pensacola, Florida 32502

The Department FDEP File Number and Facility Identification Number (WACS – 2216) for this facility shall be recorded on each report. The Test Site Number and Well Name shall be used on each report to identify the sampling point. [Rule 62-701.510, F.A.C. and Rule 62-520, F.A.C.]

9. A complete sampling record shall be provided for each sampling point. This record shall include:

Water level; total depth of the well; volume of water in the well; volume of water removed; stabilization documentation including pH, conductivity, temperature, turbidity and dissolved oxygen; time interval of purging; time sample is taken; and device(s) used for purging (including discharge rate) and sampling.

The permittee may wish to reproduce and use Attachment 6 (DEP-SOP-001/01 Form FD 9000-24) for reporting this information. Sampling methodologies must be capable of measuring concentrations of constituents at or below the maximum concentrations allowed, whenever possible. [Rules 62-701.510 and 62-520, F.A.C.]

10. In the event that water quality monitoring shows a violation of the applicable water quality standards, permittee shall arrange for a confirmation resampling within 30 days after permittee's receipt of laboratory results. In the event that permittee chooses not to conduct the reconfirmation sampling, the Department shall consider the initial analysis to be representative of the current water quality conditions at this facility. If the initial results demonstrates or the resampling confirms the ground water and/or surface water contamination, permittee shall notify the Department in writing within 14 days of this finding.

Upon notification by the Department, permittee shall initiate evaluation monitoring in accordance with Rule 62-701.510(7), F.A.C.

- 11. If the parameters detected in the detection wells identified in Rule 62-701.510(7)(a), F.A.C., consist only of iron, aluminum, manganese, sulfates, or total dissolved solids (TDS), either individually or in any combination, then only the detected parameters are required to be monitored in the representative background wells, affected detection wells and down gradient compliance wells required in the section, rather than the parameters listed in Rule 62-701.510(8)(a), F.A.C., and Rule 62-701.510(8)(d), F.A.C. However, if the facility is unlined, the parameters specified in Rule 62-701.510(8)(a), F.A.C., shall also be analyzed for in the initial sampling event for the affected detection wells and down gradient compliance wells.
- 12. All water quality monitoring required by this permit shall be in accordance with Rules 62-520.300, F.A.C. and Rule 62-4.246, F.A.C., and shall be carried out under the requirements of DEP-SOP-001/01 (December 3, 2008) FS 2000 or applicable Standard Operating Procedures (SOPs) in accordance with Chapter 62-160, F.A.C. (effective April 9, 2002). Requirements for these plans may be obtained from the Department's Environmental Assessment Section, (850) 488-2796.
- 13. A technical report and a stabilization report required by Rule 62-701.620(6), F.A.C., signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, shall be submitted to the Department every two and one-half years during the active life of the facility, and every five years during the long-term care periods. The report shall summarize and interpret the water quality monitoring results and water level measurements collected during the past two and one-half years. The report shall contain, at a minimum, the following::

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a. Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells.

- b. Trend analyses of any monitoring parameters consistently detected.
- c. Comparisons among shallow, middle and deep zone wells.
- d. Comparisons between background water quality and the water quality in detection and compliance wells.
- e. Correlations between related parameters such as total dissolved solids and specific conductance.
- f. Discussion of erratic and/or poorly correlated data.
- g. An interpretation of the ground water contour maps, including an evaluation of ground water flow rates.
- An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions

The technical report shall be submitted under separate cover with the permit renewal application, no later than the date of the permit expiration, November 13, 2010. [Rule 62-701.510(9) (b), F.A.C.]

14. If water-quality monitoring demonstrates contaminants are detected and confirmed in compliance wells or surface water sampling points in concentrations which exceed both background levels and Department water quality standards or criteria, the permittee shall notify the Department within 14 days of this finding and shall initiate corrective actions. Evaluation monitoring shall continue according to the requirements of Rule 62-701.510 (7) (a), F.A.C.

The permittee shall initiate and complete corrective actions in accordance with Chapter 62-780, F.A.C. within the manner and timeframes specified therein and provide a site assessment report (SAR) in accordance with Rule 62-780.600, F.A.C. that meets the objectives of said Rule within the manner and timeframes specified therein. [Rule 62-701.510(7)(b)2, F.A.C]

IV. ADDITIONAL LAND APPLICATION REQUIREMENTS

This section is not applicable to the facility.

V. OPERATION AND MAINTENANCE REQUIREMENTS

- 1. During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control. [62-620.320(6)]
- 2. The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility.
 - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
 - b. Copies of all reports required by the permit for at least three years from the date the report was prepared;
 - c. Records of all data, including reports and documents, used to complete the application for the permit for at least three years from the date the application was filed:
 - d. A copy of the current permit;
 - e. A copy of any required record drawings; and
 - f. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules.

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[62-620.350]

VI. SCHEDULES

1. The following improvement actions shall be completed according to the following schedule. The Best Management Practices/Pollution Prevention (BMP3) Plan shall be prepared and implemented in accordance with Part VIII of this permit:

Action Item	Completion Date
Continue implementing the existing BMP3 Plan	Issuance date of permit

[62-620.320(6)]

- 2. If the permittee wishes to continue operation of this wastewater facility after the expiration date of this permit, the permittee shall submit an application for renewal no later than one-hundred and eighty days (180) prior to the expiration date of this permit. Application shall be made using the appropriate forms listed in Rule 62-620.910, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C. [62-620.335(1) and (2)]
- 3. Within six months of the effective date of this permit, the permittee shall schedule a meeting with the Department to discuss the contents of the aquatic organism return plan in accordance with Condition I.A.12 and shall submit the plan to the Department within 12 months of the effective date of this permit. The plan shall be implemented within 24 months subsequent to approval by the Department.
- 4. The permittee shall submit technical reports in accordance with Condition III.13.

VII. BEST MANAGEMENT PRACTICES/STORMWATER POLLUTION PREVENTION PLANS

1. General Conditions

In accordance with Section 304(e) and 402(a)(2) of the Clean Water Act (CWA) as amended, 33 U.S.C. §§ 1251 et seq., and the Pollution Prevention Act of 1990, 42 U.S.C. §§ 13101-13109, the permittee must develop and implement a plan for utilizing practices incorporating pollution prevention measures. References to be considered in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act," found at 40 CFR 122.44 Subpart K and the Storm Water Management Industrial Activities Guidance Manual, EPA/833-R92-002 and other EPA documents relating to Best Management Practice guidance.

a. Definitions

- (1) The term "pollutants" refers to conventional, non-conventional and toxic pollutants.
- (2) Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- (3) Non-conventional pollutants are those which are not defined as conventional or toxic.
- (4) Toxic pollutants include, but are not limited to: (a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, or chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act of 1986; and (b) any substance (that is not also a conventional or non-conventional pollutant except ammonia) for which EPA has published an acute or chronic toxicity criterion.
- (5) "Significant Materials" is defined as raw materials; fuels; materials such as solvents and detergents; hazardous substances designated under Section 101(14) of CERCLA; and any chemical the facility is required to report pursuant to EPCRA, Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge.
- (6) "Pollution prevention" and "waste minimization" refer to the first two categories of EPA's preferred hazardous waste management strategy: first, source reduction and then, recycling.
- (7) "Recycle/Reuse" is defined as the minimization of waste generation by recovering and reprocessing usable products that might otherwise become waste; or the reuse or reprocessing of usable waste products in place

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of the original stock, or for other purposes such as material recovery, material regeneration or energy production.

- (8) "Source reduction" means any practice which: (a) reduces the amount of any pollutant entering a waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment or disposal; and (b) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.
- (9) "BMP3" means a Best Management Practices Pollution Prevention Plan incorporating the requirements of 40 CFR § 125, Subpart K, plus pollution prevention techniques, except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs.
- (10) The term "material" refers to chemicals or chemical products used in any plant operation (i.e., caustic soda, hydrazine, degreasing agents, paint solvents, etc.). It does not include lumber, boxes, packing materials, etc.

2. Best Management Practices/Pollution Prevention Plan

The permittee shall develop and implement a BMP3 plan for the facility, which is the source of wastewater and storm water discharges, covered by this permit. The plan shall be directed toward reducing those pollutants of concern which discharge to surface waters and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including process, treatment, and ancillary activities.

a. Signatory Authority & Management Responsibilities

The BMP3 plan shall be signed by permittee or their duly authorized representative in accordance with rule 62-620.305(2)(a) and (b). The BMP3 plan shall be reviewed by plant environmental/engineering staff and plant manager. Where required by Chapter 471-(P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of the BMP3 plant shall be signed and sealed by the professional(s) who prepared them.

A copy of the plant shall be retained at the facility and shall be made available to the permit issuing authority upon request.

The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. Such statements shall be publicized or made known to all facility employees. Management shall also provide training for the individuals responsible for implementing the BMP3 plan.

b. BMP3 Plan Requirements

- (1) Name & description of facility, a map illustrating the location of the facility & adjacent receiving waters, and other maps, plot plans or drawings, as necessary:
- (2) Overall objectives (both short-term and long-term) and scope of the plan, specific reduction goals for pollutants, anticipated dates of achievement of reduction, and a description of means for achieving each reduction goal;
- (3) A description of procedures relative to spill prevention, control & countermeasures and a description of measures employed to prevent storm water contamination;
- (4) A description of practices involving preventive maintenance, housekeeping, recordkeeping, inspections, and plant security; and
- (5) The description of a waste minimization assessment performed in accordance with the conditions outlined in condition c below, results of the assessment, and a schedule for implementation of specific waste reduction practices.

c. Waste Minimization Assessment

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The permittee is encouraged but not required to conduct A waste minimization assessment (WMA) for this facility to determine actions that could be taken to reduce waste loading and chemical losses to all wastewater and/or storm water streams as described in Part VII.D.2 of this permit.

If the permittee elects to develop and implement a WMA, information on plan components can be obtained forms the Department's Industrial Wastewater website, or from:

Florida Department of Environmental Protection Industrial Wastewater Section, Mail Station 3545 2600 Blair Stone Road Tallahassee, Florida 32399-2400 (850) 245-8589 (850) 245-8669 – Fax

d. Best Management Practices & Pollution Prevention Committee Recommended:

A Best Management Practices Committee (Committee) should be established to direct or assist in the implementation of the BMP3 plan. The Committee should be comprised of individuals within the plant organization who are responsible for developing the BMP3 plan and assisting the plant manager in its implementation, monitoring of success, and revision. The activities and responsibilities of the Committee should address all aspects of the facility's BMP3 plan. The scope of responsibilities of the Committee should be described in the plan.

e. Employee Training

Employee training programs shall inform personnel at all levels of responsibility of the components & goals of the BMP3 plan and shall describe employee responsibilities for implementing the plan. Training shall address topics such as good housekeeping, materials management, record keeping & reporting, spill prevention & response, as well as specific waste reduction practices to be employed. Training should also disclose how individual employees may contribute suggestions concerning the BMP3 plan or suggestions regarding Pollution Prevention. The plan shall identify periodic dates for such training.

f. Plan Development & Implementation

The BMP3 plan shall be developed and implemented 6 months after the effective date of this permit, unless any later dates are specified in this permit. Any portion of the WMA which is ongoing at the time of development or implementation shall be described in the plan. Any waste reduction practice which is recommended for implementation over a period of time shall be identified in the plan, including a schedule for its implementation.

