FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Sent by E-mail to:
(Richard.Markey@nexteraenergy.com)

In the Matter of an
Application for Permit Revision by:

Gulf Power Company
Richard M. Markey
Director of Environmental Affairs
One Energy Place
Pensacola, Florida 32520

Escambia County
Crist Electric Generating Plant
NPDES Permit No. FL0002275
PA File No. FL0002275-018-IW1S

NOTICE OF PERMIT

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 the effective date of the permit. 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

Benjamin M. Melnick
Deputy Director
Division of Water Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this permit revision and all copies were sent on the filing date below to the following listed persons:

EPA Region 4 (r4npdespermits@epa.gov)
Karrie-Jo Shell, Power Plant NPDES Permits, EPA Region 4 (shell.karrie-Jo@epamail.epa.gov)
Chairman, Board of Escambia County Commissioners (district4@myescambia.com)
FWC, Conservation Planning Services (fwcconservationplanningservices@myfwc.com)
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Laurie Murphy, Emerald Coastkeeper (laurie@emeraldcoastkeeper.org)
Christian Wagley, Gulf Restoration Network (christian@healthygulf.org)

FILING AND ACKNOWLEDGMENT

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

Shirley Shields
Clerk

March 29, 2019
Date

STATE OF FLORIDA
INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMITTEE:
Gulf Power Company

PERMIT NUMBER: FL0002275 (Major)
FILE NUMBER: FL0002275-018-IW1S
ISSUANCE DATE: March 29, 2019
EFFECTIVE DATE: March 29, 2019
EXPIRATION DATE: March 28, 2024

RESPONSIBLE OFFICIAL:
Richard M. Markey
Director of Environmental Affairs
One Energy Place
Pensacola, Florida 32520-0328
(850) 444-6573

FACILITY:

Crist Electric Generating Plant
11999 Pate Street
Pensacola, FL 32514
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 and Chapter 62-620, F.A.C. 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:

The Crist Electric Generating Plant is located in Escambia County on Pate Street, off 10 Mile Road on Governors Bayou, North of Pensacola, Florida. The existing facility consists of four predominantly coal-fired fossil fuel steam-generating units (Units 4-7). Natural gas, fuel oil and on-specification used oil are used as supplemental fuels in all four units. Units 1-3 are retired.

The total nameplate generating capacity is 1135 megawatts (MW) with a gross generation capacity of 1014 MW.

Units 4 and 5 use once-through cooling water (OTCW) for condenser cooling. A once-through helper cooling tower located along-side the discharge canal is operated during the summer months (based on discharge temperature) to lower the temperature of the combined once-through cooling water discharge. Units 6 and 7 use a closed-loop cooling tower system for condenser cooling. This permit includes the closed ash landfill site on Governor's Island. A map of the facility is shown on Attachment 1.

SURFACE WATER DESCRIPTION:

Non-contact, OTCW from Units 4 and 5 discharges to the Escambia River, a Class III fresh water. All other process wastewater is discharged to the unlined industrial wastewater treatment pond (IWTP) or disposed via underground injection (separate UIC Permit Nos. IW17-0085658-004 for wells IW-1 and IW-2 and 0085658-007-008-UC/11 for wells IW-3 and IW-4). The IWTP is permitted to discharge via an internal outfall to the discharge canal, and thence to the Escambia River, or via underground injection.

The industrial wastewater treatment pond (IWTP) receives neutralized demineralizer regeneration wastewater, cooling tower blowdown, boiler blowdown, oil/water separator pond overflow, floor drainage wastewater, auxiliary equipment cooling water and seal water, coal pile runoff, yard sump discharge, treated metal cleaning wastewater, decanted water from the proprietary dewatering system (Hydrobin®), and non-contact stormwater. 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 IWTP.

The closed-loop cooling tower systems serving Units 6 and 7 use either reclaimed water that has received advanced treatment from the Emerald Coast Utilities Authority (ECUA) Central Water Reclamation Facility (CWRF), Permit No. 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 IWTP. 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 then disposed via underground injection, and the remaining portion is returned to the headworks of the ECUA CWRF via the sanitary sewer collection system. The discharge back to ECUA is covered under an industrial pretreatment permit issued to GPC by ECUA (Permit No. 1050-13). Reclaimed water may also be directed to OTCW systems serving Units 4 and 5.

Stormwater associated with industrial activity is covered under a NPDES Multi-Sector Generic Permit (MSGP No. FLR05C161).

All domestic wastewater generated at the facility is collected and piped to the ECUA sanitary sewer collection system.

EFFLUENT DISPOSAL:

Surface Water Discharge D-010: An existing 274 MGD maximum permitted discharge to Escambia River, Class III Fresh Waters (WBID 10E). 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 of metal cleaning wastewater to the on-site IWTP.

Internal Outfall I-170: An existing permitted discharge of cooling tower blowdown to the on-site IWTP when river water is used as makeup water for the cooling towers serving Units 6 and 7.

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

Internal Outfall I-1C0: An existing permitted discharge of wastewater overflow from the IWTP to the main discharge canal prior to Outfall D-010.

SOLID WASTE MANAGEMENT:

Active Coal Ash Landfill

The active ash landfill consists of a 78-acre solid waste management facility, and includes fly storage areas, bottom ash storage areas and interim storage areas. Stormwater runoff and leachate from the on-site solid waste management facility is 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, as needed.

Closed Coal Ash Landfill

In addition, the facility includes a closed ash landfill on Governor's Island. The landfill closed in the early 1980's, and it received coal ash from 1970 until 1981 (no ash placed into the landfill in over 35 years). Discharges from the closed coal ash landfill to waters of the State are covered under Sections I and III of this permit. Stormwater runoff from this landfill is covered under a separate NPDES MSGP. On January 25, 2018, the Department executed a Consent Order addressing discharges to waters of the state from the closed ash landfill.

Gypsum Storage Areas 1 and 2

Gypsum slurry is conveyed to either the onsite lined gypsum storage area or the gypsum dewatering system. Gypsum slurry transported to the storage area is stacked, and slurry water separates from the solids via gravity and ultimately flows into the return water pond. Gypsum solids are left in place within the storage area.

Gypsum slurry routed to the gypsum dewatering system is separated into either a filter cake stream or a filtrate stream. The filter cake contains mostly gypsum solids with little water while the filtrate is mostly water with little gypsum solids. Filter cake is stored on-site until it is either loaded onto barges that are moored on Governor's Bayou or loaded to other types of transporters for delivery to end users. The filtrate is ultimately pumped to the return water pond. Pumps withdraw water from the return water pond to the return water tank for reuse back into the FGD system or to the facility's underground injection system (UIC permit numbers IW17-0085658-004-UC and 0085658-007-008-UC/11).

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

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 37 of this permit.

I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Surface Water Discharges

1. 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, reclaimed water from ECUA and IWTP overflow** from **Outfall D-010**[1] 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.:

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	Report Report	Daily Average Daily Maximum	Daily; 24 hours	Pump Curve	FLW-1	
		Max	Report	Annual Average	Monthly			
Temperature (F), Water	Deg F	Max	94.0	Daily Average	Continuous	Calculated	EFF-1	See I.A.4
pH	s.u.	Min Max	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[2]	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	
Aluminum, Total Recoverable	mg/L	Max Max	Report Report	Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1, INT-1	See I.A.8
Antimony, Total Recoverable	ug/L	Max	240	Annual Average	Quarterly	24-hr TPC	EFF-1, INT-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
Beryllium, Total Recoverable	ug/L	Max Max	0.13	Annual Average	Quarterly	24-hr TPC	EFF-1, INT-1	See I.A.8
Boron	ug/L	Max	Report	Daily Maximum	Quarterly	24-hr TPC	EFF-1, INT-1	
Cadmium, Total Recoverable	ug/L	Max Max		Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1, INT-1	See I.A.7, I.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[3]	ug/L	Max Max		Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1, INT-1	See I.A.7, I.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 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 I.A.8
Nickel, Total Recoverable	ug/L	Max Max		Monthly Average Daily Maximum	Annually	24-hr TPC	EFF-1, INT-1	See I.A.7, I.A.8

[1] Note: Ambient monitoring requirements in the Escambia River and Governor's Bayou are included in Permit Condition I.D.16.

[2] Multiple grabs 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.

[3] Consent Order No. 17-1224 addresses periodic copper exceedances at Outfall D-010 during low hardness conditions. During the CO period, an interim copper limit of "Report" will apply.

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
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
Vanadium, Total Recoverable	ug/L	Max Max	Report Report	Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1, INT-1	See I.A.8
Zinc, Total Recoverable	ug/L	Max Max		Monthly Average Daily Maximum	Quarterly	24-hr TPC	EFF-1, INT-1	See I.A.7, I.A.8
Hardness, Total (as CaCO3)	mg/L	Max	Report	Single Sample	Quarterly	24-hr TPC	EFF-1	See I.A.7
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
Chronic Whole Effluent Toxicity, 7-Day IC25 (*Ceriodaphnia dubia/ Mysidopsis bahia*)	percent	Min	100	Single Sample	Semi-Annual	24-hr TPC	EFF-1	See I.A.14
Chronic Whole Effluent Toxicity, 7-Day IC25 (*Pimephales promelas/ Menidia beryllina*)	percent	Min	100	Single Sample	Semi-Annual	24-hr TPC	EFF-1	See I.A.14

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, alone or in combination with other substances or in combination with other components of the discharge:

   a. Settle to form putrescent deposits or otherwise create a nuisance; or
   b. Float as debris, scum, oil, or other matter in such amounts as to form nuisances; or
   c. Produce color, odor, taste, turbidity, or other conditions in such degree as to create a nuisance; or
   d. Are acutely toxic; or
   e. Are present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant, locally occurring, wildlife or aquatic species, unless specific standards are established for such components in subsection 62-302.500(2) or Rule 62-302.530, F.A.C.; or
   f. Pose a serious danger to the public health, safety, or welfare.

   [62-302.500(1)(a)]

4. Pursuant to Permit 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 4 and 5 shall be placed in full operation 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.

   c. Units 6 and/or 7 condenser drainage is discharged to the Units 4 and 5 discharge canal.

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):

   $Cd \leq e^{(0.7409[\ln H]-4.719)}$
   $Cu \leq e^{(0.8545[\ln H]-1.702)}$
   $Pb \leq e^{(1.273[\ln H]-4.705)}$
   $Ni \leq e^{(0.846[\ln H]+0.0584)}$
   $Zn \leq e^{(0.8473[\ln H]+0.884)}$

   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 $CaCO_3$. 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 Discharge Monitoring Report (DMR) in the parameter row for "(effluent)." The calculated effluent limit shall be recorded on the DMR in the parameter row for "(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 "(effluent minus calculated limit)." The compliance value shall not exceed 0.00. *[62-302.530(15), 62-302.530(23), 62-302.530(39), 62-302.530(44), and 62-302.530(70), F.A.C.]*

8. The effluent limits for Aluminum, Arsenic, Beryllium, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Vanadium, 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 Permit 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.

9. 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 re-sample and Chromium VI analysis shall be performed and reported.

10. The permittee shall implement the following interim measures pending the submission of information and studies required under 40 CFR 122.21(r)(2-13).

    a. The permittee shall maintain the current intake through-screen velocity such that the existing maximum velocity is not exceeded.

b. The permittee shall maintain current traveling screen practices at Units 1 through 5 so as to assure that the screens are cycled twice during each 24 hours of continuous operation unless precluded by repair/maintenance requirements.

c. Material collected on the intake screens shall be removed 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.

[40 CFR 125.98(b)(5) and 62-620.100(3), F.A.C., C.W.A. 316(b)]

11. The permittee shall complete all studies and gather all information required under 40 CFR 122.21(r)(2-13) necessary to establish impingement mortality and entrainment BTA requirements in accordance with the schedule in Permit Condition VI.3. *[62-620.100(3), F.A.C., C.W.A. 316(b)]*

12. Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act (ESA) 40 CFR 125.98(b)(1).

13. The permittee shall comply with all mandatory reporting requirements related to endangered or threatened species, as may be required by state and federal fish and wildlife agencies. The permittee shall provide a copy of any such reports, and any related documentation, to the Department's Tallahassee Industrial Wastewater Program.

14. 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.]*

b. Monitoring Frequency
   (1) Routine toxicity tests shall be conducted once every six months, the first starting within 60 days of the issuance date of this permit and lasting for the duration of this permit.

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's 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:

(a) 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.

(b) 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.

(c) 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 DMR as follows:

(a) 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 14.a.(1).
(2) Additional Follow-up Tests:
(a) If a routine test does not meet the chronic toxicity limitation in 14.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 14.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.
(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 14.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 14.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 14.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 14.(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 **IWTP 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.:

			Effluent Limitations		Monitoring Requirements			
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	Flow Meter[4]	FLW-2	
Oil and Grease	mg/L	Max Max	7.0 10.0	Monthly Average Daily Average	Bi-weekly; every 2 weeks	Grab	OUI-2	
Solids, Total Suspended	mg/L	Max Max	30.0 65.0	Monthly Average Daily Average	Weekly, when discharging	24-hr TPC	OUI-2	
Hydrazine	mg/L	Max	300	Instantaneous Maximum	See I.B.3	Multiple Grab	OUI-2	See I.B.3
pH	s.u.	Min Max	6.0 9.0	Daily Minimum Daily Maximum	Weekly, when discharging	Grab	OUI-2	
Aluminum, Total Recoverable	mg/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Arsenic, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Beryllium, Total Recoverable	ug/L	Max	Report	Annual Average	Quarterly	Composite	OUI-2	
Boron, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Cadmium, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Chromium, Hexavalent Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Copper, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Iron, Total Recoverable	mg/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Lead, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Mercury, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Grab	OUI-2	
Nickel, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Selenium, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Vanadium, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	
Zinc, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Composite	OUI-2	

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

Monitoring Site Number	Description of Monitoring Site
FLW-2	Flow from IWTP discharge weir.
OUI-2	IWTP 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 IWTP 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 IWTP 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 IWTP.