- g. Submission of Plan Summary & Progress/Update Reports
 - (1) Plan Summary: Not later than 2 years after the effective date of the permit, a summary of the BMP3 plan shall be developed and maintained at the facility and made available to the permit issuing authority upon request. The summary should include the following: a brief description of the plan, its implementation process, schedules for implementing identified waste reduction practices, and a list of all waste reduction practices being employed at the facility. The results of waste minimization assessment studies already completed as well as any scheduled or ongoing WMA studies shall be discussed.
 - (2) Progress/Update Reports: Annually thereafter for the duration of the permit progress/update reports documenting implementation of the plan shall be maintained at the facility and made available to the permit issuing authority upon request. The reports shall discuss whether or not implementation schedules were met and revise any schedules, as necessary. The plan shall also be updated as necessary and the attainment or progress made toward specific pollutant reduction targets documented. Results of any ongoing WMA studies as well as any additional schedules for implementation of waste reduction practices shall be included.
 - (3) A timetable for the various plan requirements follows:

Timetable for BMP3 Plan Requirements:

REQUIREMENT

TIME FROM EFFECTIVE DATE OF THIS PERMIT

Progress/Update Reports

3 years, and then annually thereafter

The permittee shall maintain the plan and subsequent reports at the facility and shall make the plan available to the Department upon request.

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h. Plan Review & Modification

If following review by the Department, the BMP3 plan is determined insufficient, the permittee will be notified that the BMP3 plan does not meet one or more of the minimum requirements of this Part. Upon such notification from the Department, the permittee shall amend the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 30 days after such notification to make the changes necessary.

The permittee shall modify the BMP3 plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. Modifications to the plan may be reviewed by the Department in the same manner as described above.

VIII. OTHER SPECIFIC CONDITIONS

A. Specific Conditions Applicable to All Permits

- 1. Where required by Chapter 471 or Chapter 492, F.S., applicable portions of reports that must be submitted under this permit shall be signed and sealed by a professional engineer or a professional geologist, as appropriate. [62-620.310(4)]
- 2. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Department's Northwest District Office, are made a part hereof.
- 3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.
- 4. The permittee shall provide verbal notice to the Department's Northwest District Office as soon as practical after discovery of a sinkhole or other karst feature within an area for the management or application of wastewater, or wastewater sludges. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department's Northwest District Office in a written report within 7 days of the sinkhole discovery. [62-620.320(6)]

B. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

- I. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;
 - (1) One hundred micrograms per liter.
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels;
 - (1) Five hundred micrograms per liter,
 - (2) One milligram per liter for antimony, or
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

[62-620.625(1)]

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C. Impoundment Design, Construction, Operation, and Maintenance

1. All ash impoundments used to hold or treat wastewater and other associated wastes shall be operated and maintained to prevent the discharge of pollutants to waters of the State, except as authorized under this permit.

Operation and maintenance of any ash impoundment shall be in accordance with all applicable State regulations.
When practicable, piezometers or other instrumentation shall be used as a means to aid monitoring of
impoundment integrity.

D. Impoundment Integrity Inspections

- 1. No later than January 31, 2011, and annually thereafter, all impoundments shall be inspected by qualified personnel with knowledge and training in impoundment integrity. Annual inspections shall include observations of dike and toe areas for erosion, cracks or bulges, seepage, wet or soft soil, changes in geometry, the depth and elevation of the impounded water, sediment or slurry, freeboard, changes in vegetation such as overly lush, dead or unnaturally tilted vegetation, and any other changes which may indicate a potential compromise to impoundment integrity.
- Within 30 days after the annual inspection, a qualified, responsible officer shall certify to the Department that no breaches or structural defects resulting in the discharges to surface waters of the State and that no changes were observed which may indicate a potential compromise to impoundment integrity during the previous calendar year.

The certification shall also include a statement that the ash pond provides the necessary minimum wet weather detention volume to contain the combined volume for all direct rainfall and all rainfall runoff to the pond resulting from the 10-year, 24-hour rainfall event and maximum dry weather plant waste flows which could occur during a 24-hour period.

- 3. The permittee shall conduct follow-up inspections within 7 days after large or extended rain events (i.e., 25-year, 24-hour precipitation event).
- 4. In the event that a critical condition in the ash impoundment, such as the conditions listed below, is suspected that may result in a potential discharge to surface waters of the State, the permittee shall notify the Department within twenty-four (24) hours of becoming aware of the situation and provide a proposed course of corrective action and implementation schedule within fifteen (15) days from the time existence of the critical condition is confirmed and the Department was notified.

Critical conditions include observed changes such as concentrated seepage on the downstream of the slope, at the top of the slope, or downstream from the toe of the slope, evidence of slope instability including sloughing, bulging, or heaving of the downstream slope, or subsidence of the impoundment slope or crest, cracking of surface on the crest or either face of the impoundment, or general or concentrated seepage in the vicinity of or around any conduit through the impoundment may be signs imminent impoundment failure and should be addressed immediately.

E. Reporting and Recordkeeping Requirements for Impoundments

- 1. The summarized findings of all monitoring activities, inspections, and corrective actions pertaining to the impoundment integrity, and operation and maintenance of all impoundments shall be documented and kept on-site in accordance with permit Condition V.3, and made available to Department inspectors upon request.
- 2. Starting with the issuance of this permit, all pertinent impoundment permits, design, construction, operation, and maintenance information, including but not limited to: plans, geotechnical and structural integrity studies, copies of permits, associated certifications by qualified, Florida-registered professional engineer, and regulatory approvals, shall be kept on site in accordance with permit Condition V.3 and made available to Department inspectors upon request.

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F. Duty to Reapply

1. The permittee is not authorized to discharge to waters of the State after the expiration date of this permit, unless:

- a. the permittee has applied for renewal of this permit at least 180 days before the expiration date (July, 31, 2015) using the appropriate forms listed in Rule 62-620.910, F.A.C., and in the manner established in the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.; or
- b. the permittee has made complete the application for renewal of this permit before the permit expiration date. [62-620.335(1)-(4), F.A.C.]
- 2. When publishing Notice of Draft and Notice of Intent in accordance with Rules 62-110.106 and 62-620.550, F.A.C., the permittee shall publish the notice at its expense in a newspaper of general circulation in the county or counties in which the activity is to take place either
 - Within thirty days after the permittee has received a notice; or
 - b. Within thirty days after final agency action.

Failure to publish a notice is a violation of this permit.

G. Reopener Clauses

- The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345 F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall contain any other requirements then applicable.

- 2. The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, EPA established Total Maximum Daily Loads (TMDLs), or other information show a need for a different limitation, monitoring requirement, or more stringent requirements or any applicable standards pertaining to the operation and maintenance of coal combustion waste impoundments.
- 3. The Department or EPA may develop a TMDL during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.
- 4. The permit shall be reopened for revision as appropriate to address new information that was not available at the time of this permit issuance or to comply with requirements of new regulations, standards, or judicial decisions relating to CWA 316(b).

IX. GENERAL CONDITIONS

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1)]
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2)]

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3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3)]

- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4)]
- 5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5)]
- 6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6)]
- 7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7)]
- 8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8)]
- 9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

[62-620.610(9)]

- 10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10)]
- 11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that

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PERMITTEE: FACILITY:

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were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11)]

- 12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12)]
- 13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13)]
- 14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. [62-620.610(14)]
- 15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15)]
- 16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16)]
- 17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance.

[62-620.610(17)]

- 18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.
 - b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
 - d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
 - e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.

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f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

[62-620.610(18)]

- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19)]
- 20. The permittee shall report to the Department's Northwest District Office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - a. The following shall be included as information which must be reported within 24 hours under this condition:
 - (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - (4) Any unauthorized discharge to surface or ground waters.
 - b. Oral reports as required by this subsection shall be provided as follows:
 - (1) For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph (a)4. that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Warning Point:
 - (a) Name, address, and telephone number of person reporting;
 - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater):
 - (e) Estimated amount of the discharge;
 - (f) Location or address of the discharge;
 - (g) Source and cause of the discharge;
 - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - (i) Description of area affected by the discharge, including name of water body affected, if any; and
 - (j) Other persons or agencies contacted.
 - (2) Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to the Department's Northwest District Office within 24 hours from the time the permittee becomes aware of the circumstances.
 - c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Northwest District Office shall waive the written report.

[62-620.610(20)]

- 21. The permittee shall report all instances of noncompliance not reported under Permit Conditions IX. 17, 18 or 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition IX.20 of this permit. [62-620.610(21)]
- 22. Bypass Provisions.

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a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.

- b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Permit Condition IX. 22. b. of this permit.
- c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition IX. 20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition IX. 22. a. 1 through 3 of this permit.
- e. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition IX. 22. b. through d. of this permit.

[62-620.610(22)]

23. Upset Provisions.

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.
 - (1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.
 - (2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.
- b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Permit Condition IX.5. of this permit; and
 - (4) The permittee complied with any remedial measures required under Permit Condition IX. 5. of this permit.
- c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.
- d. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[62-620.610(23)]

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENTOF ENVIRONMENTAL PROTECTION

Director

Division of Water Resource Management

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(850) 245-8336

Attached:

Attachment 1: Final Discharge Monitoring Report

Attachment 2: DEP Form 62-701.900(31) - Water Quality Monitoring Certification

Attachment 3: DEP Form 9000-24 - Ground Water Sampling Log

From:

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, Fl. 32399-2400 PERMITTEE NAME: Gulf Power Company PERMIT NUMBER: FL0002275-013-IW1S MAILING ADDRESS: One Energy Place Pensacola, Florida 32520 LIMIT: Interim REPORT FREQUENCY: Quarterly CLASS SIZE: PROGRAM: Industrial MA FACILITY: D-010 Crist Electric Generating Plant MONITORING GROUP NUMBER: LOCATION: Ten Mile Road MONITORING GROUP DESCRIPTION: Combined Main Plant Discharge (Formerly D-001) RE-SUBMITTED DMR: DO DISCHARGE FROM SITE: Pensacola, FL

MONITORING PERIOD

Parameter		Quantity	or Loading	Units	Q	uality or Concentration	on	Units	No. Ex.	Frequency of Analysis	Sample Type
TRO-Discharge Time	Sample Measurement			· · · · · ·							
PARM Code 04223 Mon. Site No. EFF-1	Permit Requirement	·		٠.		i20 (Mo Avg.)	120 (Day Max.)	min/day		Quarterly	Meter
Oil and Grease	Sample Measurement				· · · · · · · · · · · · · · · · · · ·	(MANJANYS.)	. (20), (1240)				
PARM Code 00556 1 Mon. Site No. EFF-1	Permit Requirement					5.0 (Mo Avg.)	5.0 (Day Max.)	mg/L	STOR BODY S TORY	Quarterly	Grab
Arsenic, Total Recoverable (effluent)	Sample Measurement										
PARM Code 00978 1 Mon. Site No. EFF-1	Permit Requirement					50.0 ¹ (Mo.Avg.)	50.0 (Day Max.)	ug/L		Quarterly	24-hr TPC
Arsenic, Total Recoverable	Sample										
(Intake) PARM Code 00978 Q Mon. Site No. INT-I	Measurement Permit Requirement					Report (Ma, Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Cadmium, Total Recoverable (effluent)	Sample Measurement										
PARM Code 01113 1 Mon. Site No. EFF-1	Permit Requirement					Report (Mo.Avg.)	Report (Day.Max.)	ug/L		Quarterly	24-hr TPC
Cadmium, Total Recoverable (calculated limit)	Sample Measurement								<u> </u>		
PARM Code 01113 Q Mon. Site No. EFF-1	Permit Requirement					Report (Mo.Avg.)	Report ² (Day Max.)	ug/L		Quarterly	Calculated
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample Measurement										
PARM Code 01113 R Mon. Site No. EFF-1	Permit Requirement	W.				0.0 (Mo.Avg.)	0.0 (Day Max.)	og/L		Quarterly	Calculated

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATÉ (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

COUNTY:

OFFICE:

Escambia

Northwest District

¹ See Permit Condition I.A.8. If the concentration of the intake is greater than 50.0 ug/L, the intake concentration should be used as the effluent limit.

² See Permit Conditions I.A.7 & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER: MONITORING PERIOD

PERMIT NUMBER: FL0002275-013-IW1S

Parameter		Quantity	or Loading	Units		Qı	ality or Concentrati	on	Units	No. Ex.	Frequency of Analysis	Sample Type
Cadmium, Total Recoverable (Intake)	Sample Measurement											
ARM Code 01113 S Mon. Site No. INT-1	Permit Requirement		AT I				Report (Mo.Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Chromium, Hexavalent Total Recoverable (Effluent)	Sample Measurement											
ARM Code 78247	Permit				· · · · · ·		113	113.	ug/L	+ -	Quarterly	· 24-hr TPC
Mon. Site No. EFF-1	Requirement						(Mo.Avg.)	(Day,Max.)			Quantitati	
Chromium, Hexavalent Total	Sample											
lecoverable (Intake)	Measurement				<u> </u>					1		
ARM Code 78247 Q Mon Site No. INT-1	Permit			ŀ		,	Report	Report	սց/ե		Quarterly	24-hr TPC
Copper, Total Recoverable	Requirement Sample						(Mo.Avg.)	(Day.Max.)		-		
effluent)	Measurement											
PARM Code 01119 1	Permit						Report	Report	ng/L	1	Quarterly	24-hr TPC
Jon. Site No. EFF-1	Requirement						(Mo.Avg.)	(Day Max.)				
Copper, Total Recoverable	Sample											
calculated limit)	Measurement											
ARM Code 01119 Q Aon. Site No. EFF-1	Permit Requirement						Report	Report	ug/i.		Quarterly	Calculated
opper, Total Recoverable	Sample		***************************************	<u> </u>	<u> </u>		(Mo.Avg.)	(Day.Max.)	<u> </u>	+		l · · ·
effluent minus calculated limit)	Measurement											
ARM Code 01119 R	Permit	9		·			Report ³	Report	ug/L	 	Quarterly	Calculated
Mon. Site No. EFF-1	Requirement				}		(Mo, Avg.)	(Day, Max.)	}		4	
Opper, Total Recoverable	Sample				·							
Intake)	Measurement											
ARM Code 01119 S	Permit	•					Report	Report	ug/L		Quarterly	24-br TPC
Aon. Site No. INT-1	Requirement		. ,	<u> </u>			(Mo.Avg.)	(Day.Max.)		-		
ron, Total Recoverable effluent)	Sample Measurement			į								
ARM Code 00980 1	Permit		····	 	 		1.06	1.05	mg/L	+	Quarterly	24-hr TPC
Mon. Site No. BFF-1	Requirement						(Mo.Avg.)	(Day.Max.)			Quarterry	24-18 110
ron, Total Recoverable	Sample						(MO,ZEVE.)	(Cray, Inda.)		-	<u> </u>	
Intake)	Measurement								1			
ARM Code 00980 Q	Permit	14 × 10 × 10 × 10 × 10 × 10 × 10 × 10 ×					Report	Report	mg/L		Quarterly	24-hr TPC
don Site No. INT-1	Requirement						(Mo Avg.)	(Day.Max.)	<u>l</u>			
ead, Total Recoverable	Sample											
effluent)	Measurement			<u> </u>	<u> </u>				ļ <u>.</u>	 		
ARM Code 01114 1	Permit	. 14-		,			Report	Report	ug/L		Quarterly	24-hr TPC
Mon. Site No. EFF-1	Requirement	4 1943		 	ļ		(Mo.Avg.)	(Day Max.)			<u> </u>	
.ead, Total Recoverable	Sample							1				
Calculated Hmit) PARM Code 01114 O	Measurement Permit			ļ	 		B	Daine 6	118/L		Quarterly	Calculated
Mon. Site No. EFF-1	Requirement						Report ² (Mo.Avg.)	Report ⁶ (Day, Max.)	18.7		Quarterry	Calculated
TOTAL ONG TAV. DE 1 " (1 redancinett	l		1	ł .		(NID.AVg.)	(L/ay, Max.)	1		<u> </u>	<u> </u>

³ See Permit Condition I.A.8 & I.A.9. If the concentration of the intake is greater than 11 ug/L, the intake concentration should be used as the effluent limit.
4 See Permit Conditions I.A.7 & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

⁵ Copper has an Interim Limit see CO 10-2627-17-1W
⁶ See Permit Condition 1.A.8. If the concentration of the intake is greater than 1.0 mg/L, the intake concentration should be used as the effluent limit.

⁷ See Permit Conditions I.A.7 & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER: MONITORING PERIOD From:

PERMIT NUMBER: FL0002275-013-IW1S

Parameter		Quantity	or Loading	Units	(Quality or Concentrati	on	Units	No. Ex	Frequency of Analysis	Sample Type
Lead, Total Recoverable	Sample						1		T		
effluent minus calculated limit)	Measurement										<u> </u>
PARM Code 01114 R	Permit					0.0	0.0	ug/L	1 1	Quarterly	Calculated
Mon. Site No. EFF-1	Requirement					(Mo.Avg.)	(Day.Max.)				
ead, Total Recoverable	Sample										
Intake)	Measurement								\longrightarrow		
PARM Code 01114 S Mon. Site No. INT-I	Permit					Report	Report	- ug/L	1 1	Quarterly	24-hr TPC
Mercury, Total Recoverable	Requirement					(Mo.Avg.)	(Day. Max.)	<u> </u>	-		
effluent)	Sample Measurement						İ		1 1		ł
PARM Code 71901 I	Permit								 	Our relative	C
Aon. Site No. EFF-1	Requirement					0.012	0.012	ug/L		Quarterly	Grab
						(Mo.Avg.)	(Day.Max.)	ļ		<u> </u>	
Mercury, Total Recoverable Intake)	Sample							ļ			
PARM Code 71901 Q	Measurement Permit			 	. ,	 			-		
Mon. Site No. INT-1	Requirement			1		Report	Report	υ g/L	1 1	Quarterly	Grab
Zinc, Total Recoverable				1. 1.		(Mo,Avg.)	(Day Max.)	<u> </u>	1	<u> </u>	
effluent)	Sample								1 1		İ
ARM Code 01094	Measurement					Books	19 to - 4 to 4	33.00		Outstand	24-hr TPC
ARM Code 01094 Mon. Site No. EFF-1	Permit		2000			Report	Report	ບສູໂ		Quarterly	24-nr 1 PC
inc. Total Recoverable	Requirement					(Mo Avg.)	(Day Max.)		+		1
calculated limit)	Sample								1 1		
PARM Code 01094 O	Measurement Permit							ug/L	+	Owentile	Calculated
Mon. Site No. EFF-1	Requirement					Report	Report	ugt	1 [Quarterly	Carculated
				ļ		(Mo.Avg.)	(Day Max)		 		
Line, Total Recoverable	Sample						1		1 1		
effluent minus calculated limit) PARM Code 01094 R	Measurement Permit					0.0	0.0	ug/L	+	Overteelet	Calculated
Mon. Site No. EFF-1	Requirement						(Day Max.)	L UMA		Quarterly	Carcotateo
Linc. Total Recoverable	Sample					(Mo.Avg.)	(Day.Max.)		1	<u> </u>	
Intake)	Measurement										
PARM Code 01094 S	Permit			ļ		Report	Report	ug/L	╁╼╌┧	Quarterly	24-hr TPC
Mon. Site No. INT-1	Requirement					(Mo.Avg.)	(Day Max.)	uy.c		Quarterry	24-18 11-0
lardness, Total (as CaCO3)	Sample			12 2 2		(MOLEVE)	(Esay Max.)		1-4	 	
tarditess, Total (as CaCO3)	Measurement							ĺ	1 1		1
ARM Code 00900	Permit			 		ļ	Report	mg/L	+	Quarterly	24-hr TPC
Aon. Site No. EFF-1	Requirement			1.		İ	(Max.)		1 1	Quarterry	1 27-111-11-0
Alpha, Gross Particle Activity	Sample			 		 	(May.)		 		
effluent)	Measurement						}		1 1		
ARM Code 80045 1	Permit					15.010	15.09	pCi/L	+	Quarterly	24-hr TPC
Ann Code 80043	Requirement						,	P.J.C		Quarterry	23-711 77-0
				 		(Mo.Avg.)	(Day.Max.)	 	1 1	······································	
Alpha, Gross Particle Activity	Sample										
Intake)	Measurement			 		Damant	Beneut	pCi/L	+ 1	Quarterly	24-hr TPC
ARM Code 80045 Q Mon. Site No. INT-1	Permit Requirement		-1			Report (Mo.Avg.)	Report (Day.Max.)	pc.	ļ	Quarterry	ביייו וויי
IOIL DIVE INOUTHAL	Vedmienen			1	e de la companya de l	(IND.AVE.)	[LANY.IVINA.]	1	1		

⁶ See Permit Condition I.A.8. If the concentration of the intake is greater than 0.012 ug/L, the intake concentration should be used as the effluent limit.