   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

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

surfaces. Boiler blowdown, under normal operating conditions with hydrazine concentrations of 10 to 50 µg/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 IWTP. Such discharge shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.D.3.:

			Effluent Limitations		Monitoring Requirements			
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	Pump Curve	FLW-3	
Copper, Total Recoverable	mg/L	Max Max	1.0 1.0	Monthly Average Daily Maximum	Per discharge	Time Proportional Composite[5]	OUI-3	
Iron, Total Recoverable	mg/L	Max Max	1.0 1.0	Daily Maximum Monthly Average	Per discharge	Time Proportional Composite[5]	OUI-3	
Oil and Grease	mg/L	Max Max	20.0 15.0	Daily Maximum Monthly Average	Weekly	Time Proportional Composite[5]	OUI-3	
Solids, Total Suspended	mg/L	Max Max	100.0 30.0	Daily Maximum Monthly Average	Weekly	Time Proportional Composite[5]	OUI-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-3	Flow from metal cleaning treatment pond.
OUI-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 periods of time where the metal cleaning wastewater (MCW) pond has been emptied, all metal cleaning residuals have been removed, and only stormwater is present in the MCW pond, discharge of stormwater via **Internal Outfall I-150** is permitted without limitations or monitoring requirements.

8. 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 IWTP **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.:

[5] One aliquot collected immediately after the start of discharge to the IWTP, one aliquot immediately prior to termination of the discharge, and six aliquots collected at approximately equal times in between.

			Effluent Limitations		Monitoring Requirements			
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	Pump Curve	FLW-4	
Total Residual Oxidants Discharge Time	min/day	Max Max	120 120	Monthly Average Daily Maximum	Daily, when discharging	Meter	EFF-1	See I.B.10
Oxidants, Free Available	mg/L	Max Max	0.2 0.5	Monthly Average Daily Maximum	Per occurrence	Grab	OUI-4	See I.B.11
Solids, Total Suspended	mg/L	Max Max	30.0 100.0	Monthly Average Daily Maximum	Monthly, when discharging	Grab	OUI-8	
Oil and Grease	mg/L	Max Max	15.0 20.0	Monthly Average Daily Maximum	Monthly, when discharging	Grab	OUI-8	

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

Monitoring Site Number	Description of Monitoring Site
FLW-4	Flow of cooling tower conveyance line prior to discharge to the IWTP.
OUI-4	Cooling tower conveyance line prior to discharge to the IWTP.
OUI-8	Combustion residual leachate pipe prior to entering the first stormwater pond.

10. Total Residual Oxidants 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.

11. 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 IWTP.

12. The permittee shall annually 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.8 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____."

13. 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 system for Units 4 and 5. Such discharge shall be

limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.D.3.:

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max	20 Report	Daily Annual Average Monthly Average	Continuous	Meter[6]	FLW-5	
		Max Max Max	Report Report Report	Annual Maximum Monthly Average Daily Maximum	Continuous	Meter[4]	FLW-6, FLW-7	See I.B.15, I.B.17
Flow (Condenser Volume)	Mgal	Max	Report	Daily Maximum	When Discharging[7]	Estimated	CAL-1	
Duration of Discharge	hr	Max Max	Report Report	Annual Total Monthly Total	Weekly, when discharging	Calculated	FLW-6, FLW-7	
Total Residual Oxidants Discharge Time	min/ day	Max Max	120 120	Monthly Average Daily Maximum	Weekly; when discharging	Calculated	OUI-6	See I.B.19
Oxidants, Total Residual	mg/L	Max Max	0.2 0.5	Monthly Average Daily Maximum	Weekly, when discharging	Grab	OUI-6	See I.B.19, I.B.20
Solids, Total Suspended	mg/L	Max Max	30.0 100.0	Monthly Average Daily Maximum	Monthly, when discharging	Grab	OUI-8	
Oil and Grease	mg/L	Max Max	15.0 20.0	Monthly Average Daily Maximum	Monthly, when discharging	Grab	OUI-8	
Nitrogen, Total	mg/L	Max Max Max	Report Report Report	Monthly Average Weekly Average Daily Maximum	Weekly, when discharging	Calculated	OUI-5	See I.B.15
		Max Max	Report Report	Monthly Average Weekly Average	Weekly, when discharging	Calculated	OUI-6, OUI-7	See I.B.15, I.B.16
Nitrogen, Total Ammonia	mg/L	Max Max	Report Report	Monthly Average Weekly Average	Weekly, when discharging	Calculated	OUI-6, OUI-7	
Nitrogen, Total (Monthly Net Loading)	lb/mth	Max	Report	Monthly Total	Weekly, when discharging	Calculated	OUI-5 OUI-6 OUI-7	See I.B.15
Nitrogen, Total (Annual Net Loading)	lb/yr	Max	Report	Annual Total	Weekly, when discharging	Calculated	OUI-5 OUI-6 OUI-7	See I.B.15
Nitrogen, Total	lb/yr	Max	21,392	Annual Total	Weekly, when discharging	Calculated	OUI-6	
Phosphorus, Total (as P)	mg/L	Max Max Max	Report Report Report	Monthly Average Weekly Average Daily Maximum	Weekly, when discharging	Grab	OUI-5	See I.B.16, I.B.17
		Max	Report	Weekly Average	Weekly, when discharging	Grab	OUI-6, OUI-7	See I.B.16, I.B.17
Phosphorus, Total (as P) (Monthly Net Loading)	lb/mth	Max	Report	Monthly Total	Weekly, when discharging	Calculated	OUI-5 OUI-6 OUI-7	See I.B.17
Phosphorus, Total (as P) (Annual Net Loading)	lb/yr	Max	Report	Annual Total	Weekly, when discharging	Calculated	OUI-5 OUI-6 OUI-7	See I.B.17
Phosphorus, Total (as P)	lb/yr	Max	2,852	Annual Total	Weekly, when discharging	Calculated	OUI-6	

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

[7] Estimation of condenser volume is only required when emptying the condenser water into the IWTP.

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

Monitoring Site Number	Description of Monitoring Site
CAL-1	Calculation of condenser flow
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	Reclaimed water and spent reclaimed water (Unit 6 and/or 7 cooling tower blowdown) prior to discharge into the intake tunnel.
OUI-7	Reclaimed water pipeline prior to discharge into the discharge tunnel.
OUI-8	Combustion residual leachate pipe prior to entering the first stormwater pond.

15. 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.

16. The permittee shall not add nitrogen or phosphorous containing products to the Unit 6 and 7 cooling towers without Department approval. Monitoring for Total Phosphorus at monitoring location OUI-6 shall occur when using the NALCO Trasar 3DT118 and 3DT195 chemicals in the Units 6 and 7 cooling tower systems and discharging blowdown through Outfall I-180 to the intake. The monitoring for Total Phosphorus shall correspond to the time of highest anticipated concentration of NALCO Trasar products used for the week

17. The net Total Phosphorus (TP) loading is defined as the pounds of TP discharged at OUI-6 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 TP loading (in pounds per year) on any given month is equal to the monthly TP net loading for that month plus the previous eleven monthly TP loadings and is considered a rolling annual maximum value.

18. Unscheduled discharges shall be subject to General Conditions IX.22 and IX.23 for bypass and upset.

19. 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.

20. 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.

21. During times of transition from reclaimed water to river water, the volume of reclaimed water drained from the condensers to the IWTP shall be included in the calculation of total nitrogen and total phosphorus, for purposes of compliance with their Wasteload Allocations.

C. Underground Injection Control Systems

1. Requirements for the discharge of wastewater from the FGD system, stormwater, de-minimus amounts of laboratory wastes, ash contact water and water from the industrial wastewater treatment pond (comprised of neutralized demineralizer regeneration wastewater, cooling tower blowdown, boiler blowdown, floor drainage, auxiliary equipment cooling water and seal water, coal pile runoff, yard sump discharge, treated metal cleaning wastewater as currently permitted to be discharged through Outfall D-010) and surficial aquifer groundwater containing water from the gypsum storage pond and piping system to four Class I injection wells are established

under separate Department UIC Permit Numbers IW17-0085658-004 (wells IW-1 and IW-2) and 0085658-007-008-UC/11 (wells IW-3 and IW-4).

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 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 DMRs in accordance with the frequencies specified by the REPORT type (i.e. monthly, 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	first day of month - last day of month	28th day of following month
Quarterly	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 - June 30 July 1 - December 30	July 28 January 28
Annual	January 1 - December 31	January 28

The permittee shall use the electronic DMR system approved by the Department (EzDMR) and shall electronically submit the completed DMR forms using the DEP Business Portal at http://www.fldepportal.com/go/, unless the permittee has a waiver from the Department in accordance with 40 CFR 127.15. Reports shall be submitted to the Department by the twenty-eighth (28th) of the month following the month of operation.

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 (PCBs), such as those commonly used for transformer fluid, to waters of the state. The permittee shall dispose of all known PCB equipment, articles, and wastes in accordance with:

   a. Department-issued permits governing soil thermal treatment (Chapter 62-713, F.A.C.) or Department-approved landfills provided the PCB concentrations meet the Florida landfill's permitted limit when concentrations are less than 50 ppm; or

   b. 40 CFR 761. When concentrations are greater than or equal to 50 ppm.

   [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 that ultimately may be released to waters of the State is prohibited unless specifically authorized elsewhere in a permit. It is not prohibited for products used for lawn and agricultural purposes or for the use of herbicides if used in accordance with labeled instructions and any applicable State permit.

   In the event the permittee proposes to use biocides, corrosion inhibitors, or additives not authorized in this permit, or not previously reported to the Department, that ultimately may be released to waters of the State, the permittee shall notify the Department in writing a minimum of thirty (30) days prior to instituting the use of such product. The product shall not be used prior to a determination by the Department that a permit revision is not required or prior to Department approval. Such notification shall include:

   a. Name and general composition of biocide or chemical

   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, depending on the test type, according to Section 12 of EPA document no. EPA-821-R-02-012 entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, Section 10 of

EPA document no. EPA-821-R-02-013 entitled, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms or Section 10 of EPA document no. EPA-821-R-02-014 entitled, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, or most current addition)

f. Product data sheet

g. EPA registration number, if applicable.

9. Discharge of uncontaminated, non-contact stormwater, intake screen backwash water, turbine oil cooler water, and hydrogen generator cooler water is permitted without limitations or monitoring requirement; however, the discharge of floating oil is prohibited.

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 transport water, resulting from the combustion of on-specification used oil as authorized under the Resource Conservation and Recovery Act and 40 CFR Part 266, via the IWTP 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 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
Ferric Chloride	IWTP
Nalco Optimer® 7128 @ 0.5 mg/L	IWTP
Nalco Cat-Floc 8103 Plus @ 5.0 mg/L	IWTP
Nalco Trasar-3DT121 @ 4.0 mg/L	Units 6 and 7 Cooling Tower System
Nalco Trasar-3DT118 @ 30.0 mg/L	Units 6 and 7 Cooling Tower System
Nalco Trasar-3DT195 @ 30.0 mg/L	Units 6 and 7 Cooling Tower System

Subsequent permit revisions are not necessary for use of chemicals equivalent to those authorized if the alternative chemicals consist of the same constituents, at the same concentrations and are dosed at the permitted rate. The permittee is responsible for maintaining documentation on-site which demonstrates equivalency of any new water treatment products from another vendor or manufacturer with a different product name from those listed above.

13. 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, when Nalco 7308 is in use.

14. During the first period of usage of Nalco Optimer® 7128 and Nalco Cat-Floc 8103 Plus, the permittee shall:

a. Record the amount used and the duration of the chemical application in the IWTP;

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.14, with the inclusion of the following:

(1) The toxicity test shall be performed using effluent from the IWTP containing either chemical, with the appropriate dilution with non-contact OTCW from Units 4 and 5. 24-hour composite sampling of the effluent from the IWTP shall begin when the chemical is expected to be discharged out of the IWTP. The non-contact OTCW used to prepare the dilution may be a grab sample. The dilution shall represent the typical ratio of IWTP water to cooling water contained in the final effluent at Outfall D-010 and shall constitute the 100% effluent sample in the procedures of Condition I.A.14.

(2) Results of the toxicity test shall be sent to:

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

15. The permittee shall maintain a log of the dates and amounts of NALCO Trasar 3DT118 and 3DT195 added to Units 6 and 7 cooling tower systems when discharging blowdown through Internal Outfall I-180 to the intake. The log shall be kept on-site in accordance with Permit Condition V.2 and made available to Department inspectors upon request.

16. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee shall complete the following surface water monitoring in the Escambia River and Governor's Bayou:

a. The permittee shall monitor the ambient locations below and as shown in Attachment 2 on a monthly basis:

Monitoring Site ID	Approximate Location	Approximate Latitude	Approximate Longitude
SW-9	In Governor's Bayou, near Governor's Island approximately 5 feet from the shore at mid-depth.	30° 34' 8.7114 "N	87° 13'30.5569" W
SW-10	In Governor's Bayou, near Governor's Island approximately 5 feet from the shore at mid-depth.	30° 34' 6.6468 "N	87° 13'25.2286" W
SW-11	In Governor's Bayou, near Governor's Island approximately 5 feet from the shore at mid-depth.	30° 34' 0.8303 "N	87° 13' 21.977" W
SW-12	Approximately 5 feet from shore, at mid-depth, near the north end of the ITWP.	30° 33' 54.53 "N	87° 13' 11.09" W
SW-13	Approximately 5 feet from shore, at mid-depth, near the middle of the ITWP.	30° 33' 50.78 "N	87° 13' 7.58" W
SW-14	Approximately 5 feet from shore, at mid-depth, near the south end of the ITWP.	30° 33'47.71 "N	87° 13' 3.89" W
SW-15	Approximately 5 feet from shore, at mid-depth, in Thompson Bayou near the center of the ITWP.	30° 33' 43.43 "N	87° 13' 6.20" W
SW-16	In the Escambia River near Governor's Island, approximately 5 feet from the shore at mid-depth.	30° 34' 3.9853 "N	87° 13' 14.9153" W
SW-17	In the Escambia River south of Governor's Island, near the convergence of Governor's Bayou, approximately 5 feet from the short at mid-depth.	30° 33' 57.5935 "N	87° 13' 10.6572" W
SW-18	In the Escambia River near Governor's Island, approximately 5 feet from the shore at mid-depth.	30° 34' 11.9312 "N	87° 13' 20.015" W
SW-19	In the Escambia River near Governor's Island, approximately 5 feet from the shore at mid-depth.	30° 34' 20.1763 "N	87° 13' 26.6074" W
SW-20	In the Escambia River north of Governor's Island, approximately 5 feet from the short at mid-depth.	30° 34' 41.4062 "N	87° 13' 30.4734" W
SW-21	In Governor's Bayou, approximately 5 feet from the shore at mid-depth.	30° 34' 45.8666 "N	87° 13' 51.0532" W

b. Surface water monitoring sites SW-9 through 21 are for monitoring purposes only.

c. The permittee shall monitor for the following parameters during each sampling event: antimony, arsenic, barium, beryllium, boron, cadmium, chloride, total chromium, copper, lead, mercury, nickel, selenium, thallium, vanadium and pH;

d. The permittee shall submit the results of the monitoring as an attachment to their EzDMR submittal.

e. The permittee shall submit a summary report to the Department of all monthly samples taken during the calendar year, in accordance with Permit Condition VI.6. The annual summary report shall also include a summary of all surface water monitoring conducted in Section III of this permit.

17. After consulting with the Florida Fish and Wildlife Commission, the Permittee shall develop a confirmation study in accordance with Rule 62-302.520(1), F.A.C., pursuant to the schedule in Permit Condition VI.5, including a proposed implementation schedule, designed to determine the extent of the thermal plume and any effects on migration, foraging and residency patterns of the biological communities from the heated water discharge to the Escambia River.

    The plan shall address monitoring of aquatic species, including federal and state listed aquatic species as appropriate, and shall include reporting requirements. The evaluation plan shall incorporate existing data developed by the permittee and available data from other entities as well as any additional monitoring to be conducted by the permittee, if necessary. The Department will review the evaluation plan and implementation schedule for revision, as needed.

II. COMBUSTION BY-PRODUCTS MANAGEMENT REQUIREMENTS

1. Combustion by-products produced by the operation of Crist Electric Generating Plant: 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.

2. The disposal of combustion by-products in the on-site solid waste management facility permitted by this permit shall be in accordance with the construction permit, IC17-031700, issued October 13, 1980, as revised by the permit application documents dated October 7, 2011, and the requirements of Chapter 62-701, F.A.C., except as modified by Evaluation of Solid Waste Management Practices and Requirements for the Florida Electric Utility Industry, dated July 18, 1994.

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 the landfill area.

5. This facility is being constructed in phases.

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.

7. Final closure of the facility shall comply with the provisions of Rules 62-701.600 through 62-701.620, FAC, except as modified by 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.

8. Surface water runoff not otherwise covered by an individual or multi-sector generic permit 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 zone of discharge (ZOD) for this site shall be as follows:

a. The horizontal ZOD shall consist of the north, south, and west property lines and lands landward of the mean high-water lines toward the east property line of the site, which includes Governor's Island, as provided on Attachment 3. The permittee's semi-annual groundwater monitoring reports indicate that groundwater flows toward and to Governor's Bayou and to the Escambia River.

b. The vertical ZOD shall extend from the land surface down to the top of the low permeability zone beneath the site at approximately -186 to -204 feet North American Vertical Datum (ft. NAVD).

[62-520.465]

2. The discharge to groundwater shall at all places and at all times be free from domestic, industrial, agricultural, or other man-induced non-thermal components of discharges in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal):
   a. Are harmful to plants, animals, or organisms that are native to the soil and responsible for treatment or stabilization of the discharge relied upon by Department permits, or
   b. Are carcinogenic, mutagenic, teratogenic, or toxic to human beings, unless specific criteria are established for such components in Rule 62-520.420, F.A.C., or
   c. Are acutely toxic within surface waters affected by the ground water, or
   d. Pose a serious danger to the public health, safety, or welfare, or
   e. Create or constitute a nuisance, or
   f. Impair the reasonable and beneficial use of adjacent waters.
   [62-520.400(1)]

3. The discharge to groundwater shall meet the Class G-II groundwater standards established in Rule 62-520.420, F.A.C., at the boundary of the ZOD. *[62-520.420]*

4. The discharge to groundwater shall not impair the designated use of contiguous surface waters. *[62-520.310(2)]*

5. 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 4. 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. *[62-701.510(3)(d) and 62-532.500(4)]*

6. The water-quality monitoring network shall consist of thirty-nine (39) ground water monitoring wells (2-background, 23-detection, 4-compliance, 10-Piezometers) and 8 surface water sampling sites. The surface water and groundwater monitoring well network is graphically represented on Attachments 2 and 5, respectively. 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
MW2029	Background	Unit 2	9106
MW2028	Detection	Unit 2	9108
MW2015	Detection	Unit 2 (Gypsum Area 1)	9109
MW2027	Detection	Unit 2	9111

Well Name	Designation	Approximate Location	Test Site Number
MW2026	Compliance	Unit 2	8942
MW2004	Background	Unit 2 (Gypsum Area 2)	9114
MW2024	Detection	Unit 2	9115
MW2025	Detection	Unit 2	9118
MW1006	Piezometer	Unit 1	9121
MWC-12[8]	To Be Abandoned	Unit 1	9122
MW1005	Piezometer	Unit 1	9123
MW1004	Piezometer	Unit 1	9124
MW1003	Piezometer	Unit 1	9125
MW1002	Piezometer	Unit 1	9126
MW1001	Piezometer	Unit 1	9129
MW2001	Piezometer	Unit 2	9131
MW5003[9]	Compliance	Unit 5	30240
MW5004[9]	Compliance	Unit 5	30241
MW2002	Piezometer	Unit 2	30242
MW2003	Piezometer	Unit 2	30243

b. Gypsum Storage Area 1 and Area 2:

Well Name	Designation	Approximate Location	Test Site Number
MW2004	Background	Unit 2, Gypsum Area 2	9114
MW2009[10]	Detection	Unit 2, Gypsum Area 2	22847
MW2008[10]	Detection	Unit 2, Gypsum Area 2	22849
MW2014[10]	Detection	Unit 2, Gypsum Area 2	22848
MW2013[10]	Detection	Unit 2, Gypsum Area 2	22850
MW2007[10]	Detection	Unit 2, Gypsum Area 2	22851
MW2012[10]	Detection	Unit 2, Gypsum Area 2	22852
MW2006[10]	Detection	Unit 2, Gypsum Area 2	22853
MW2011[10]	Detection	Unit 2, Gypsum Area 2	22854
MW2005[10]	Detection	Unit 2, Gypsum Area 2	22855
MW2010[10]	Detection	Unit 2, Gypsum Area 2	22856
MW2018	Detection	Unit 2, Gypsum Area 1	22857
MW2017	Detection	Unit 2, Gypsum Area 1	22859
MW2022	Detection	Unit 2, Gypsum Area 1	30089
MW2019	Detection	Unit 2, Gypsum Area 1	22862
MW2015	Detection	Unit 2, Gypsum Area 1	9109
MW2016	Detection	Unit 2, Gypsum Area 1	22865
MW2020	Detection	Unit 2, Gypsum Area 1	30244
MW2021	Detection	Unit 2, Gypsum Area 1	30245
MW2023	Detection	Unit 2, Gypsum Area 1	30246
MW5001	Piezometer	Unit 5, Gypsum Area 1	30247
MW5002	Compliance	Unit 5, Gypsum Area 1	30248

c. Surface Water:

Surface Water Name	Designation	Approximate Location	Approximate Latitude	Approximate Longitude	Test Site Number
SW-1	Ambient	Approx. 150 ft W of GW-1S	30° 33' 41.80" N	87° 14' 25.31" W	22867
SW-2	Down Gradient	Approx. 225 ft SSW of GW-2S	30° 33' 54.53" N	87° 14' 36.68" W	22868
SW-3	Down Gradient	Approx. 60 ft WSW of GW-3S	30° 34' 03.49" N	87° 14' 34.11" W	22869

[8] To be abandoned. The permittee shall abandon monitoring wells in accordance with Condition III.4 and obtain abandonment permit in accordance with Condition III.4.

[9] Proposed monitoring wells to be installed. Install proposed monitoring wells within 120 days of issuance of permit and submit new monitoring well information in accordance with Condition III.4. Submit proposed new monitoring well coordinates in accordance with Condition III.4.

[10] Proposed monitoring wells to be installed. Install proposed monitoring wells for Gypsum Area 2 prior to storage in Gypsum Area 2. Submit new monitoring well information in accordance with Condition III.4. Submit proposed new monitoring well coordinates in accordance with Condition III.4.

Surface Water Name	Designation	Approximate Location	Approximate Latitude	Approximate Longitude	Test Site Number
SW-4	Down Gradient	Approx. 430 ft WNW of GW-4S	30° 34' 10.73" N	87° 14' 26.83" W	22870
SW-5	Down Gradient	Approx. 800 ft W of GE-1S	30° 34' 18.72" N	87° 14' 08.46" W	22871
SW-6	Down Gradient	Approx. 980 ft NNW of GE-1S	30° 34' 28.55" N	87° 14' 01.28" W	22872
SW-7	Down Gradient	Approx. 1,870 ft NE of GE-1S	30° 34' 31.73" N	87° 13' 45.11" W	22873
SW-8	Down Gradient	Approx. 270 ft NE of GE-6S	30° 34' 17.53" N	87° 13' 49.09" W	22874

7. The following parameters shall be sampled semiannually for the groundwater monitoring wells associated with the areas listed below and shall be included in all future analysis reports:

   a. Ash Landfill:

Field Parameters	Laboratory Parameters
Static water level in wells before purging	Aluminum, Total Recoverable
Specific conductivity	Arsenic, Total Recoverable[11]
pH	Boron, Total Recoverable
Dissolved oxygen	Cadmium, Total Recoverable
Turbidity	Calcium
Temperature	Chloride
Oxidation –Reduction Potential	Chromium, Total Recoverable
Colors and sheens (by observation)	Copper, Total Recoverable
	Fluoride, Total Recoverable
	Lead, Total Recoverable
	Manganese, Total Recoverable
	Mercury, Total Recoverable[12]
	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. Gypsum Storage Area 1 and Area 2:

Field parameters	Laboratory parameters
Static water level in wells before purging	Antimony
Specific conductivity	Arsenic[11]
pH	Calcium
Dissolved oxygen	Magnesium
Turbidity	Mercury
Temperature	Potassium
Oxidation –Reduction Potential	Selenium
Colors and sheens (by observation)	Sodium
	Thallium
	Bicarbonate Alkalinity
	Bromide
	Chloride
	Sulfates
	Total Dissolved Solids (TDS)

   c. 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

[11] Monitoring for arsenic shall be "Report" only.

[12] Monitoring for mercury shall be "Report" only for MW-2025

using a consistent nationally recognized datum, shall be reported on each analysis report. Prior to sampling, the field parameters of Rule 62-701.510(7)(a), F.A.C., shall be stabilized from each well.

d. 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.

e. Background water quality shall be sampled and analyzed in accordance with the provisions of Rule 62-701.510(5)(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 Condition III.6.a. and b. above.

f. 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.

g. 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.]*

8. The following parameters shall be sampled semiannually for the surface water monitoring sites listed below and shall be included in all future analysis reports:

a. Surface water test sites SW-1 through SW-8:

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)

b. Surface water monitoring sites SW-2 through SW-8 shall meet the surface water standards as set forth in Chapter 62-302, F.A.C. Surface water monitoring site SW-1 is for monitoring purposes only.

c. Surface water quality shall be sampled and analyzed in accordance Permit Condition I.D.1.