⁷ See Permit Condition I.A.7. & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

¹⁰ See Permit Condition I.A.8. If the concentration of the intake is greater than 15.0 pCi/L, the intake concentration should be used as the effluent limit.

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER: MONITORING PERIOD From:

D-010

PERMIT NUMBER: FL0002275-013-IW1S

Parameter		Quantity	or Loading	Units	Q	uality or Concentration	n	Units	No Ex	Frequency of Analysis	Sample Type
Radium 226 + Radium 228, Total effluent) PARM Code 11503 Mon. Site No. EFF-1	Sample Measurement Permit Requirement					5.0 ¹¹ (Mo.Avg.)	5.0 ¹⁶ (Day.Max.)	pCi/L		Quarterly	24-hr TPC
Radium 226 + Radium 228, Total Intake)	Sample Measurement					(Mo.rvg)	(Day.iylax.)				
PARM Code 1503 Q Mon. Site No. INT-I	Permit Requirement					Report (Mo.Avg.)	Report (Day.Max.)	pCi/L		Quarterly	24-hr-TPC
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¹¹ See Permit Condition I.A.8. If the concentration of the intake is greater than 5.0 pCi/L, the intake concentration should be used as the effluent limit.

Docket No. 110007-EI Plant Crist NPDES Permit Exhibit JOV-1, Page 41 of 63

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME MAILING ADDRESS	Gulf Power Company One Energy Place	PERMIT NUMBER	FL0002275-013-IW1S		
	Pensacola, Florida 32520	LIMIT.	Final	REPORT FREQUENCY:	Monthly
		CLASS SIZE:	MA	PROGRAM:	Industrial
FACILITY:	Crist Electric Generating Plant	MONITORING GROUP NUMBER:	D-010		
LOCATION:	Ten Mile Road	MONITORING GROUP DESCRIPTION:	Combined Main Plant Discharg	ge (Formerly D-001)	
	Pensacola, FL	RE-SUBMITTED DMR:			
		NO DISCHARGE FROM SITE:			
COUNTY:	Escambia	MONITORING PERIOD From:	To:		
OFFICE:	Northwest District				

Parameter		Quantity	or Loading	Units	Units Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type	
Flow	Sample Measurement										
A SA SECTION OF THE S	Permit Requirement	Report (Day.Avg:)	Report (Day:Max.)	MGD						Daily, 24 hours	Calculated
Temperature (F), Water	Sample Measurement										
PARM Code 00011 1 Mon. Site No. EFF-1	Permit Requirement					94.0 (Day Avg.)	f. Assault	Dags	3.4	Continuous	Calculated
	Sample Measurement										
	Permit Requirement				6.0 (Day Min.)		8,5 (Day Max.)	5.U .		Weekly	Grab
Oxidants, Total Residual	Sample Measurement										
	Permit Requirement					0.01 (Mo Avg.)	0.01 (Day Max.)	mg/L		Weekly	Grab

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DEP Form 62-620,910(10), Effective Nov. 29, 1994

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400 PERMITTEE NAME: Gulf Power Company PERMIT NUMBER: FL0002275-013-IW1S MAILING ADDRESS: One Energy Place Pensacola, Florida 32520 Final LIMIT: REPORT FREQUENCY: Quarterly CLASS SIZE: PROGRAM: Industrial FACILITY Crist Electric Generating Plant MONITORING GROUP NUMBER: D-010

LOCATION. Ten Mile Road MONITORING GROUP DESCRIPTION: Combined Main Plant Discharge (Formerly D-001) Pensacola, FL Green Monitoring GROUP DESCRIPTION: Combined Main Plant Discharge (Formerly D-001)

COUNTY: Escambia MONITORING PERIOD From: To:
OFFICE: Northwest District

Parameter		Quantity	or Loading	Units	Q	uality or Concentratio	n	Units	No. Ex.	Frequency of Analysis	Sample Type
TRO-Discharge Time	Sample Measurement										
PARM Code 04223 1 Mon. Sitts No. EFF-1	Permit Requirement					120 (MoAvg.)	120 (Day,Max.)	min/day	450	Quarterly	Meter
Oil and Grease	Sample Measurement				X					And the second	
PARM Code 90556 Mon. Site. No. EPF-1	Permit Requirement				NX	5.0 (Mo.Avg.)	5:0 (Day Max.)	mg/L		Quarterly	Grab
Arsenic, Total Recoverable (effluent)	Sample Measurement			the state of the s						and the second s	
PARM Code 00978 1 Mon. Site No. EFF-1	Permit Requirement				/	50.0 ¹ (Mo.Avg.)	50,0 ¹ (Day Max)	ug/L		Quarterly	24-hr TPC
Arsenic, Total Recoverable (Intake)	Sample Measurement										
PARM Code 00978 Q Mon. Site No. ENT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ng/L		Quarterly	24-hr TPC
Cadmium, Total Recoverable (effluent)	Sample Measurement										
PARM Code 01113 1 Mon. Site No. EFF-1	Permit Requirement					Report (Mo:Avg.)	Report (Day Max)	og/L		Quarterly	24-hr TPC
Cadmium, Total Recoverable (calculated limit)	Sample Measurement	/									
PARM Code 01113 Q Mon. Site No. EFF-1	Permit Requirement					Report ² (Mo.Avg.)	Report ¹ (Day.Max.)	ng/L		Quarterly	Calculated
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample Measurement			A STATE OF THE PARTY OF THE PAR							
PARM Code 01113 R Mon. Site No. EFF-1	Permit Requirement					0,0 (Mo.Avg.)	0.0 (Day Max.)	ng/L		Quarterly	Calculated

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

¹ See Permit Condition I.A.8. If the concentration of the intake is greater than 50.0 ug/L, the intake concentration should be used as the effluent limit.

² See Permit Conditions I.A.7 & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition 1.A.7, the intake concentration should be used as the effluent limit.

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER: MONITORING PERIOD From: D-010

PERMIT NUMBER: FL0002275-013-IW1S

To:

Parameter		Quantity	or Loading	Units	Ç	Quality or Concentration	on	Units	No Ex.	Frequency of Analysis	Sample Type
Cadmium, Total Recoverable (Intake) PARM Code 01113 S Mon. Site No. INT-1	Sample Measurement Permit Requirement			Stoll Co. St.		Report (Mo.Avg.)	Report (Day, Max.)	ug/L		Quarterly	24-hr TPC
Chromium, Hexavalent Total Recoverable (Effluent) PARM Code 78247 1	Sample Measurement Permit					113	(Day.Max.)	ug/L		Quarterly	24-br TPC
Mon Site No. EFF-1 Chromium, Hexavalent Total	Requirement Sample	-		100		(Mo.Avg.)	(Day.Max-)		e see	Qualitary .	
Recoverable (Intake) PARM Code 78247 Q Mon. Site No. INT-1	Measurement Permit Requirement					Report (Mo Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Copper, Total Recoverable (effluent)	Sample Measurement										
PARM Code 01119 1 Mon Site No EFF-1	Permit Requirement			N		(Mo. Avg.)	Report (Day.Max.)	ug/L		Quarterly	24-hr TPC
Copper, Total Recoverable (calculated limit) PARM Code 01119 Q Mon. Site No. EFF-1	Sample Measurement Permit Requirement			1		Report (Mo Ave)	Report* (Day Max)	rig/L		Quarterly	Calculated
Copper. Total Recoverable (effluent minus calculated limit)	Sample Measurement										Calculated
PARM Code 01119 R Mon. Site No. EFF-1	Permit Requirement		- 17 - 19 - 19		= 0 (2	0.0 (Mo.Avg.)	(Day Max.)	ugal		Quarterly	Calculated
Copper, Total Recoverable (Intake) PARM Code 01119 S Mon: Site No. INT-1	Sample Measurement Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Iron, Total Recoverable (effluent)	Sample Measurement					(MO.P.Yg.)	(Day Max.)				
PARM Code 00980 1 Mon. Site No. EFF-1	Permit Requirement					1.0 ⁸ (Mo.Avg.)	1.0 ⁵ (Day.Max.)	mg/L		Quarterly	24-hr TPC
Iron, Total Recoverable (Intake)	Sample Measurement										
PARM Code 00980 Q Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day.Max.)	mg/L		Quarterly	24-hr TPC
Lead, Total Recoverable (effluent) PARM Code 01114	Sample Measurement Permit					Report	Report	ug/L		Quarterly	24-hr TPC
Mon. Site No. EFF-1 Lead. Total Recoverable	Requirement					(Mo.Avg.)	(Day Max.)			Zimi (2)	
(calculated limit) PARM Code 01114 Q Mon Site No. EFF-1	Measurement Permit Requirement					Report (Mo Avg.)	Report ⁶ (Day Max.)	ug/L		Quarterly	Calculated

³ See Permit Condition I.A.8 & 1.A.9. If the concentration of the intake is greater than 11 ug/L, the intake concentration should be used as the effluent limit.

See Permit Conditions 1.A.7 & 1.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

⁵ See Permit Condition I.A.8. If the concentration of the intake is greater than 1.0 mg/L, the intake concentration should be used as the effluent limit.

⁶ See Permit Conditions I.A.7 & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER

D-010

PERMIT NUMBER: FL0002275-013-IW1S

MONITORING PERIOD To: Parameter Quantity or Loading Units Quality or Concentration Units No. Frequency of Sample Type Ex. Analysis Lead, Total Recoverable Sample (effluent minus calculated limit) Measurement PARM Code 01114 R Permit 0.0 0.0 ug/L Calculated Quarterly Mon. Site No. EFF-1 Requirement (Mo Avg.) (Day Max.) Lead. Total Recoverable Sample (Intake) Measurement PARM Code 01114 S Permit Report Report ug/L Quarterly 24-hr TPC Mon. Site No. INT-1 Requirement (Mo.Avg.) (Day Max.) Mercury, Total Recoverable Sample Measurement (effluent) PARM Code 71901 1 Permit ug/L Grab 0.012 0.012 Quarterly Mon. Site No. EFF-1 Requirement (Mo.Avg.) (Day Max.) Mercury, Total Recoverable Sample (Intake) Measurement PARM Code 71901 O Permit Report ng/L Grab Report Quarterly Mon. Site No. INT-1 Requirement (Day Max.) (Mo Avg.) Zinc, Total Recoverable Sample (effluent) Measurement PARM Code 01094 1 Permit Report Report ng/L Quarterly 24-hr TPC Mon. Site No. EFF-1 Requirement (Mo.Avg.) (Day Max.) Zinc, Total Recoverable Sample (calculated limit) Measurement PARM Code 01094 O Permit Calculated ug/L Report Report Quarterly Mon. Site No. EFF-1 Requirement (Day Max.) (Mo Ave Zinc, Total Recoverable Sample (effluent minus calculated limit) Measurement PARM Code 01094 R Permit 0.0 0.0 ug/L Calculated Quarterly Mon Site No EFF-1 Requirement (Mo.Avg.) (Day Max.) Zinc, Total Recoverable Sample (Intake) Measurement PARM Code 01094 S ing/L Permit Report Report Quarterly 24-hr TPC Mon. Site No. INT-1 (Day Max.) Requirement (Mo.Avg.) Hardness, Total (as CaCO3) Sample Measurement PARM Code 00900 1 Permit Report mg/L Quarterly 24-hr TPC Mon Site No EFF-1 Requirement (Max.) Alpha, Gross Particle Activity Sample (effluent) Measurement pCi/L Quarterly 24-hr TPC PARM Code 80045 Permit 15.09 15.09 Mon. Site No. EFF-1 Requirement (Mo.Avg.) (Day Max.) Alpha, Gross Particle Activity Sample (Intake) Measurement

Permit

Requirement

PARM Code 80045 O

Mon. Site No. INT-1

Report

(Mo.Avg.)

Quarterly

24-hr TPC

DCVL

Report

(Day Max.)

⁷ See Permit Condition 1.A.8. If the concentration of the intake is greater than 0.012 ug/L, the intake concentration should be used as the effluent limit.

⁸ See Permit Conditions I.A.7 & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

⁹ See Permit Condition I.A.8. If the concentration of the intake is greater than 15.0 pCi/L, the intake concentration should be used as the effluent limit.

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER:

D-010

PERMIT NUMBER: FL0002275-013-IW1S

Parameter		Quantity	or Loading	Units		Quality or Concentrati	on /	Units	No.	Frequency of	Sample Type
	ļ					,			Ex.	Analysis	
Radium 226 + Radium 228, Total effluent)	Sample Measurement										
PARM Code 11503 1	Permit				· · · · · · · · · · · · · · · · · · ·	5,010	5.010	pCi/L	27.00	Quarterly	24-hr TPC .
Mon. Site No. EFF-1	Requirement					(Mo.Avg.)	(Day.Max)				Carlotte Comment
Radium 226 + Radium 228, Total (Intake)	Sample Measurement										
PARM Code 11503 Q	Permit		JANES	2,333,454		Report	Report	pCi/L	35 Tes V 1000	Quarterly	24-hr TPC
Mon. Site No. INT-1	Requirement	t wild While				(Mo.Avg.)	(Day Max.)	MACHINE !	2.5.3	a fight that will are for	
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¹⁰ See Permit Condition 1.A.8. If the concentration of the intake is greater than 5.0 pCi/L, the intake concentration should be used as the effluent limit.

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME	Gulf Power Company	PERMIT NUMBER:	FL0002275-013-IW1S	
MAILING ADDRESS:	One Energy Place			
	Pensacola, Florida 32520	LIMIT:	Final REPORT FREQUE	UENCY: Annually
		CLASS SIZE	MA PROGRAM:	Industrial
FACILITY	Crist Electric Generating Plant	MONITORING GROUP NUMBER:	D-010	
LOCATION	Ten Mile Road	MONITORING GROUP DESCRIPTION:	Combined Main Plant Discharge (Formerly D-001	v.
	Pensacola, FL	RE-SUBMITTED DMR	Combined Main Flank Discharge (Formerly D-001	Ł
	Tensacola, I E			
00101011		NO DISCHARGE FROM SITE:		
COUNTY:	Escambia	MONITORING PERIOD From:	To	
OFFICE:	Northwest District			

Parameter		Quantity	or Loading	Units	Q	Quality or Concentration	on	Units	No. Ex.	Frequency of Analysis	Sample Type
Nickel, Total Recoverable (effluent)	Sample Measurement										
PARM Code 01074 Mon. Site No. EFF-1	Permit Requirement			46		Report (Mo.Avg.)	Report (Day Max.)	ug/L		Annually	24-hr TPC
Nickel, Total Recoverable (calculated limit)	Sample Measurement										
PARM Code 01074 Q Mon. Site No. EFF-1	Permit Requirement					Report ¹¹ (Mo.Avg.)	Report ²⁰ (Day Max.)	ug/L		Annually	Calculated
Nickel, Total Recoverable (effluent minus calculated limit)	Sample Measurement										
PARM Code 01074 R Mon. Site No. EFF-1	Permit Requirement			4		0.0 (Mo,Avg.)	0.0 (Max.)	ug/L		Annually	Calculated
Nickel, Total Recoverable (Intake)	Sample Measurement										
PARM Code 01074 S Mon Site No INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Annually	24-hr TPC
Selenium, Total Recoverable (Effluent)	Sample Measurement										
PARM Code 00981 1 Mon. Site No. EFF-1	Permit Requirement					5.0 ¹² (Mo.Avg.)	5.0 ²¹ (Day Max.)	ng/L	なる	Annually	.24-hr TPC
Selenium, Total Recoverable (Intake)	Sample Measurement			A Sanga Addissimination his day to be							
PARM Code 00981 Q Mon. Site No. INT-1	Permit Requirement					Report (Mo Avg.)	Report (Day Max.)	ug/L	100 m	Annually	24-hr TPC

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

See Permit Conditions I.A.7 & I.A.8. If the concentration of the intake is greater than the limit calculated in Condition I.A.7, the intake concentration should be used as the effluent limit.

¹² See Permit Condition I.A.8 If the concentration of the intake is greater than 5.0 ug/L, the intake concentration should be used as the effluent limit.

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

Paramete	er	Quantity or Loading	Units	Quality	or Concentration	Units	No.	Frequency of	Sample Typ
COUNTY: OFFICE:	Escambia Northwest District		ONITORING N	OT REQUIRED: TERIOD From:	То:			ar eliquip Adulta Aprilla	
LOCATION:	Ten Mile Road Pensacola, FL	R	ONITORING G E-SUBMITTED O DISCHARGE		Combined Main Plant Dischar	ge (Formerly	D-001)		
FACILITY	Crist Electric Generating P		LASS SIZE: ONITORING G	ROUP NUMBER:	MA D-010	PROGRA			strial
MAILING ADDRESS		L	MIT		Final	REPORT	FREQU	JENCY: Tox	icity
PERMITTEE NAME	Gulf Power Company	PI	ERMIT NUMBE	R:	FL0002275-013-IW1S				

Parameter		Quantity	or Loading	Units		Quality or Concentration	on	Units	No. Ex.	Frequency of Analysis	Sample Type
7-DAY CHRONIC STATRE Ceriodaphnia dubia(Routine)	Sample Measurement										
PARM Code TRP3B P Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		Quarterly	24-hr TPC
7-DAY CHRONIC STATRE Ceriodaphnia dubia(Additional)	Sample Measurement										
PARM Code TRP3B Q Mon. Site No. EFF-1	Permit Requirement				100 (Min.)	Variable Contraction		percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Ceriodaphnia dubia(Additional)	Sample Measurement										
PARM Code TRP3B R Mon Site No. EFF-1	Permit Requirement				100 (Min.)			percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Pimephales promelas(Routine)	Sample Measurement										
PARM Code TRP6C P Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		Quarterly	24-hr TPC
7-DAY CHRONIC STATRE Pimephales promelas(Additional)	Sample Measurement										
PARM Code TRP6C Q Mon, Site No. EFF-1	Permit Requirement				100 (Min.)			percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Pimephales promelas (Additional)	Sample Measurement										
PARM Code TRP6C R Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		As needed	As required by the permit

^{*}ENTER "MNR" IN THE RESULTS COLUMN FOR EACH TEST THAT IS NOT REQUIRED.

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER: MONITORING PERIOD From: D-010

PERMIT NUMBER: FL0002275-013-IW1S

To:

Parameter		Quantity	or Loading	Units		Quality or Concentrati	on	Units	No. Ex.	Frequency of Analysis	Sample Type
7-DAY CHRONIC STATRE Mysidopsis bahia (Routine)	Sample Measurement										
PARM Code TRP3E P Mort. Site No. EFF-1	Permit Requirement				100 (Min.)			percent	10% (7.8	Semi-Annually; twice per year	24-hr TPC
7-DAY CHRONIC STATRE Mysidopsis bahia (Additional)	Sample Measurement						Painten khukkii min limailia (amii. Iakin di				
PARM Code TRP3E Q Mon. Site No EFF-1	Permit Requirement				100 (Min.)			∜ percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Mysidopsis bahia (Additional)	Sample Measurement										
PARM Code TRP3E R Mon. Site No. EFF-1	Permit Requirement				100 (Min.)		FINANCE.	percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Menidia beryllina (Routine)	Sample Measurement				16						
PARM Code TRP6B P Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		Semi-Annually; twice per year	24-hr TPC
7-DAY CHRONIC STATRE Menidia beryllina (Additional)	Sample Measurement										
PARM Code TRP6B Q Mon. Site No. EFF-1	Permit Requirement				(Min.)			percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Menidia beryllina (Additional)	Sample Measurement										
PARM Code TRP6B R Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		As needed	As required by the

*ENTER "MNR" IN THE RESULTS COLUMN FOR EACH TEST THAT IS NOT REQUIRED.

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ISSUANCE/REISSUANCE DATE: January/February 2011

DEP Form 62-620.910(10), Effective Nov. 29, 1994

Page 2 of 2

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: MAILING ADDRESS:	Gulf Power Company One Energy Place	PERMIT NUMBER:	FL0002275-013-IW1S		
	Pensacola, Florida 32520	LIMIT:	Final	REPORT FREQUENCY	Monthly
	r chaecola, r fortua 32320			The second of th	
		CLASS SIZE:	MA	PROGRAM:	Industrial
FACILITY:	Crist Electric Generating Plant	MONITORING GROUP NUMBER:	I-1C0		
LOCATION:	Ten Mile Road	MONITORING GROUP DESCRIPTION:	Ash Pond Discharge to the Disc	charge Canal	
	Pensacola, FL	RE-SUBMITTED DMR:	8		
	1 stiguethi, 1 s	NO DISCHARGE FROM SITE:			
COUNTY	Escambia	MONITORING PERIOD From:	To:		
OFFICE:	Northwest District				

Parameter		Quantity o	r Loading	Units	C	Quality or Concentrat	ion	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
PARM Code 50050 [Mon Sice No FLW-3	Permit Requirement	Report (Mo.Avg.)	Report (Day Max.)	MGD						Daily, when discharging	Flow Totalizer
Oil and Grease	Sample Measurement										
PARM Code 00556 L Mon. Site No. EFF-2	Permit Requirement				7.0 (Mo.Avg.)	10.0 (Day Avg.)		mg/L		Bi-weekly; every 2 weeks	Grab
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 1 Mon. Site No. EFF-2	Permit Requirement				(30,0 (Mo.Avg.)	65.0 (Day Avg.)		mg/L		Weekly, when discharging	24-hr TPC
Hydrazine	Sample Measurement										
PARM Code 81313 1 Mon. Site No. EFF-2	Permit Requirement	Kalingan Ar					300 (Inst.Max.)	mg/L		Weekly, when discharging 13	Multiple Grab
рН	Sample Measurement										
PARM Code 00400 1 Mon. Site No. EFF-2	Permit Requirement				6.0 (Day Min.)		9.0 (Day Max.)	s.u.		Weekly, when discharging	Grab

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here).