9. Rainfall at the site shall be measured on a daily basis and the results submitted with the semiannual reports.

10. 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.

11. 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.]*

12. 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. All water quality-monitoring reports required by this section shall be submitted to:

    Department of Environmental Protection
    Northwest District Office
    Solid Waste Section
    160 W. Government Street, Suite 308
    Pensacola, Florida 32502

    The Department FDEP File Number and Facility Identification Number (WACS –99720) 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. The results of each set of water quality analysis shall be submitted electronically on compact disc media readable by a Microsoft Windows computer.

    The data shall be evaluated using ADaPT to conduct data quality review and compliance checking. The owner or operator shall include DEP Form 62-701.900(31), Water Quality Monitoring Certification provided as Attachment 6 with each report certifying that the laboratory results have been reviewed and approved by the owner or operator. To download the appropriate version of the ADaPT software for data entry and submittals and for other general information related to the use of ADaPT, go to the DEP's web site at:

    http://www.dep.state.fl.us/waste/ADaPT/

    The ADaPT water quality analysis shall be submitted electronically on compact disc media readable by a Microsoft Windows computer. Electronic laboratory data must be submitted in a specific format called an Electronic Data Deliverable (EDD). The submittal shall also include Chain of Custody sheets, field data sheets (Form FD 9000-24, Attachment 7), groundwater contour maps, water elevation table, summary of exceedances, recommendations, and the Groundwater Monitoring Report Certification. The Department will use ADaPT to conduct data quality review and compliance checking. *[Rule 62-701.510, F.A.C., Rules 62-160.240(3) and 62-160.340(4), F.A.C., and Rule 62-520, F.A.C.]*

13. A complete sampling record shall be provided for each monitoring well. 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, and temperature; time interval of purging; time sample is taken; and device(s) used for purging (including discharge rate) and sampling. 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. *[Rules 62-701.510 and 62-520, F.A.C.]*

14. In the event the water quality monitoring shows a violation of the applicable water quality standards, the permittee shall arrange for a confirmation re-sampling within 30 days after the permittee's receipt of laboratory results. If the re-sampling confirms ground water contamination, the permittee shall notify the Department in writing within 14 days of this finding.

15. If water quality monitoring demonstrates contaminants are detected and confirmed in compliance wells or compliance 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 evaluation monitoring, prevention measures and/or corrective actions in accordance with Rule 62-701.510(6), F.A.C.

    If required, the permittee shall initiate prevention measures and/or 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(6)(c), F.A.C]*

16. All water quality monitoring required by this section shall be in accordance with Rule 62-520.600, F.A.C., and Rule 62-701.510, F.A.C., and shall be carried out under the requirements of DEP-SOP-001/01 Standard Operating Procedures for Field Activities and in accordance with Chapter 62-160, F.A.C.

17. A technical report required by Rule 62-701.510(8)(b), 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. 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:

    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.

    h. An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions

    The technical reports shall be submitted under separate cover, two and one-half years after permit issuance, and no later than the date of the permit expiration. *[Rule 62-701.510(8)(b), 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.

    [62-620.350]

3. Once a year during the period of operation authorized by this permit, the permittee shall, as part of the regular maintenance schedule, review the structural integrity of all outfalls, including all outfalls which have been taken out of service.

VI. SCHEDULES

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

Action Item	Completion Date
1. 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. The permittee shall continue the approved Plan of Study (POS) for the applicable provisions of 40 CFR 122.21(r), in accordance with Permit Condition I.A.11, and shall submit the results of the POS, and all other required information, as soon as practicable but no later than 180 days prior to the expiration date of the permit (also the due date for submission of the permit renewal application).

4. The permittee shall submit the following information, in accordance with the requirements of the revised effluent guidelines in 40 CFR 423.13 for any applicable waste stream:
   a. If applicable, within 90 days of November 1, 2020, the permittee shall set up a meeting with the Department to discuss the permittee's plan to comply with applicable sections of 40 CFR 423.13 for bottom ash transport water.
   b. If applicable, within 6 months of the meeting to be held under 4.a above, the permittee shall submit a Plan of Study (POS) to address the implementation of any applicable effluent limitations from 40 CFR 423.13 for bottom ash transport water. The POS shall include milestones and time frames for meeting the requirements by December 31, 2023.
   c. The permittee shall meet any applicable revised effluent guidelines for bottom ash transport water no later than December 31, 2023.

5. The permittee shall complete the following items, in accordance with Permit Condition I.D.17:
   a. Within 90 days of the effective date of the permit, the permittee shall schedule a meeting with the Department to discuss the contents of the confirmation study.
   b. Within 180 days of the effective date of the permit, the permittee shall submit a draft confirmation study to the Department for approval.
   c. The permittee shall complete the confirmation study and the results of the study shall be submitted by 180 days prior to the expiration of the permit.

6. The permittee shall submit the annual summary of monthly surface water monitoring results by February 28th of each year to the Department's Tallahassee Industrial Wastewater Program.

VII. BEST MANAGEMENT PRACTICES/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 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 continue to 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, including mercury, 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 plan shall be signed and sealed by the professional(s) who prepared them.

A copy of the plan 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

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 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 Program, 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 Implementation

The BMP3 plan shall be 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.

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 Preservation of State Historical Resources

1. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are discovered at any time within the project site area, the permittee shall immediately notify the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)245-6333, to determine appropriate action.

2. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

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

1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department's Northwest District Office 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)]

D. Impoundment Design, Construction, Operation, and Maintenance

1. All 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.

2. Operation and maintenance of any 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.

E. Impoundment Integrity Inspections

1. All impoundments, including the closed ash landfill on Governor's Island, shall be inspected annually 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, torn or damaged pond liners and any other changes which may indicate a potential compromise to impoundment integrity, including subsidence and destructive animal activity such as burrowing.

2. Within 30 days after the annual inspection, a qualified, responsible officer shall certify to the Department's Industrial Wastewater Program 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. Information concerning corrective actions taken as a result of the

inspections shall be kept on-site in accordance with Permit Condition V.2. Additional requirement for concentrated seepage are listed below in Permit Condition VIII.E.4.

The certification shall also include a statement that the IWTP 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 routine annual or other inspection indicates that a critical condition in the impoundment is suspected that could result in a potential discharge to surface waters of the State, such as the conditions listed below, the permittee shall notify the Department's Northwest District Office 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 (not related to rainfall events) 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.

   If a routine annual or other inspection results in an observation of an impoundment integrity issue causing releases of concentrated seepage to surface waters, the proposed corrective action shall include at a minimum monitoring for impacts on compliance with surface water standards and feasible methods to divert the concentrated seepage into the IWTP or eliminate the release.

F. 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.2 and made available to Department's Northwest District Office 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.2 and made available to Department's Northwest District Office inspectors upon request.

G. 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 (**September 30, 2023**) 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

   a. 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.

H. Reopener Clauses

1. 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 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).

3. The permit may be reopened to adjust effluent limitations or monitoring requirements if a need for different or more stringent limitations or monitoring requirements is shown, based on

   a. Water Quality Based Effluent Limitation (WQBEL) determinations;

   b. DEP or EPA approved changes in water quality standards;

   c. DEP or EPA established Total Maximum Daily Loads (TMDLs);

   d. Basin Management Action Plans (BMAPs); or

   Other water quality studies or information.

4. The permit may be reopened to implement the revised Effluent Limitations Guidelines and Standards (ELGS) for the Steam Electric Power Generating category (40 CFR 423) in the event the EPA adopts new compliance deadlines or further revisions to the rule.

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)]*

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 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.

    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 WATCH OFFICE 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 Watch Office:
            (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.

    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. c. 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. b. (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

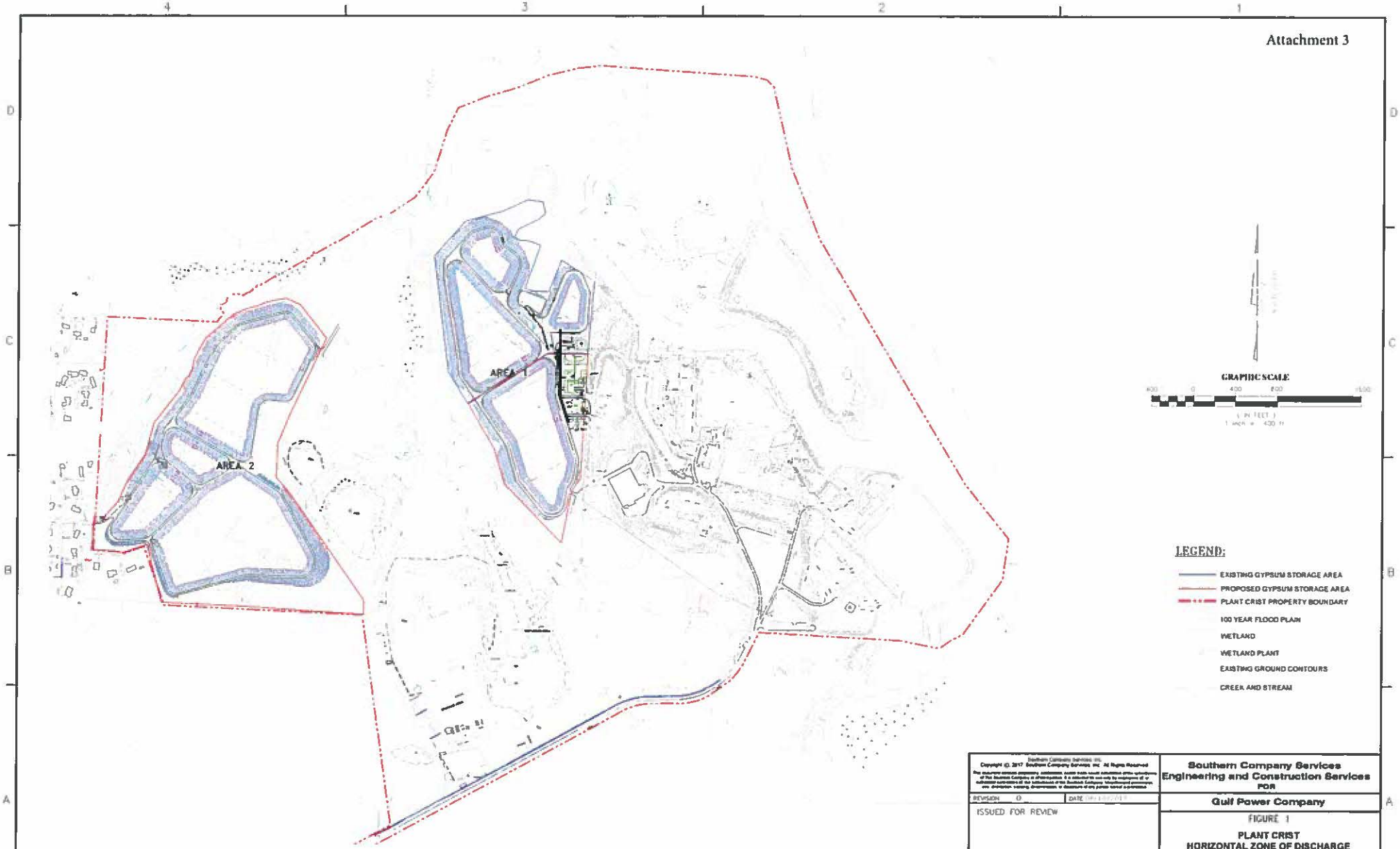
Benjamin M. Melnick
Deputy Director
Division of Water Resource Management

Attachment(s):

Attachment 1: Facility Map
Attachment 2: Surface Water Sampling Locations
Attachment 3: Facility Horizontal Zone of Discharge
Attachment 4: Monitoring Well Construction Diagram
Attachment 5: Proposed Well Network
Attachment 6: Water Quality Monitoring Certification
Attachment 7: DEP Form FD 9000-24 Ground Water Sampling Log

Attachment 1 – Facility Map

Attachment 3



Southern Company Services
Engineering and Construction Services
FOR
Gulf Power Company