A discharge event is defined as a cold dump of a single boiler following cold stand-by status which required hydrazine to be added to the boiler water to achieve concentrations higher than normal for protection of metal surfaces.

A two day period begins at the start of a boiler discharge to the pond and includes the subsequent 48 hours. Grab samples shall be taken at 6, 12, and 24 hours from the time approximately 50 percent of the discharge is complete.

Monthly

¹³ The monitoring frequency for hydrazine shall be three times per cold dump discharge event when the amount of residual hydrazine in the boiler water discharged into the ash pond during a two day period exceeds the threshold level of 43.2 kg. Monitoring for hydrazine is not required during a cold dump discharge event provided the total boiler water residual hydrazine amount being discharged is below 43.2 kg. The total amount of hydrazine going to the ash pond will be calculated by multiplying the capacity of each boiler being dumped within a two day period by the measured hydrazine residual concentration in that boiler

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400 PERMITTEE NAME: Gulf Power Company PERMIT NUMBER: FL0002275-013-IW1S MAILING ADDRESS: One Energy Place Pensacola, Florida 32520 LIMIT: Final REPORT FREQUENCY: Monthly CLASS SIZE: MA PROGRAM: Industrial FACILITY: Crist Electric Generating Plant MONITORING GROUP NUMBER: 1-150 LOCATION: Ten Mile Road MONITORING GROUP DESCRIPTION: Metal Cleaning Wastes to the Ash Pond Pensacola, FL RE-SUBMITTED DMR: NO DISCHARGE FROM SITE: COUNTY: Escambia MONITORING PERIOD From: To:

Parameter		Quantity or Loading		Units	Units Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
	Permit Requirement	Report (Ma Avg.)	Report (Day.Max.)	MGD						Per discharge	Calculated
Copper, Total Recoverable	Sample Measurement										
PARM Code 01119 1 Mon. Site No. EFF-3	Permit Requirement					1.0 (Mo.Avg.)	1.0 (Day Max.)	mg/L		Per discharge	Composite ¹⁴
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 1 Mon. Site No. EFF-3	Permit Requirement					1.0 (Mo.Avg.)	1.0 (Day Max.)	mg/L		Per discharge	Composite ²³
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 I Mon. Site No. EFF-3	Permit Requirement					30.0 (Mo,Avg.)	100.0 (Day Max.)	mg/L		Per discharge	Composite ²³
Oil and Grease	Sample Measurement										
PARM Code 00556 1 Mon. Site No. EFF-3	Permit. Requirement					15.0 (Mo.Avg.)	20.0 (Day Max.)	mg/L		Per discharge	Grab

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (nm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

Northwest District

Monthly

Docket No. 110007-EI
Plant Crist NPDES Permit
Exhibit JOV-1, Page 51 of 63

OFFICE

¹⁴ One aliquot collected immediately after the start of discharge to the ash pond, one aliquot immediately prior to termination of the discharge, and six aliquots collected at approximately equal times in between.

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME:	Gulf Power			PE	RMIT NUMB	ER:	FL000227	5-013-IW1S				
MAILING ADDRESS	0,	Place lorida 32520			MIT: LASS SIZE:		Final MA		REPORT PROGRA			Monthly
FACILITY: LOCATION	Crist Electric Ten Mile Ro	Generating Plant	ant	MO	ONITORING	GROUP NUMBER GROUP DESCRIPT	I-170 TION: Units 6 an		Blowdown to	1000		ndustrial iver Water is Used as
	Pensacola, F	L			S-SUBMITTEI D DISCHARG	D DMR: E FROM SITE:	Make-up	Water for the Coolin	g l'owers			
COUNTY: OFFICE	Escambia Northwest D	istrict		Mo	ONITORING I	PERIOD Fro	em:	To:			***************************************	
Paramete	er		Quantity	or Loading	Units		Quality or Concentrat	ion	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow		Sample Measurement									-	
PARM Code 50050 1 Mon. Site No. FLW-5	Aller to the state of the state of	Permit Requirement	Repurt (Mo.Avg.)	Report (Day Max.)	MGD			4,75 4,582,7			Weekly, when discharging	Calculated
Total Residual Oxidants (Discharge Time)		Sample Measurement										
PARM Code 04223 1 Mon. Site No. EFF-1		Permit Requirement		Marine State			120 (Mo Avg.)	(Day.Max.)	min/day		Daily, when discharging	Meter
Oxidants, Free Available	:	Sample Measurement										
PARM Code 34045 1 Mon. Site No. OUI-6		Permit Requirement					0.2 ¹⁵ (Mo.Avg.)	0,5 ²⁴ (Day Max.)	mg/L		Per occurrence	e Grab

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VICLATIONS (Reference all attachments here):

Monthly

¹⁵ Limitations and monitoring requirements for Free Available Oxidants shall be applicable when an oxidant (e.g., chlorine or Nalco Actibrom 7342) is used in the cooling towers for Units 6 and 7 and the blowdown is discharged to the ash pond

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME MAILING ADDRESS	Gulf Power Company One Energy Place	PERMIT NUMBER:	FL0002275-013-IW1S		
	Pensacola, Florida 32520	LIMIT	Final	REPORT FREQUENCY	Quarterly
		CLASS SIZE:	MA	PROGRAM:	Industrial
FACILITY	Crist Electric Generating Plant	MONITORING GROUP NUMBER:	I-170		
LOCATION.	Ten Mile Road	MONITORING GROUP DESCRIPTION:	Units 6 and 7 Cooling Tower Bl	owdown to the Ash Pond When	River Water is Used as
			Make-up Water for the Cooling	Towers	
	Pensacola, FL	RE-SUBMITTED DMR:			
		NO DISCHARGE FROM SITE:			
COUNTY:	Escambia	MONITORING PERIOD From:	To		
OFFICE:	Northwest District				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Chromium, Total Recoverable	Sample Measurement										
PARM Code 01118 1 Mon. Site No. OUT-6	Permit Requirement					0,2 (Mo.Avg.)	0.2 (Day Max.)	mg/L		Quarterly, when discharging	Grab
Zinc, Total Recoverable	Sample Measurement										
PARM Code 01094 1 Mon. Site No. OUI-6	Permit Requirement					1.0 (Mo.Avg.)	1.0 (Day.Max.)	mg/L		Quarterly, when discharging	Grab

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COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

Parameter		Quantity or Loading	Units	Quality	or Concentration	Units No		Sample Type
COUNTY: OFFICE:	Escambia Northwest District		MONITORING F		To:	***************************************		
	Pensacola, FL		RE-SUBMITTED	_	recommed water is oded as re	ликопр Брен К	columned Water	
LOCATION:	Ten Mile Road		MONITORING (GROUP DESCRIPTION:	ECUA Reclaimed Water and I Reclaimed Water is Used as M			n when ECUA
FACILITY:	Crist Electric Generating Pla	ant	CLASS SIZE MONITORING (GROUP NUMBER:	MA I-180	PROGRAM:	Indi	ustrial
MAILING ADDRESS	One Energy Place Pensacola, Florida 32520		LIMIT		Final	REPORT FR	EQUENCY: Mo	nthly
PERMITTEE NAME	Gulf Power Company		PERMIT NUMBI	ER	FL0002275-013-IW1S			

Parameter					on	Units	No. Ex.	Frequency of Analysis	Sample Type	
Flow	Sample Measurement									
PARM Code 50050 Y Mon. Site No. FLW-5	Permit Requirement		20 (An Avg.)	MGD				77.5	Continuous	Flow Totalizer
Flow	Sample Measurement									
PARM Code 50050 1 Mon. Site No. FLW-5	Permit Requirement		Report (Mo, Avg.)	MGD					Continuous	Flow Totalizer
Flow	Sample Measurement									
PARM Code 50050 Q Mon. Site No. FLW-6	Permit Requirement		855 (An Max.)	MGD					Continuous	Flow Totalizer
Flow	Sample Measurement									
PARM Code 50050 R Mon. Site No. FLW-6	Permit Requirement	Report (Mo.Avg.)	Report (Day Max.)	MGD	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			7.19	Continuous	Flow Totalizer
Flow	Sample Measurement									
PARM Code 50050 S Mon. Site No. FLW-7	Permit Requirement		855 (An, Max.)	MGD					Continuous	Flow Totalizer
Flow	Sample Measurement									
PARM Code 50050 T Mon. Site No. FLW-7	Permit Requirement	Report (Mo Avg.)	Report (Day Max.)	MGD		The second secon			Continuous	Flow Totalizer
Duration of Discharge	Sample Measurement									
PARM Code 81381 I Mon. Site No. FLW-6	Permit Requirement		Réport (An Total.)	hr			4		Weekly, when discharging	Calculated

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COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER: MONITORING PERIOD From: I-180

PERMIT NUMBER: FL0002275-013-IW1S

To:

Parameter		Quantity	or Loading	Units		Quality or Concentrati	on	Units	No Ex.	Frequency of Analysis	Sample Type
Duration of Discharge	Sample Measurement										
PARM Code 81381 Q Mon Site No. FLW-6	Permit Requirement	Report (Mo.Total.)		Hz/month					7	Weekly, when discharging	Calculated
Duration of Discharge	Sample Measurement										
PARM Code 81381 R Mon. Site No. FLW-7	Permit Requirement		Report (An Total)	hr						Weekly, when discharging	Calculated
Duration of Discharge	Sample Measurement				The last section of the la		the state of the s				
PARM Code 81381 S Mon. Site No. FLW-7	Permit Requirement	Report (Mo.Total.)	*1	hr/month	Year Salan		1,			Weekly, when discharging	Calculated
TRO-Discharge Time	Sample Measurement					Same of an article of a sale					
PARM Code 04223 P Mon, Site No. OUI-6	Permit Requirement					120 (Mo.Avg.)	120 (Day Max.)	min/day		Weekly, when	Calculated
TRO-Discharge Time	Sample Measurement										
PARM Code 04223 Q Mon. Site No. OUI-7	Permit Requirement					120 (Mo.Ayg.)	(Day Max.)	min/day	7.5	Weekly, when discharging	Calculated
Oxidants, Total Residual	Sample Measurement										
PARM Code 34044 P Mon Site No. CL/I-6	Permit Requirement					0.2 ¹⁶ (Mo.Avg.)	0.5 ²⁵ (Day Max.)	mg/L		Weekly, when discharging	Grab
Oxidants, Total Residual	Sample Measurement							1000			
PARM Code 34044 Q Mon. Site No. OUI-7	Permit					0.2 ¹⁵ (Mo.Avg.)	0.5 ²⁵ (Day Max.)	mg/L		Weekly, when discharging	Grab
Nitrogen, Ammonia, Total (as N)	Sample Measurement										
PARM Code 00610 P Mon, Site No. OUI-5	Permit Requirement				Report (Mo.Avg.)	Report (Wk.Avg.)	Report (Day Max.)	mg/L	1 ,14	Weekly, when discharging	Grab
Nitrogen, Ammonia, Total (as N)	Sample Measurement										
PARM Code 00610 Q Mon. Site No. OUI-6	Permit Requirement				Report (Mo Avg.)	Report (Wk Avg.)	Report (Day Max)	mg/L		Weekly, when discharging	Grab
Nitrogen, Ammonia, Total (as N)	Sample Measurement										
PARM Code 00610 R Mon. Site No. OUT-7	Permit Requirement			12.45-2	Report (Mo Avg.)	Report (Wk:Avg.)	Report (Day.Max.)	mg/L		Weekly, when discharging	Grab
Nitrogen, Kjeldahl, Total (as N)	Sample Measurement			-							
PARM Code 00625 P Mon. Site No. OUT-5	Permit Requirement				Report (Mo.Avg.)	Report - (Wk.Avg.)	Report (Day Max)	mg/L	100	Weekly, when discharging	Grab

Monthly

¹⁶ Limitations and monitoring requirements for Total Residual Oxidants and Free Available Oxidants shall be applicable when an oxidant (e.g., chlorine or Nalco Actibrom 7342) is used in the cooling towers for Units 6 and 7 and discharging the blowdown to surface waters of the state

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY:

Crist Electric Generating Plant

MONITORING GROUP NUMBER: MONITORING PERIOD From: 1-180

PERMIT NUMBER: FL0002275-013-IW1S

To:

Parameter		Quantity o	or Loading	Units	Q	Quality or Concentration	on	Units	No. Ex.	Frequency of Analysis	Sample Type
Nitrogen, Kjeldahl, Total (as N)	Sample Measurement										
PARM Code 00625 Q Mon. Site No. OUI-6	Permit Requirement				(Mo. Avg.)	Report (Wk Avg.)	Report (Day Max)	mg/L		Weekly, when discharging	Grab
Nitrogen, Kjeldahl, Total (as N)	Sample Measurement										
PARM Code 00625 R Mon. Site No. OUI-7	Permit Requirement		Shell of new second		Report (Mo.Avg.)	Report (Wk Avg.)	Raport (Day Max)	mg/L		Weekly, when discharging	Grab
Nitrite plus Nitrate, Total 1 det (as N)	Sample Measurement										
PARM Code 00630 P Mon Site No. OUI-5	Permit Requirement				Report (Mo.Avg.)	Report (Wk.Avg.)	Report (Day Max.)	mg/L		Weekly, when discharging	Grab
Nitrite plus Nitrate, Total (as N)	Sample Measurement										
PARM Code 00630 Q Mon. Site No. OUI-6	Permit Requirement				Report (Mo Avg.)	Report (Wk Avg.)	Report (Day Max.)	mg/L		Weekly, when discharging	Grab
Nitrite plus Nitrate, Total (as N)	Sample Measurement										
PARM Code 00630 R Man Site No. OUI-7	Permit Requirement				Report (Mo.Avg.)	Report (Wk:Avg.)	Report (Day Max.)	mg/L		Weekly, when discharging	Grab.
Nitrogen, Total	Sample Measurement										
PARM Code 00600 P Mon. Site No. OUI-S	Permit Requirement				3.75 (Mo.Avg.)	4.5 (Wk.Avg.)	6.0 (Day Max.)	mg/L		Weekly, when discharging	Calculated
Nitrogen, Total	Sample Measurement										
PARM Code 00600 Q Mon. Site No. OUJ-6	Permit Requirement				Report (Mo.Avg.)	Report (Wk:Avg.)		mg/L		Weekly, when discharging	Grab
Nitrogen, Total	Sample Measurement										
PARM Code 00600 R. Mon. Site No. OUI-7	Permit Requirement				Report (Mo.Avg.)	Report (Wk.Avg.)		mg/L		Weekly when discharging	Grab
Nitrogen, Total (Reclaimed Water Pipeline for Makeup)	Sample Measurement										
PARM Code 00600. S Mon. Site No. QUI-5	Permit Requirement	1,54	Report (Mo.Total)	Ibs					À.	Weekly, when discharging	Grab
Nitrogen, Total (Cooling Tower Conveyance Line)	Sample Measurement										
PARM Code 00600 T Mon. Site No. OUI-6	Permit Requirement		Report (Mo.Total)	lbs /month				Barrell .		Weekly, when discharging	Grab
Nitrogen, Total (Reclaimed Water Pipeline Prior to Discharge to Discharge Tunnel)	Sample Measurement										
PARM Code 00600 U Mon. Site No. OUI-7	Permit Requirement		Report (Mo Total)	lbs /month						Weekly, when discharging	Grab

FACILITY:

Gulf Power Company - Crist Power Plant

MONITORING GROUP NUMBER: 1-180 MONITORING PERIOD

PERMIT NUMBER: FL0002275-013-IW1S

To:

Parameter		Quantity	Quantity or Loading Units Qua				Quality or Concentration			Frequency of Analysis	Sample Type
Nitrogen, Total Monthly Net Loading – Water from ECUA/Discharge Line to Overall Intake)	Sample Measurement										
PARM Code 00690 X Mon. Site No. QUI-S. QUI-6	Permit Requirement		Report (Mo.Total)	lbs /manth					1/1	Weekly, when discharging	Grab
Nitrogen, Total (Monthly Net Loading – Water from ECUA/Discharge Line to Discharge Canal)	Sample Measurement										
PARM Code 00600 Z Mon. Site No. OUI-5, OUI-7	Permit Requirement		Report ²⁶ (Mo Total)	lbs /month						Weekly, when discharging	Grab
Nitrogen, Total (Annual Net Loading — Water from ECUA/Discharge Line to Overall Intake)	Sample Measurement										
PARM Code 00600° V Mon. Site No. OUI-5, OUI-6	Permit Requirement		Report (An. Total)	lbs/ year				Silver Silver	2.7	Weekly, when discharging	Calculated
Nitrogen, Total (Annual Net Loading – Water from ECUA/Discharge Line to Discharge Canal)	Sample Measurement				of the state of th						
PARM Code 00600 W Mon. Site No. OUI-5; OUI-7.	Permit Requirement		Report ²⁷ (An.Total)	lbs/ year			表表的表示。 第		7.2	Weekly, when discharging	Calculated
Phosphorus, Total (as P)	Sample Measurement									<u> </u>	
PARM Code 00665 P Mon. Site No. OUI-5	Permit				0.4 (Mo.Avg.)	0.6 (Wk.Avg.)	0.8 (Day Max.)	mg/L	263	Weekly, when discharging	Grab
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 Q Mon. Site No. OUI-6	Permit Requirement					Report (Wk Avg.)		mg/L	有类	Weekly, when	Grab
Phosphorus, Total (as P)	Sample Measurement				· ·						
PARM Code 00665 R Mon. Site No. OUI-7	Permit Requirement					Report (Wk.Avg.)		mg/L	. 1	Weekly, when discharging	Grab
Phosphorus, Total (as P) (Reclaimed Water Pipeline for Makeup)	Sample Measurement					(Manual Park)				asserted gring	
PARM Code 00665 S Mon. Site No. OUI-5	Permit Requirement		Report (Mo Total)	lbs /month					10/6	Weekly, when discharging	Grab
Phosphorus, Total (as P) (Cooling Tower Conveyance Line)	Sample Measurement		Activity of the second		100000000000000000000000000000000000000			20 11 7 40 1	The second		<u> </u>
PARM Code 00665 T Mon Site No OUL6	Permit Requirement		Report (Mo Total)	lbs /month			3680-3	8		Weekly, when discharging	Grab
Phosphorus, Total (as P) (Reclaimed Water Pipeline Prior to Discharge to Discharge Tunnel)	Sample Measurement	Charles Sec. 13 refer to 2 h 3 k 3 k 3			20 S S S S S S S S S S S S S S S S S S S	NO. N. S. D. WOLD, M. B. S. S. S.		100 100 100 100 100 100 100 100 100 100		ALL CONTROL OF THE PARTY OF THE	
PARM Code 00665 X Mon. Site No. OUI-7	Permit Requirement		Report (Mo.Total)	lbs /month					10	Weekly, when discharging	Grab

¹⁷ The net Total Nitrogen (TN) loading is defined as the pounds of TN discharged at OUI-6 or OUI-7 minus the pounds of TN in the makeup water for Units 6 and 7 cooling towers at OUI-5, over a corresponding time period. The permittee shall report the monthly net TN loading, which equals the pounds of TN discharged during a month minus the pounds of TN entering Units 6 and 7 cooling towers during the same month.

18 The annual net loading (in pounds per year) on any given month is equal to the monthly net loading for that month plus the previous eleven monthly loadings and is considered a rolling annual maximum value.

FACILITY

Gulf Power Company - Crist Power Plant

MONITORING GROUP NUMBER:
MONITORING PERIOD From

1-180

PERMIT NUMBER: FL0002275-013-IW1S

To

Parameter		Quantity	or Loading	Units		Quality or Concentrati	on	Units	No. Ex.	Frequency of Analysis	Sample Type
Phosphorus, Total (as P) (Monthly Net Loading – Water from ECUA/Discharge Line to Overall Intake)	Sample Measurement										
	Permit Requirement		Report (Mo. Total)	lbs /month					Link.	Weekly, when discharging	Grab
Phosphorus, Total (as P) (Monthly Net Loading – Water from ECUA/Discharge Line to Discharge Canal)	Sample Measurement										
PARM Code 00665 Z Mon. Site No. OUI-5, OUI-7	Permit Requirement		Report ²⁰ (Mo. Total)	lbs /month						Weekly, when a discharging	Grab
Phosphorus, Total (as P) (Annual Net Loading – Water from ECUA/Discharge Line to Overall Intake)	Sample Measurement										- 11
PARM Code 00665 V Mon. Site No. OUI-5, OUI-6	Permit Requirement		Report ²¹ (An Total)	lbs/ year					i. k i.	Weekly, when discharging	Calculated
Phosphorus, Total (as P) (Annual Net Loading – Water from ECUA/Discharge Line to Overall Intake)	Sample Measurement										
PARM Code 00665. W Mon. Site No. QUI-5, OUI-7	Permit Requirement		Report ³⁰ (An Total)	lbs/ year						Weekly, when "discharging	Calculated
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				139			No. of Section				

The net Total Phosphorus (TP) loading is defined as the pounds of TP discharged at OUI-6 or OUI-7 minus the pounds of TP in the makeup water for Units 6 and 7 cooling towers at OUI-5, over a corresponding time period. The permittee shall report the monthly net TP loading, which equals the pounds of TP discharged during a month minus the pounds of TP entering Units 6 and 7 cooling towers during the same month.