ISSUED FOR REVIEW

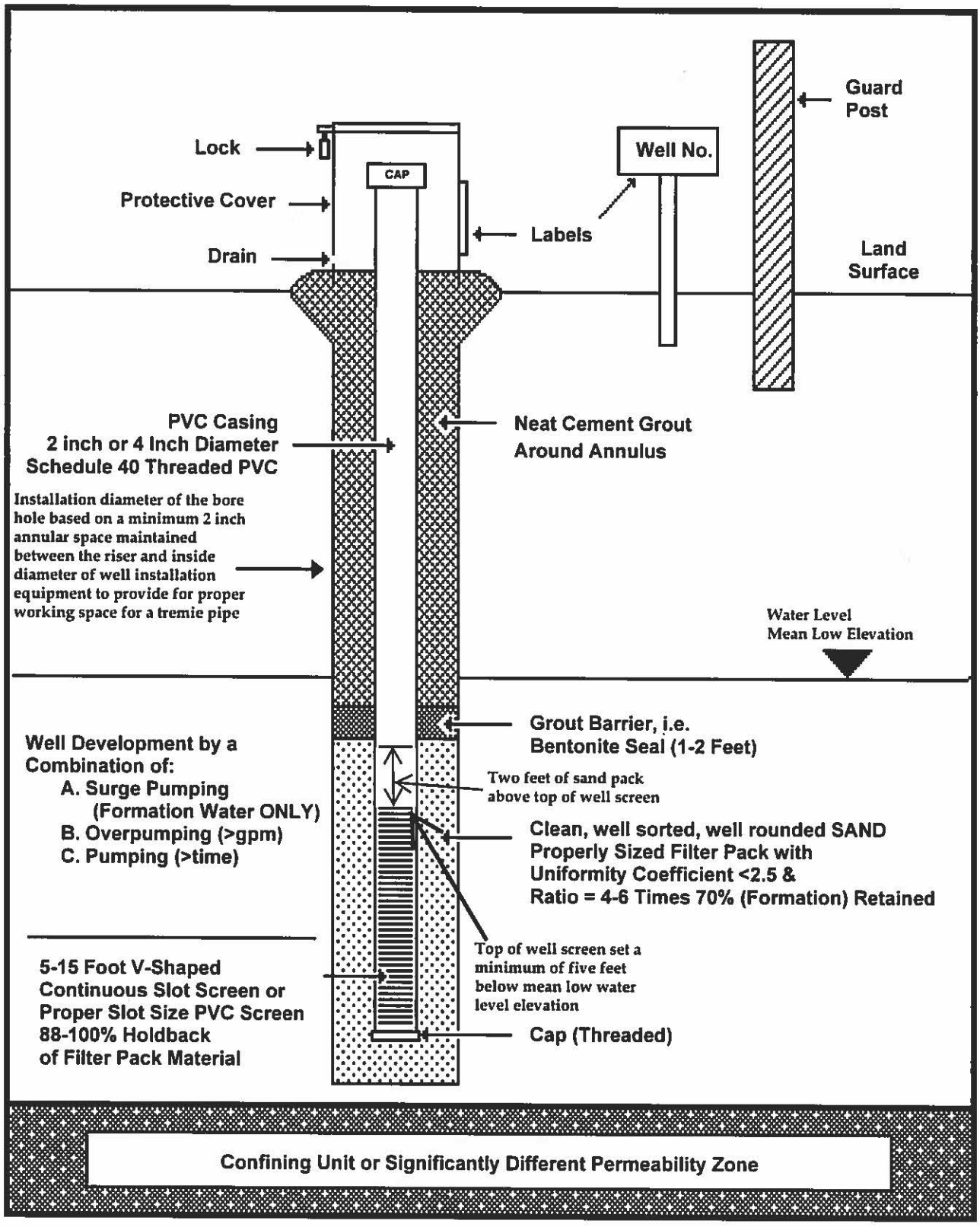
FIGURE 1
PLANT CRIST
HORIZONTAL ZONE OF DISCHARGE

BY	CHK'D	DES. APP'D	PLANT APP'D	E/C APP'D	DOCS APP'D	DOC NO	SCALE	PRINT UP	DRAWING NUMBER	REV	CONF'S	FILE
ASF	JDP	JCR					AS SHOWN		ES4016	1	FINAL	0

Drawing name: T:\ESCE MAJOR PROJECTS\PROJECTS\CRYST\2007\ES1607 - REPONSE TO FDEP\DWG\ES1607_Revised_Boundary.dwg Aug 09, 2017 - 5:33pm

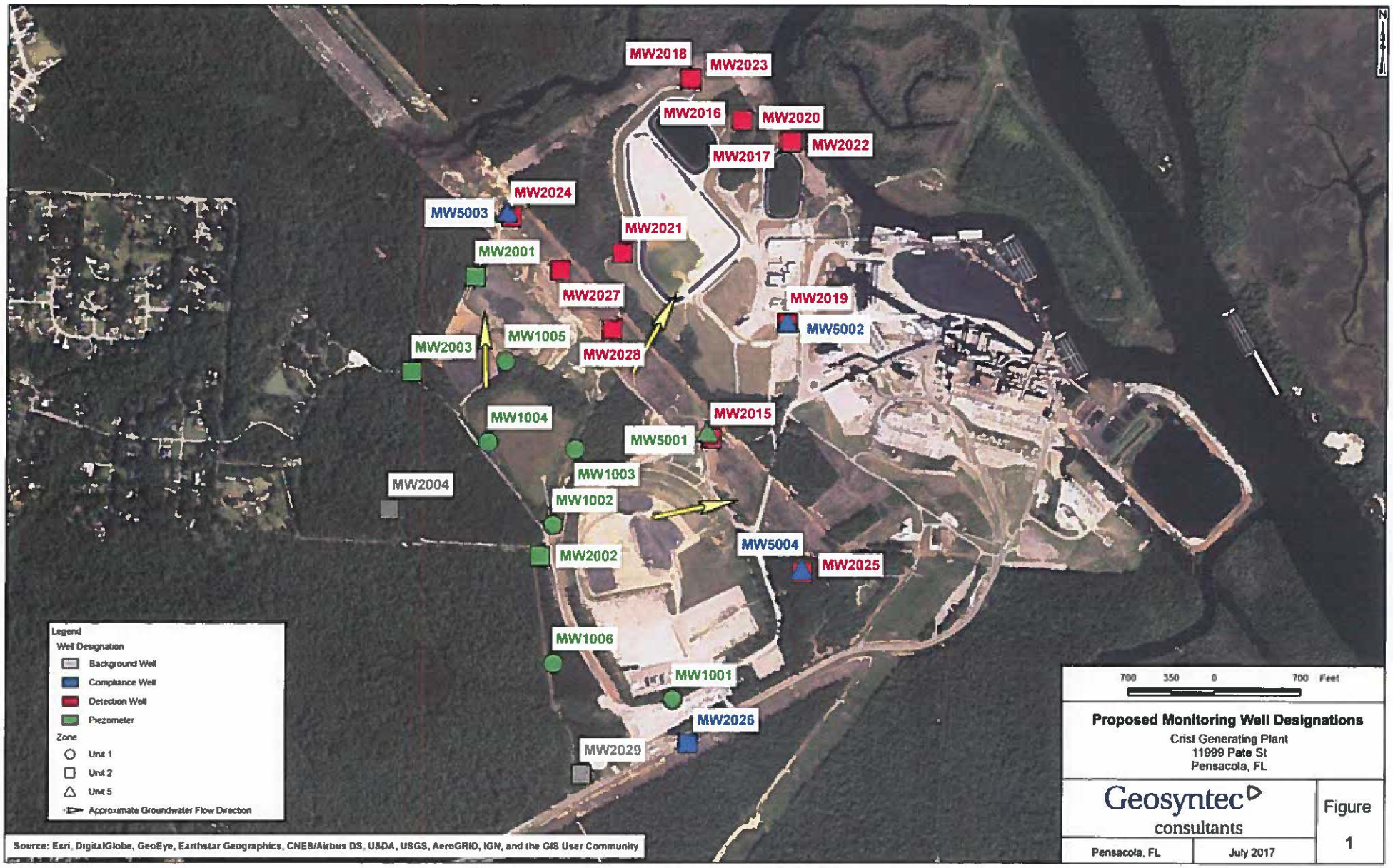
ANSI D 34x22 Acad2008

20190007-Staff-POD-2-55



Basic Monitor Well Design
in a Water Table Aquifer

Florida Department of
Environmental Protection
Northwest District Office



Attachment 5

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 _____

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) _____

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

_____ _____

(Date) (Owner or Authorized Representative's Signature)

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization _____

Analytical Lab NELAC / HRS Certification # _____

Lab Name _____

Address _____

Phone Number (____) _____

Email address (if available) _____

Northwest District
160 Government Center
Pensacola, FL 32501-5794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. 200 B
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky
Temple Terrace, FL
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33902-2549
239-332-6975

Southeast District
400 North Congress Ave.
West Palm Beach, FL 33401
561-681-6600

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	SITE LOCATION:
WELL NO:	SAMPLE ID: / DATE:

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

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

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

Revision Date: February 12, 2009

FACT SHEET
FOR
STATE OF FLORIDA INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMIT NUMBER: FL0002275-018 (Major)

FACILITY NAME: Crist Electric Generating Plant

FACILITY LOCATION: 11999 Pate Street, Pensacola, FL 32514-0328
Escambia County

NAME OF PERMITTEE: Gulf Power Company (GPC)

PERMIT WRITER: Kevin Ledbetter, P.E.

1. SUMMARY OF APPLICATION

Addendum to Factsheet – The public comment period for the Notice of Draft ended on July 7, 2018. During the comment period, the Department received comments from Emerald CoastKeeper, Gulf Restoration Network, Sierra-Club and others. Furthermore, the Department received requests for a public meeting from Emerald CoastKeeper and Gulf Restoration Network. A public notice announcing the meeting was published in the Pensacola Journal on November 19, 2018 A public meeting was held on December 19, 2018, in Pensacola. During the meeting the public had the opportunity to discuss their concerns directly with the Department and Gulf Power Company representatives. The Department accepted additional comments from the public on the day of the meeting until close of business. As a result of the comments received and the input from the public meeting, the draft permit was revised as follows:

Permit condition I.A.3 referenced the surface water minimum criteria in Rule 62-302.500(1)(a). To provide clarity, the condition was re-written to include the surface water minimum criteria in the condition itself.

Permit Condition I.D.7 was revised to clarify that the permit prohibits polychlorinated biphenyl compounds to waters of the state.

Permit condition I.D.8 was revised to clarify that the permit does not prohibit the use of products for lawn and agricultural purposes or the use of herbicides if used in accordance with labeled instructions and any applicable State permit.

Permit condition I.D.9 was revised to clarify that the permit prohibits the discharge of floating oil.

Permit condition I.D.17 was revised to clarify that the confirmation study shall evaluate whether the thermal plume has effects on the migration, foraging and residency patterns of the biological communities in the Escambia River.

Permit condition III.2 referenced the groundwater minimum criteria in Rule 62-520.400(1). To provide clarity, the condition was re-written to include the groundwater minimum criteria in the condition itself. In addition, the second sentence of the condition was placed in a separate condition (permit condition III.3)

Permit condition III.14 was revised to clarify that the permittee shall re-sample within 30 days of discovering a water quality sample exceeds the applicable water quality standard.

Permit Condition VIII.E. was revised to require the permittee to look for and correct subsidence and destructive animal activity such as burrowing as part of structural integrity inspections for wastewater impoundments.

Commenters requested public access to monitoring data collected by Gulf Power Company for the Crist Electric Generating Plant. It should be noted that monitoring data submitted to the Department is available

through the public login of the Department's document management system (OCULUS). OCULUS can be accessed from the following website: https://depedms.dep.state.fl.us/Oculus/servlet/login.

Commenters also requested that the timeframes for Gulf Power Company to notify the Department of groundwater quality violations and to conduct confirmation re-sampling should be shorter than that stipulated in the draft permit. It should be noted that these timeframes are set by rule.

a. Purpose

This is a renewal of the existing National Pollutant Discharge Elimination System (NPDES) industrial wastewater discharge permit No. FL0002275 for the GPC Crist Electric Generating Plant. In addition, the permit addresses post-rehabilitation activities and potential discharges to waters of the State from the closed ash landfill on Governor's Island. Consent Order No. 17-1224 addresses the closed ash landfill on Governor's Island and copper exceedances, and Consent Order 16-1250 addresses releases from the onsite gypsum pond system at the facility.

b. Chronology of Application

Application Number:	FL0002275-018-IW1S
Application Submittal Date:	July 23, 2015
Additional Information Received:	October 7, 2015; November 20, 2015; April 26, 2016; September 6, 2016; February 7, 2017; July 3, 2017; December 15, 2017; December 20, 2017; and April 13, 2018
Consent Order Issuance Dates:	September 13, 2016 and January 25, 2018
Notice of Draft:	June 1, 2018 (issued); June 7, 2018 (published)
Notice of Intent to Issue	March 1, 2018 (issued); March 7, 2018 (published)

A draft permit was published on September 13, 2016. During the public comment period, the Department received substantial comments on the draft permit that was issued, primarily related to the Revised Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (40 CFR Part 423) (ELGS), Clean Water Act (CWA) 316(b), Endangered Species Act and potential discharges to waters of the State from the closed ash landfill. This draft permit addresses comments received on the first draft permit in the sections below and imposes new requirements.

c. Facility Description

The Crist Electric Generating Plant is located in Escambia County on Pate Street, off 10 Mile Road on Governors Bayou, North of Pensacola, Florida. The existing facility consists of four predominantly coal-fired fossil fuel steam-generating units (Units 4-7). Natural gas, fuel oil and on-specification used oil are used as supplemental fuels in all four units. Units 1-3 are retired.

The total nameplate generating capacity is 1135 megawatts (MW) with a gross generation capacity of 1014 MW.