The net Total Phosphorus (TP) loading is defined as the pounds of TP discharged at OUI-5 or OUI-7 minus the pounds of TP in the makeup water for Units 6 and 7 cooling towers at OUI-5, over a corresponding time period. The permittee shall report the monthly net TP loading, which equals the pounds of TP discharged during a month minus the pounds of TP entering Units 6 and 7 cooling towers during the same month.

The annual net loading (in pounds per year) on any given month is equal to the monthly net loading for that month plus the previous eleven monthly loadings and is considered a rolling annual maximum value.

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400 PERMITTEE NAME: Gulf Power PERMIT NUMBER: FL0002275-013-IW1S MAILING ADDRESS: I Energy Pl Pensacola, Florida 32520-LIMIT: Final REPORT FREQUENCY Quarterly PROGRAM: Industrial CLASS SIZE: MA FACILITY MONITORING GROUP NUMBER: Gulf Power Company - Crist Power Plant 1 - 180Ten Mile Road LOCATION: MONITORING GROUP DESCRIPTION: ECUA reclaimed water and Units 6 and 7 cooling tower blowdown when ECUA

Pensacola, FL

RE-SUBMITTED DMR:

NO DISCHARGE FROM SITE:

MONITORING PERIOD

Parameter Quantity or Loading Units Quality or Concentration Units No. Frequency of Sample Type Ex. Analysis Chromium Total Recoverable Sample Measurement PARM Code 01118 P Permit 0.22 0.231 myL Quarterly, when Grab Mon Site No. OUI-6 Requirement discharging (Mo.Avg.) (Day Max.) Chromium, Total Recoverable Sample Measurement PARM Code 01118 O Parmit 0.231 0.231 mg/L Quarterly, when Grab Mon. Site No. OUI-7 Requirement discharging-(Mo AVE) (Day Max.) Zinc, Total Recoverable Sample Measurement PARM Code 01094 P Permit: 1.031 1.034 mg/L Quarterly, when Grab Mon. Site No. OUI-6 Requirement (Mo.Avg.) (Day Max.) discharging Zinc, Total Recoverable Sample Measurement 1.031 1.031 PARM Code 01094 Q Permit mg/L Quarterly, when Grab

From

(Mo, Avg.)

To

(Day Max.)

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here).

Requirement

COUNTY:

Mon. Site No. OUI-7

OFFICE

Escambia

Northwest District

discharging

²² Limitations and monitoring requirements for Total Recoverable Chromium and Total Recoverable Zinc shall be applicable when discharging the cooling tower blowdown to surface waters of the state

Read these instructions before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28th of the monitoring period. The DMR shall be mailed to the address printed on the DMR by the 28th of the monitoring period.

The DMR consists of three parts--A, B, and D--all of which may or may not be applicable to every facilities may have one or more Part A's for reporting effluent or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are different.

CODE	DESCRIPTION/INSTRUCTIONS	
ANC	Analysis not conducted.	
DRY	Dry Well	
FLD	Flood disaster	
IFS	Insufficient flow for sampling.	
LS	Lost sample	
MNR	Monitoring not required this period	

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available.
ŞEF	Sampling equipment failure.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used

- Results greater than or equal to the POL shall be reported as the measured quantity.
- 2 Results less than the POL and greater than or equal to the MDL shall be reported as the laboratory's MDl, value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
- 3. Results less than the MDL shall be reported by entering a less than sign ("<") followed by the laboratory's MDL value, e.g. < 0.001. A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.). Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following should be completed by the permittee or authorized representative:

Resubmitted DMR: Check this box if this DMR is being re-submitted because there was information missing from or information that needed correction on a previously submitted DMR. The information that is being revised should be clearly noted on the re-submitted DMR (e.g. highlight, circle, etc.)

No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number; however, if the monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed

Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units.

No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. If none, enter zero

Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.

Sample Type: The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Page 1 of 2

Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Daily Monitoring Results: Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62160, F.A.C., comains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
Α	Value reported is the mean (average) of two or more determinations.
J J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

To calculate the monthly average, add each reported value to get a total. For flow, divide this total by the number of days in the month. For all other parameters, divide the total by the number of observations. Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed. Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.

Time Sample Obtained: Enter the time the sample was taken

Sample Measurement: Record the results of the analysis. If the result was below the minimum detection limit, indicate that.

Detection Limits: Record the detection limits of the analytical methods used.

Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources

Sampling Equipment Used: Indicate the procedure used to collect the sample (e.g. airlift, bucket/bailer, centrifugal pump, etc.)

Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comments and Explanation: Use this space to make any comments on or explanations of results that are unexpected. If more space is needed, reference all attachments in this area.

SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES

Flow (Limited Wet Weather Discharge): Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

Flow (Upstream): Enter the average flow rate in the receiving stream upstream from the point of discharge for the period of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.

Actual Stream Dilution Ratio: To calculate the Actual Stream Dilution Ratio accurate to the nearest 0.1.

No. of Days the SDF > Stream Dilution Ratio: For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "*" and record the total number of days the Stream Dilution Ratio

Dilution Ratio

CBODs: Enter the average CBODs of the reclaimed water discharged during the period shown in duration of discharge.

TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge

Actual Rainfall: Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.

Rainfall During Average Rainfall Year: On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.

No. of Days LWWD Activated During Calendar Year: Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.

Reason for Discharge: Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

Docket No. 110007-EI Plant Crist NPDES Permit Exhibit JOV-1, Page 62 of 63



Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form #: 62-701 900(31)

Form Title. Water Quality Monitoring Certification

Effective Date, January 6, 2010

Incorporated in Rule 62-701 510(9)

WATER QUALITY MONITORING CERTIFICATION

PART I GENERAL INFORMATION										
(1) Facility Name	Facility Name									
Address										
City	Zip	County								
Telephone Number ()										
(2) WACS Facility ID										
(3) DEP Permit Number										
(4) Authorized Representative's Name		Title								
Address										
City	Zip	County								
Telephone Number ()										
Email address (if available)										
I certify under penalty of law that I have persided document and all attachments and that, based of information, I believe that the information is true for submission of false information including the	on my inquiry of those individuals in e, accurate, and complete. I am a	nmediately responsible for obtaining the ware that there are significant penalties								
(Date)	(Owner or Authorized Represen	tative's Signature)								
PART II QUALITY ASSURANCE REQUIREMEN	NTS									
Sampling Organization										
Analytical Lab NELAC / HRS Certification #										
Lab Name										
Address										
Phone Number ()										
Email address (if available)										

DEP-SOP-001/01 FS 2200 Groundwater Sampling Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:				· · · · · · · · · · · · · · · · · · ·	SITE LOCATION:					7 · · · · · · · · · · · · · · · · · · ·
WELL NO				SAMPLE ID:				DATE:		
				PU	IRGING DA	TA				
WELL DIAMETEI	R (inches):	TUBING DIAMETER	(inches):	WELL SCREEN II DEPTH: fee	NTERVAL et to feet	STATIC DI		PURGE PUMP ' OR BAILER:	TYPE	
	LUME PURGE: It if applicable)	1 WELL VOL	UME = (TOTAL	WELL DEPTH -	STATIC DEPTH	O WATER)	X WELL CAP	PACITY		
·		DCE: 4 EOIH	= (feet -	TURING CADAC	feet)		gallons/foo TH) + FLOW CEI		gallons
	it if applicable)	NOL. TEGU	- MENT V CE		•	ons/foot X	TODING LENG	feet) +	gallons =	gallons
	JMP OR TUBING	,	FINAL PUMP		PURGIN		PURGIN		TOTAL VOLUM	
DEPTH IN	WELL (feet):	CUMUL.	DEPTH IN W	ELL (feet):	INITIAT		ENDED DISSOLVED		PURGED (gallo	ns):
TIME	VOLUME PURGED (gallons)	VOLUME PURGED (gallons)	PURGE RATE (gpm)	TO pH (stand units	ard FMP.	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L o % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
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WELL CAP	PACITY (Gallons	Per Foot): 0.	75" = 0.02:	l" = 0.04; 1.25" =	: 0.06: 2" = 0.1	6: 3" = 0	37; 4" = 0.65;	5" = 1.02;	6" = 1.47; 12"	' = 5.88
				06; 3/16" = 0.001		6; 5/16"				' = 0.016
SAMPLED	BY (PRINT) / AF	FILIATION:	SAN	MPLER(S) SIGNATU		<u> </u>	SAMPLING INITIATED AT		SAMPLING ENDED AT:	
PUMP OR				IPLE PUMP		······	TUBING		1	
	WELL (feet): CONTAMINATION	vi: Y N	FIEI	W RATE (mL per m _D-FILTERED: Y	N FILT	ER SIZE:	MATERIAL CC	DUPLICATE:	Y N	
	SAMPLE C		1 Fatt	ation Equipment Typ	SAMPLE PRESER	RVATION		INTENDED	T SA	MPLING
SAMPLE II CODE	SPECIFI D # CONTAINER	MATERIAL	VOLUME	PRESERVATIVE TOTAL VOL USED ADDED IN FIELD (mL)			FINAL ANALYSIS AN METHOD		D/OR EQU	UIPMENT CODE
					<u> </u>					
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			1		 					
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REMARKS:										
MATERIAL	CODES:	AG = Amber (Glass; CG = 0	Clear Glass, PE	= Polyethylene;	PP = Poly	propylene; S =	Silicone; T = To	effon; O = Oth	er (Specify)
SAMPLING		PP = After Per		B = Bailer;	BP ≈ Bladder Pu Straw Method (Tu	mp; ES	SP = Electric Sub		PP = Peristal O = Other (tic Pump
				nformation requ	•	• ,	**	- vaccom map,	O - Oniel (S	apecity)

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: \pm 0.2 units Temperature: \pm 0.2 °C Specific Conductance: \pm 5% Dissolved Oxygen: all readings \leq 20% saturation (see Table FS 2200-2); optionally, \pm 0.2 mg/L or \pm 10% (whichever is greater) Turbidity: all readings \leq 20 NTU; optionally \pm 5 NTU or \pm 10% (whichever is greater)

AFFIDAVIT

STATE OF FLORIDA

Docket No. 110007-El

COUNTY OF ESCAMBIA

Before me the undersigned authority, personally appeared James O. Vick, who being first duly sworn, deposes, and says that he is the Director of Environmental Affairs of Gulf Power Company, a Florida corporation, and that the foregoing is true and correct to the best of his knowledge, information, and belief. He is personally known to me.

James 💋. Vick

Director of Environmental Affairs

Sworn to and subscribed before me this 24th day of August, 2011.

Notary Public, State of Florida at Large

Commission Number: # EE09117

Commission Expires: May 08, 2015