Units 4 and 5 use non-contact once-through cooling water (OTCW) for condenser cooling. A once-through helper cooling tower located along-side the discharge canal is operated during the summer months (based on discharge temperature) to lower the temperature of the combined once-through cooling water discharge. Units 6 and 7 use a closed-loop cooling tower system for condenser cooling. This permit includes the closed ash landfill site on Governor's Island. A map of the facility is shown on Attachment 1 of the permit.

d. Surface Water

Non-contact, once-through cooling water from Units 4 and 5 discharges to the Escambia River, a Class III fresh water. All other process wastewater is discharged to the unlined industrial wastewater treatment pond (IWTP) or disposed via underground injection (separate UIC Permit Nos. IW17-0085658-004 for wells IW-1 and IW-2 and

0085658-007-008-UC/I1 for wells IW-3 and IW-4). The IWTP is permitted to discharge via an internal outfall to the discharge canal or via underground injection.

The industrial wastewater treatment pond (IWTP) receives neutralized demineralizer regeneration wastewater, cooling tower blowdown, boiler blowdown, oil/water separator pond overflow, floor drainage wastewater, auxiliary equipment cooling water and seal water, coal pile runoff, yard sump discharge, treated metal cleaning wastewater, decanted water from the proprietary dewatering system (Hydrobin®), and non-contact stormwater. 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 IWTP.

The closed-loop cooling tower systems serving Units 6 and 7 use either reclaimed water that has received advanced treatment from the Emerald Coast Utilities Authority (ECUA) Central Water Reclamation Facility (CWRF), Permit No. 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 industrial wastewater treatment pond (IWTP). 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 then disposed via underground injection, and the remaining portion is returned to the headworks of the ECUA CWRF via the sanitary sewer collection system. The discharge back to ECUA is covered under an industrial pretreatment permit issued to GPC by ECUA (Permit No. 1050-13). Reclaimed water may also be directed to OTCW systems serving Units 4 and 5.

Stormwater associated with industrial activity is covered under a Multi-Sector Generic Permit (MSGP No. FLR05C161).

All domestic wastewater generated at the facility is collected and piped to the ECUA sanitary sewer collection system.

Solid Waste Management Areas

Active Coal Ash Landfill

The active ash landfill consists of a 78-acre solid waste management facility, and includes fly ash storage areas, bottom ash storage areas and interim storage areas. Stormwater runoff and leachate from the on-site solid waste management facility is 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.

Closed Coal Ash Landfill

In addition, the facility includes a closed ash landfill on Governor's Island. The closed coal ash landfill received coal ash from 1970 until 1981 (no ash placed into the landfill in over 35 years). The landfill closed in the early 1980's. Discharges from the closed coal ash landfill to waters of the State are covered in Sections I and III of this permit. Stormwater runoff from this landfill is also covered under the separate NPDES MSGP.

On January 25, 2018, the Department issued a Consent Order (OGC Case No. 17-1224) addressing discharges to waters of the state from the closed ash landfill (see Section 8). Under the Consent Order, the Department requires the permittee to initiate and complete rehabilitation of the closed ash landfill; activities include the following:

(1) A geological and engineering site evaluation to determine the extent of the rehabilitation area, evaluate the integrity of the existing landfill cap, and identify any seeps and discharges as well as the quantity and quality of those discharges to waters of the state;

(2) An evaluation of engineering solutions to eliminate or minimize the seeps and discharges to waters of the state, which may include improvements to the cap and walls of the landfill, and controlling further penetration of tree and shrub roots through the ash material; and

(3) Conduct a one-year sampling and monitoring plan following completion of the rehabilitation activities to demonstrate success and provide reasonable assurance for any remaining discharges from the landfill meet applicable water quality standards and do not impair the designated use of contiguous waters of the state.

Furthermore, Sections I and III of this draft permit include conditions that protect the quality of groundwater and prohibit the impairment of the designated use of contiguous surface waters from the onsite landfill wastewater discharges. These conditions are in accordance with Chapter 62-520, F.A.C. In addition, the permittee is required to conduct inspections of all impoundments at the facility, including the closed ash landfill, to ensure that there are no breaches or structural defects resulting in discharges to surface waters of the State and that there are no observable changes which may indicate a potential compromise to impoundment integrity.

Gypsum Storage Areas 1 and 2

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

Gypsum slurry that is routed to the gypsum dewatering system is separated into two separate streams. One, referred to as filter cake, contains mostly solids gypsum with little water while the other, referred to as filtrate, is mostly water with little gypsum solids. The filter cake is stored onsite until it is loaded and transported for recycle by end users. The filtrate is ultimately pumped to the return water pond. Pumps withdraw water from the return water pond to the return water tank for reuse back into the flue gas desulfurization (FGD) system or to the facility's underground injection system (UIC permit numbers IW17-0085658-004-UC and 0085658-007-008-UC/II).

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

e. Primary Regulatory Requirements

Standard Industrial Classification (SIC) Code: 4911 - Electrical Generation.

North American Industry Classification System (NAICS): 221112 - Fossil Fuel Electric Power Generation.

316(b): The facility operates once-through cooling water systems with intake structures subject to Section 316(b) of the Clean Water Act.

ELGS: The facility is subject to the Effluent Limitations Guidelines and Standards (ELGS) for the Steam Electric Power Generating Point Source Category (40 CFR Part 423)

Facility Capacity

Existing Permitted Capacity:	274 MGD Maximum Flow
Proposed Increase in Permitted Capacity:	0 MGD Maximum Flow
Proposed Total Permitted Capacity:	274 MGD Maximum Flow

2. SUMMARY OF SURFACE WATER DISCHARGE

Monitoring Group D-010: Existing discharge of once-through cooling water from Units 4-7, supply of reclaimed water from Emerald Coast Utility Authority (ECUA), and overflow from the industrial wastewater treatment pond (IWTP) to the Escambia River, a Class III Fresh Water (WBID 10E).

Monitoring Group I-150: An existing permitted discharge of metal cleaning wastewater to the on-site IWTP.

Monitoring Group I-170: An existing permitted discharge of cooling tower blowdown to the on-site IWTP when river water is used as makeup water for the cooling towers serving Units 6 and 7.

Monitoring Group I-180: An existing permitted discharge to the intake tunnel for use in the once-through cooling water system.

Monitoring Group I-1C0: An existing permitted discharge of wastewater overflow from the IWTP to the main discharge canal prior to Outfall D-010.

Pollutant concentrations reported in the application which are subject to permit limitations are as follows:

Parameter	Units	Max/Min	Reported Value	Statistical Basis
Flow	MGD	Avg.	177	Annual Average
Temperature (F), Water (Winter)	Deg F	Avg.	64.7	Annual Average
Temperature (F), Water (Summer)	Deg F	Avg.	78.2	Annual Average
pH	s.u.	Max	7.88	Daily Maximum
		Min	6.25	Daily Minimum
Arsenic, Total Recoverable	mg/L	Max	<0.004	Daily Maximum
Cadmium, Total Recoverable	mg/L	Max	<0.001	Daily Maximum
Chromium, Total Recoverable	mg/L	Max	0.002	Daily Maximum
Copper, Total Recoverable	mg/L	Max	0.002	Daily Maximum
Iron, Total Recoverable	mg/L	Max	0.51	Daily Maximum
Lead, Total Recoverable	mg/L	Max	0.002	Daily Maximum
Mercury, Total Recoverable	ug/L	Max	0.00115	Daily Maximum
Nickel, Total Recoverable	mg/L	Max	<0.003	Daily Maximum
Selenium, Total Recoverable	mg/L	Max	<0.004	Daily Maximum
Zinc, Total Recoverable	mg/L	Max	<0.008	Daily Maximum
Nitrogen, Total	mg/L	Max	0.26	Daily Maximum
Phosphorus, Total (as P)	mg/L	Max	<0.03	Daily Maximum

3. BASIS FOR PERMIT LIMITATIONS AND MONITORING REQUIREMENTS

This facility is authorized to discharge once-through non-contact cooling water, reclaimed water from ECUA, and industrial wastewater treatment pond overflow from **Outfall D-010** to the Escambia River based on the following:

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
Flow	MGD	N/A	N/A	N/A	N/A	Report	Report	308(a) CWA and 62-620.320(6), F.A.C.
Temperature (F), Water	Deg F	N/A	N/A	N/A	N/A	94.0 (Day.Avg)	94.0 (Day.Avg)	62-302.520, F.A.C.
pH	s.u.	N/A	N/A	8.5	6.0 (Day.Min)	8.5	6.0 (Day.Min)	62-302.530, F.A.C.
Oxidants, Total Residual	mg/L	0.20	0.20	0.01	0.01	0.01	0.01	62-302.530, F.A.C.
Oxidants, Total Residual (Discharge Time)	min/day /unit	120	120	N/A	N/A	120	120	40 CFR Part 423.13(d)(2)
Oil and Grease	mg/L	N/A	N/A	5.0	5.0	5.0	5.0	62-302.530, F.A.C.
Aluminum, Total Recoverable	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-302.530, F.A.C.
Arsenic, Total Recoverable	ug/L	N/A	N/A	50.0	50.0	50.0	50.0	62-302.530, F.A.C.
Beryllium, Total Recoverable	ug/L	N/A	N/A	N/A	0.13 (An.Avg.)	N/A	0.13 (An.Avg.)	62-302.530, F.A.C.
Boron	ug/L	N/A	N/A	N/A	N/A	Report	N/A	62-620.320(6), F.A.C.
Cadmium, Total Recoverable	ug/L	N/A	N/A	See Below	See Below	See Below	See Below	62-302.530, F.A.C.
Chromium, Hexavalent Total Recoverable	ug/L	N/A	N/A	11	11	11	11	62-302.530, F.A.C.

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
Copper, Total Recoverable[1]	ug/L	N/A	N/A	See Below	See Below	See Below	See Below	62-302.530, F.A.C.
Iron, Total Recoverable	mg/L	N/A	N/A	1.0	1.0	1.0	1.0	62-302.530, F.A.C.
Lead, Total Recoverable	ug/L	N/A	N/A	See Below	See Below	See Below	See Below	62-302.530, F.A.C.
Mercury, Total Recoverable	ug/L	N/A	N/A	0.012	0.012	0.012	0.012	62-302.530, F.A.C.
Nickel, Total Recoverable	ug/L	N/A	N/A	See Below	See Below	See Below	See Below	62-302.530, F.A.C.
Selenium, Total Recoverable	ug/L	N/A	N/A	5.0	5.0	5.0	5.0	62-302.530, F.A.C.
Vanadium, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-302.530, F.A.C.
Zinc, Total Recoverable	ug/L	N/A	N/A	See Below	See Below	See Below	See Below	62-302.530, F.A.C.
Alpha, Gross Particle Activity	pCi/L	N/A	N/A	15.0	15.0	15.0	15.0	62-302.530, F.A.C.
Hardness, Total (as CaCO3)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-302.530, F.A.C.
Radium 226 + Radium 228, Total	pCi/L	N/A	N/A	5.0	5.0	5.0	5.0	62-302.530, F.A.C.
Chronic Whole Effluent Toxicity, 7-Day IC25 (Ceriodaphnia dubia)	percent	N/A	N/A	100 (Min)		100 (Min)		62-302.530(20) & (61), F.A.C. and 62-4.241(1)(b), F.A.C.
Chronic Whole Effluent Toxicity, 7-Day IC25 (Pimephales promelas)	percent	N/A	N/A	100 (Min)		100 (Min)		62-302.530(20) & (61) FAC and 62-4.241(1)(b), F.A.C.

The limit(s) 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):

$Cd \leq e^{(0.7409[\ln H]-4.719)}$ ug/L
$Cu \leq e^{(0.8545[\ln H]-1.702)}$ ug/L
$Pb \leq e^{(1.273[\ln H]-4.705)}$ ug/L
$Ni \leq e^{(0.846[\ln H]+0.0584)}$ ug/L
$Zn \leq e^{(0.8473[\ln H]+0.884)}$ ug/L

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 $CaCO_3$. 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. *[62-302.530(15), 62-302.530(23), 62-302.530(39), 62-302.530(44), 62-302.530(70), F.A.C.]*

The effluent limits for Aluminum, Arsenic, Beryllium, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Vanadium, 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 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.

This facility is authorized to discharge metal cleaning wastewater from **Internal Outfall I-150** to the industrial wastewater treatment pond based on the following:

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
Flow	MGD	N/A	N/A	N/A	N/A	Report	Report	308(a) CWA and 62-620.320(6), F.A.C.
Copper, Total Recoverable	mg/L	1.0	1.0	N/A	N/A	1.0	1.0	40 CFR Part 423.12(b)(5)
Iron, Total Recoverable	mg/L	1.0	1.0	N/A	N/A	1.0	1.0	40 CFR Part 423.12(b)(5)
Solids, Total Suspended	mg/L	100.0	30.0	N/A	N/A	100.0	30.0	40 CFR Part 423.12(b)(5)

[1] During the period of Consent Order No. 17-1224, an interim copper limitation of "Report" at Outfall D-010 will apply.

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
Oil and Grease	mg/L	20.0	15.0	N/A	N/A	20.0	15.0	40 CFR Part 423.12(b)(5)

During periods of time where the metal cleaning wastewater (MCW) pond has been emptied and cleaned, and only stormwater is present in the MCW pond, discharge of stormwater via **Internal Outfall I-150** is permitted without limitations or monitoring requirements.

This facility is authorized to discharge cooling tower blowdown from **Internal Outfall I-170** to the industrial wastewater treatment pond based on the following:

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
Flow	MGD	N/A	N/A	N/A	N/A	Report	Report	308(a) CWA and 62-620.320(6), F.A.C.
Oxidants, Total Residual (Discharge Time)	min/day	120	120	N/A	N/A	120	120	40 CFR Part 423.13(d)(2)
Oxidants, Free Available	mg/L	0.5	0.2	N/A	N/A	0.5	0.2	40 CFR Part 423.13(d)(1)
Solids, Total Suspended	mg/L	100.0	30.0	N/A	N/A	100.0	30.0	40 CFR Part 423.12(b)(11)
Oil and Grease	mg/L	20.0	15.0	N/A	N/A	20.0	15.0	40 CFR Part 423.12(b)(11)

This facility is authorized to discharge ECUA reclaimed water and Units 6 and 7 cooling tower blowdown from **Internal Outfall I-180** to the intake tunnel for use in the OTCW system based on the following:

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Annual Total	Monthly Average	Daily Max	Monthly Average	
Flow (Spent Reclaimed Water)	MGD	N/A	N/A	N/A	N/A	Report	Report	308(a) CWA and 62-620.320(6), F.A.C.
Flow (Cooling Tower Makeup)	MGD	N/A	N/A	N/A	N/A	Report	Report	308(a) CWA and 62-620.320(6), F.A.C.
Duration of Discharge	hr	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Oxidants, Total Residual	mg/L	0.5	0.2	N/A	N/A	0.5	0.2	40 CFR Part 423.13(d)(1)
Solids, Total Suspended	mg/L	100.0	30.0	N/A	N/A	100.0	30.0	40 CFR Part 423.12(b)(11)
Oil and Grease	mg/L	20.0	15.0	N/A	N/A	20.0	15.0	40 CFR Part 423.12(b)(11)
Nitrogen, Total	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-304.330(10)(a), F.A.C.
Nitrogen, Total Ammonia	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Nitrogen, Total (Monthly Net Loading)	lb/mth	N/A	N/A	N/A	N/A	Report (Mo.Total)	N/A	62-304.330(10)(a), F.A.C.
Nitrogen, Total (Annual Net Loading)	lb/yr	N/A	N/A	N/A	N/A	Report (An.Total)	N/A	62-304.330(10)(a), F.A.C.
Nitrogen, Total	lb/yr	N/A	N/A	21,392	N/A	21,392 (An.Total)	N/A	62-304.330(10)(a), F.A.C.
Phosphorus, Total (as P)	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-304.330(10)(a), F.A.C.
Phosphorus, Total (as P) (Monthly Net Loading)	lb/mth	N/A	N/A	N/A	N/A	Report (Mo.Total)	N/A	62-304.330(10)(a), F.A.C.
Phosphorus, Total (as P) (Annual Net Loading)	lb/yr	N/A	N/A	N/A	N/A	Report (An.Total)	N/A	62-304.330(10)(a), F.A.C.
Phosphorus, Total (as P)	lb/yr	N/A	N/A	2,852	N/A	2,852 (An.Total)	N/A	62-304.330(10)(a), F.A.C.

This facility is authorized to discharge industrial wastewater treatment pond overflow from **Internal Outfall I-1C0** to the main discharge canal, prior to D-010, based on the following:

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
Flow	MGD	N/A	N/A	N/A	N/A	Report	Report	308(a) CWA and 62-620.320(6), F.A.C.
Oil and Grease	mg/L	10.0 (Day.Avg)	7.0	N/A	N/A	10.0 (Day Avg)	7.0	40 CFR 423.12(b)(3) and 62-620.320(6), F.A.C.
Solids, Total Suspended	mg/L	65.0 (Day.Avg)	30.0	N/A	N/A	65.0 (Day Avg)	30.0	40 CFR 423.12(b)(3) and 62-620.320(6), F.A.C.
Hydrazine	mg/L	N/A	N/A	N/A	N/A	300 (Inst Max)	N/A	62-620.320(6), F.A.C.

Parameter	Units	TBEL		WQBEL		Permit Limit		Rationale
		Daily Max	Monthly Average	Daily Max	Monthly Average	Daily Max	Monthly Average	
pH	s.u.	9.0	6.0 (Min.)	N/A	N/A	9.0	6.0 (Min.)	40 CFR 423.12(b)(1)
Aluminum, Total Recoverable	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Arsenic, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Beryllium, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Boron, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Cadmium, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Chromium, Hexavalent Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Copper, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Iron, Total Recoverable	mg/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Lead, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Mercury, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Nickel, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Selenium, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Vanadium, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.
Zinc, Total Recoverable	ug/L	N/A	N/A	N/A	N/A	Report	Report	62-620.320(6), F.A.C.

Reasonable Assurance

The permittee has provided reasonable assurance that the discharges to waters of the State from the site will neither cause nor contribute to an exceedance of water quality standards nor cause non-attainment of specified designated uses of the receiving waters. Inspection data, as well as all other available data, have been evaluated in accordance with the Department's reasonable assurance procedures to ensure that no limits other than those included in this permit are needed. See Consent Orders (OGC Case No. 16-1250) and (OGC Case No. 17-1224).

A nutrient Total Maximum Daily Load (TMDL) that includes WBID 548AA was adopted in Rule 62-304.330, F.A.C., and became effective June 7, 2013. Under the TMDL, the facility, which discharges to a tidally-influenced water body, is assigned Waste Load Allocations (WLAs) of 2,852 lbs/year for total phosphorus and 21,392 lbs/year for total nitrogen. These loads are imposed as limits in the permit. The nutrient TMDL and WLAs constitute a site-specific numeric interpretation of the narrative nutrient criteria pursuant to paragraph 62-302.531(2)(a), F.A.C., and protect the downstream waterbody, as required by subsection 62-302.531(4), F.A.C; hence, providing reasonable assurance that the direct and downstream receiving waters attain the numeric nutrient criteria. The Escambia River is tidally influenced and may exhibit saltwater conditions for extended periods of time.

Water Quality Effluent Limitation (WQBEL) and Technically-Based Effluent Limitation (TBEL) Considerations

Effluent limitations were determined based on an evaluation of the impact of the discharge on the receiving bodies. This evaluation was conducted in accordance with the Level I WQBEL process described in Rule 62-650.400, F.A.C.

When developing permit limitations, the Department applies both technology-based and water quality-based permit requirements. When both may apply, permit limitations are chosen by whichever is more stringent. Criteria and standards for the inclusion of technology-based requirements in permits are described in 40 CFR Part 125, Subpart A, adopted by the Department in Rule 62-620.100(3)(h), F.A.C.

Technology-based requirements represent the minimum level of control that must be imposed to meet best practicable control technology currently available (BPT) for certain conventional pollutants, best conventional control technology

(BCT) for conventional pollutants, and best available technology economically achievable (BAT) for toxic and non-conventional pollutants. Effluent limitations guidelines for the Steam Electric Power Generating Point Source Category are found at 40 C.F.R. Part 423, adopted by the Department in Rule 62-660.400(1)(e), F.A.C.

Water quality-based effluent limitations are required in NPDES permits when the Department determines that limits more stringent than technology-based limits are necessary to maintain or achieve state Water Quality Standards (WQS). WQS provide a classification for all the water bodies in the state along with their designated uses and designates numeric and narrative water quality criteria that the water bodies in each classification should be able to achieve. NPDES permit limitations are derived to ensure that discharges and cooling water withdrawals do not cause a violation of these standards.

For each effluent limitation included in the permit, technology and water quality-based limitations were compared and the most stringent limitation was selected. The evaluation can be seen in the tables located above. In addition, all applicable federal rules regarding NPDES facilities were reviewed and incorporated into the draft permit, as described below.

4. BASIS FOR SPECIFIC PERMIT REQUIREMENTS

a. Industrial Wastewater Treatment Pond (former Ash Pond)

The permittee uses a wet sluicing system in which water removes bottom ash solids, the heavier portion of coal ash, from the boilers. Until the early 1980s, this water-sluiced bottom ash was directly discharged from the boilers to the on-site pond. The bottom ash then settled out in the pond prior to the wastewater overflowing into the main discharge canal. In 1983 the permittee installed a proprietary dewatering system, Hydrobin®, that uses gravity to separate the solids from the sluice water prior to discharging from the system. The decanted water is then discharged into the IWTP.

Even though the solids from the bottom ash sluicing system were no longer being discharged into the on-site pond, legacy bottom ash remained at the bottom of the pond. In July 2014, the permittee dredged the pond to remove the legacy ash from the pond. The permittee submitted documentation signed by a Florida-licensed Professional Engineer showing that the pond was dredged to the original pond depth that existed prior to the introduction of ash. Legacy ash was removed from the pond; hence, the Department changed the nomenclature of the pond from an ash pond to an industrial wastewater treatment pond (IWTP).

The IWTP receives wastewater from various sources at the facility, including neutralized demineralizer regeneration wastewater, cooling tower blowdown, boiler blowdown, oil/water separator pond overflow, floor drainage wastewater, auxiliary equipment cooling water and seal water, coal pile runoff, yard sump discharge, treated metal cleaning wastewater, decanted water from the Hydrobin® dewatering system and non-contact stormwater. Treated wastewater is discharged from the IWTP via an internal outfall to the discharge canal or via deep well injection, with some portion of the treated wastewater passing through the unlined pond by natural infiltration. The IWTP then discharges through an internal outfall to the main discharge canal, where the commingled wastewater is monitored.

The permit includes additional monitoring requirements for metals associated with coal ash at the discharge from the IWTP and at the main outfall from the facility. In addition, it includes a new condition in the groundwater monitoring requirements stating that groundwater shall not impair the designated use of contiguous surface waters. Last, the permit has specific requirements for concentrated seepage from the IWTP, regular impoundment inspections and the implementation of corrective actions should seeps be observed. These new requirements, coupled with 13 new surface water monitoring locations in the Escambia River and Governor's Bayou in the area of the IWTP (and the closed ash pond on Governor's Island) will ensure that water quality is maintained in the vicinity of the facility.

b. 316(b) Demonstration

Section 316(b) of the Clean Water Act (CWA) requires that the location, design, construction, and capacity of cooling water intake structures (CWIS) reflect the best technology available (BTA) to protect aquatic organisms from physical, thermal, or chemical stresses from impingement (pinned against intake screens) or entrainment (drawn completely through cooling water systems from intake to discharge).

EPA published rules for existing large steam electric power plants that use surface waters in their cooling systems on August 15, 2014, and the rules became effective on October 14, 2014. The Department adopted the final rule by reference in 62-620.100(3), F.A.C. The final rule describes the compliance schedule for submitting reports and supporting documents to the Department.

For facilities that have NPDES permits that expire prior to July 18, 2018, the rule allows the Department to establish an alternate schedule for completion of the studies if the facility demonstrates it cannot develop the required information by the applicable submission date. The permittee requested an alternative schedule during the application process. After reviewing the justifications included in the request, the Department approved and incorporated an alternative scheduling in Permit Condition VI.3 of the draft permit.

The facility has a design intake flow of 274 MGD and an actual average intake flow of 171 MGD; therefore, the permittee must address the requirements of 40 CFR 122.21(r)(2) through (13) of the rule. Much of the information and data needed for §122.21(r)(2) through (5) may already be available from previous studies or public sources. The permittee consulted with the National Marine Fishery Service and the U.S. Fish and Wildlife Service (collectively referred to as the Services) and the Florida Fish and Wildlife Commission to identify species of concern and to develop a plan of study (POS) for collecting the required information, which includes impingement mortality and entrainment.

Following the submittal of the information in 40 CFR 122.21(r)(2-13) during the upcoming permit cycle, the Department, Services, and FWC will review the information, including the entrainment characterization study, and conduct a Best Technology Available (BTA) analysis at that time. If the BTA analysis concludes that new technology or other modifications of the cooling water system are needed to protect threatened or endangered species, the Department will require those changes at that time. In the meantime, interim measures as allowed under 40 CFR 125.98(b)(5) are included in Permit Condition I.A.10 of the draft permit.

c. Federal Endangered Species Act (ESA) and State-Listed Threatened Species

(1) Incidental Take

The Endangered Species Act prohibits the "take" of listed species through direct harm or habitat destruction. In the 1982 ESA amendments, Congress authorized the U.S Fish and Wildlife Service (through the Secretary of the Interior) to issue permits for the "incidental take" of endangered and threatened wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity (see Sections 9 and 4(d) of the ESA).

The ESA directs all federal agencies to work to conserve endangered and threatened species and to use their authorities to further the purposes of the Act. Section 7 of the ESA, called "Interagency Cooperation," is the mechanism by which federal agencies ensure the actions they take, including those they fund or authorize, do not jeopardize the existence of any listed species. EPA requested a formal consultation with U.S. Fish and Wildlife Service and NMFS (collectively referred to as the Services) as part of the 316(b), CWA, rulemaking. In 2015, the Services issued a final biological opinion (Opinion) on the EPA issuance and implementation of the final regulations implementing Section 316(b), CWA. The Opinion recognizes that: the 316(b) rule includes a number of provisions specifically designed to ensure that the rule as it is implemented is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of designated critical habitat pursuant to the ESA; and the NPDES permit process to establish 316(b) controls for CWIS under the rule provides a framework for addressing and minimizing adverse environmental impact that may include adverse effects to listed species and designated critical habitat.

As it pertains to incidental take, the Opinion states: "any take incidental to the operation of a CWIS [cooling water intake structure] permitted under the Rule through the implementation process described in this Opinion will be exempt from Section 9 and Section 4(d) prohibitions if the owner/operator implements enforceable control measures, monitoring, and reporting as agreed upon by the owner/operator and the Services, and as reflected in the permit." The permittee consulted with the Services and FWC as part of the development of its plan of study for collecting the required 316(b) CWIS information (see Section 4.b. above).

As stated above in Section 4.b., the NPDES permit includes interim provisions for the operation of the facility's CWIS, and the Department may revise these provisions following review of the submitted 316(b) CWIS information or other additional information in accordance with Permit Condition VIII.H.2.

Furthermore, information concerning incidental take of federal or state listed species is reported to the Services and FWC, respectively. The draft permit includes a requirement for the permittee to copy the Department on take incidents related to the facilities CWIS that are reported to the Services and FWC.

(2) Threatened or Endangered Species

The Department consulted with the National Marine Fisheries service (NMFS) and Florida Fish and Wildlife Commission (FWC) on ESA-listed species, state-listed threatened species, other species of concern, and critical habitat in the vicinity of the facility. Species included gulf sturgeon, saltwater top minnow, and Alabama shad.

Gulf sturgeon is an ESA-listed species. Based on recent gulf sturgeon studies by FWC, holding areas for sturgeon are typically north of the facility and sturgeon are not typically found in the area surrounding the cooling water intake structures.

Since Gulf Sturgeons were listed under the ESA over twenty-five years ago, only five Gulf Sturgeon have been observed at the facility. On November 19, 2009, a live sturgeon was found in the cooling water intake structure bar rack debris, along with a dead fish. Both fish were approximately 18 inches long and were entangled in vegetation and debris in the bar rack debris basket. The live fish was recovered from the basket and released. On the other occasions in 2006, 2015 and 2016, the fish had observable injuries or were in a state of decomposition prior to entering the cooling water intake structure. All occurrences were reported to the Florida Fish and Wildlife Conservation Commission (FWC), and either the FWC, the permittee, or both, also advised the U.S. Fish and Wildlife Service of the occurrences.

The saltmarsh top minnow is not an ESA-listed species, but it is a state-listed threated species. FWC reviewed available information and determined that the critical habitat for saltmarsh top minnow is located south of the facility, closer to the Escambia Bay. FWC concluded that it is unlikely that the facility's intake structure would have a significant impact on either of these species.

On January 23, 2018, a single manatee death was observed in the vicinity of the facility. The permittee notified the FWC, and after consultation it was concluded that the death was likely caused by impact with a watercraft.

On January 12, 2017, NMFS announced that it had completed a comprehensive review of scientific and commercial information available on the status of Alabama shad, including: (1) historical and current distribution and abundance of this species throughout its range, including data addressing presence or absence at a riverine scale; (2) historical and current population sizes and trends; (3) biological information (life history, genetics, population connectivity, etc.); (4) landings and trade data; (5) management, regulatory, and enforcement information; (6) any current or planned activities that may adversely impact the species; and (7) ongoing or planned efforts to protect and restore the species and its habitat. Based on this review, NMFS determined that the species does not warrant listing at this time as it is not currently in danger of extinction throughout all or a significant portion of its range and is not likely to become so within the foreseeable future.

d. Thermal Considerations

The thermal component of the discharge is subject to compliance with Florida Water Quality Standards. Section 62-302.520(1)(a) of the Florida Administrative Code provides that heated water discharges existing on July 1, 1972, "shall not increase the temperature of the RBW (receiving body of water) so as to cause substantial damage or harm to the aquatic life or vegetation therein or interfere with beneficial uses assigned to the RBW."

Biological studies previously submitted by the permittee demonstrated that the facility meets the requirements of Rule 62-302.520(1)(a), F.A.C. In addition, the October 2010 "Biological Assessment of Gulf Power Crist Electric Generating Plant, conducted by the Department, supported the demonstration by stating, "The similarities in macroinvertebrate and periphyton communities at the Control and Test Sites show the effluent is not negatively affecting downstream water." For these reasons and because the nature of the discharge has not changed substantially since the original assessment, the temperature effluent limitations in the permit, which are a numeric interpretation of Rule 62-302.520(1)(a), F.A.C., remain the same as the previous permit.

To demonstrate that the facility continues to meet the requirements of Rule 62-302.520(1)(a), F.A.C., a requirement was included in this draft permit for the permittee to complete a thermal confirmation study in the upcoming permit cycle to reaffirm that the daily average temperature limitation continues to be protective when the ambient river temperatures are at their highest (June through August). The study will address monitoring of aquatic species, including federal and state listed aquatic species as appropriate, and will contain reporting requirements. The study may incorporate existing data developed by the permittee and available data from other entities as well as any additional monitoring to be conducted by the permittee, if necessary. The permittee shall also consult with the Florida Fish and Wildlife Commission during the planning of the study.

e. Impaired Water Considerations

Receiving Waters

The facility discharges to the Escambia River, which is designated as WBID 10F. WBID 10F is included on the Department's verified list for mercury impairment. Also, the Escambia River is a tributary to the northern portion of the Escambia Bay (WBID 548AA). The northern portion of the Escambia Bay is listed on the Department's Verified List of Impaired Waters for excessive nutrients. These parameters are discussed in more detail below.

Mercury

All WBIDs described above are included on the Department's Verified List of Impaired Waters for mercury in fish tissue assessed using the Impaired Surface Waters Rule (IWR).

Based on the review of available mercury data sampled at Outfall D-010 for the current permit cycle, the facility's discharge does not have a reasonable potential to cause or contribute to an exceedance of the Class III fresh water total recoverable mercury criterion in Rule 62-302.530, F.A.C.

A requirement to prepare and implement a mercury minimization plan as required by Rule 62-304.900, F.A.C., for the statewide mercury total maximum daily load, minimization of mercury through the Best Management Practices/Pollution Prevention (BMP3) Plan was added to Section VII of the permit. A Statewide Total Maximum Daily Load (TMDL) for mercury was adopted October 24, 2013.

Nutrients

The Department has adopted a TMDL for the Pensacola Bay Basin in Rule 62-304.330, F.A.C., which establishes Wasteload Allocations (WLAs) for total nitrogen and total phosphorus that would restore the waterbody to where it will meet the applicable water quality standards for nutrients. The TMDL provides protection for both the immediate receiving water and downstream waterbodies. The WLAs from the TMDL for this facility are 2,852 lbs/year total phosphorus (TP) and 21,392 lbs/year total nitrogen (TN) and are incorporated as effluent limitations for TP and TN in this permit.

f. Revised Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (40 CFR Part 423)

On November 17, 2015, EPA published the final revised rule for Effluent Limitations Guidelines and Standards (ELGS) for the Steam Electric Power Generating Point Source Category (40 CFR Part 423). The revised rule establishes new limitations for both existing and new generating units for various waste streams that were previously considered low volume wastes under the prior rule. The waste streams included in the revised rule are flue-gas desulfurization (FGD), flue-gas mercury control (FGMC) and gasification wastewaters, combustion residual leachate water, and fly and bottom ash transport water. As part of the permit renewal process, the Department evaluated the facility for each of the applicable waste streams. Listed below are the results of the evaluation:

(1) The facility generates FGD wastewater, which is disposed via underground injection wells, UIC permit numbers IW17-0085658-004-UC and 0085658-007-008-UC/11. As the ELGS are only applicable to waste streams that discharge to surface waters, the limitations at 40 CFR 423.13(g)(1)(i) are not applicable in this case.

(2) The facility collects, handles, and manages its fly ash in a dry state, and thereby does not generate fly ash transport water. Therefore, the provisions of 40 CFR 423.13(h)(1)(i) are not applicable to this facility. It should be noted that the facility sluiced ash to the industrial wastewater treatment pond in the past. Removal of the legacy ash from the pond was completed in July 2014.

(3) The facility does not generate FGMC wastewater from any processes; therefore, the provisions of 40 CFR 423.13(i)(1)(i) are not applicable to this facility.

(4) The facility does not generate coal gasification wastewater from any processes; therefore, the provisions of 40 CFR 423.13(j)(1)(i) are not applicable to this facility

(5) The facility sluices bottom ash from Units 4-7 to a dewatering silo (Hydrobin®), thence the transport water is directed into the IWTP and can eventually discharge through an overflow structure to the main discharge canal. Therefore, both the Best Practicable Control Technology (BPT) limitations of 40 CFR 423.12(b)(11) and the Best Available Technology economically achievable (BAT) of 40 CFR 423.13(k)(1) for bottom ash transport wastewater are applicable to this facility.

Due to the difficulty in collecting representative samples of the decanted transport water prior to commingling with other wastewater streams in the IWTP, effluent limitations to comply with the provisions of 40 CFR 423(b)(4) for transport water were previously adjusted using the combined waste stream formula. This approach was used to derive both daily maximum and monthly average IWTP overflow effluent limitations for total suspended solids (TSS) and oil and grease at Internal Outfall I-1C0. The revised ELGS for bottom ash transport water in 40 CFR 423.12(k)(1)(ii) also specify that all transport water generated prior to the compliance date for the BAT limitations must meet the BPT limitations of 40 CFR 423(b)(4). Therefore, the combined waste stream formula approach was continued in this permit. A review of the calculated TSS and oil and grease permit limitations using current maximum flows of the wastewater streams entering the IWTP indicates the existing permit limits remain protective and meet the revised ELGS. Implementation of the revised BAT limitations is discussed further below.

(6) The facility operates a landfill that is used to dispose coal combustion byproducts, which includes a holding pond for any leachate and stormwater runoff from the landfill. Currently, this stormwater and leachate is treated by settling in the pond, and then the water is used for a small amount of makeup water in the Units 6 and 7 cooling tower systems. Because this water has the potential to discharge to surface waters of the State, the provisions of 40 CFR 423.13(l) are applicable, which includes effluent limitations for total suspended solids and oil and grease, based upon the BPT provisions of 40 CFR 423.12(b)(11). These limitations were included in Internal Outfalls I-170 and I-180 at the landfill combustion leachate pipe prior to entering the landfill stormwater ponds, thereby ensuring the limits are met before mixing with other waste streams, such as stormwater and eventually cooling tower basin water.

On April 25, 2017, EPA published a notice in the Federal Register titled "Postponement of Certain Compliance Dates for Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category." *[82 Fed. Reg. 19005]*. The notice indefinitely postponed (stayed) the compliance dates for meeting the effluent limitation guidelines for fly ash transport water, bottom ash transport water, flue gas desulfurization wastewater, flue gas mercury control wastewater and gasification wastewater. On June 6, 2017, EPA published notice of its proposal to postpone those compliance dates "as a stopgap measure to prevent the unnecessary expenditure of resources until EPA completes reconsideration of the 2015 Rule." *[82 Fed. Reg. 26017-26018]*.

In September 2017, EPA postponed the earliest compliance dates for the BAT standards for bottom ash transport water and flue gas desulfurization (FGD) wastewater *[82 Fed. Reg. 43494-43500]*. The earliest compliance dates for these two waste streams was extended from November 1, 2018 to November 1, 2020. The compliance date of the new BAT standards for the other four wastewater streams remains November 1, 2018. The facility generates bottom ash transport water; therefore, the draft permit includes a schedule for meeting the BAT ELGS. Because of uncertainty surrounding the final regulations concerning bottom ash transport water, a schedule was included in the permit to give the permittee time to review and implement the final requirements of the rule, once they are finalized by EPA.

The BPT provisions of the rule remain in effect for all applicable waste streams. In the case of this facility, this includes the bottom ash transport water and combustion residual leachate wastewaters. Both wastewater streams include the updated BPT limitations from 40 CFR 423.12(b)(11), as discussed further above.

g. Other

The Disposal of Coal Combustion Residuals Rule from Electric Utilities ("CCR" Rule) was finalized in December 19, 2014, by EPA. The rule establishes nationally applicable minimum criteria for the safe disposal of CCR in landfills and surface impoundments, along with technical requirements for CCR landfills and surface impoundments under subtitle D of the Resource Conservation and Recovery Act (RCRA).

The CCR rule is a self-implementing rule, meaning that facilities must comply with requirements without regulatory oversite, and the rule requires owners or operators of a CCR facility to document how the provisions of the rule are being met by placing the information in an operating record and maintaining a publicly accessible internet site that posts documentation that in many instances also been entered into the operating record (https://www.gulfpower.com/about-us/our-company/ccr-rule).

5. GROUND WATER MONITORING REQUIREMENTS

Semi-annual ground water monitoring events were conducted by the permittee in April and October of each year. The monitoring events require the measurement of water levels, a determination of groundwater flow direction and collection of samples from designated monitoring wells. Based upon the ground water monitoring data from the monitoring events, it appears that wastewater that discharges into ground water flows towards and to the northeast to Governor's Bayou and to the Escambia River. The water-quality monitoring network consists of thirty-nine (39) ground water monitoring wells (2-background, 23-detection, 4-compliance, 10-Piezometers) and 8 surface water sampling sites. Ground water monitoring requirements have been established in accordance with Chapter 62-700, F.A.C.

The Northwest District Office established ground water monitoring conditions in the permit, including a continuation of the horizontal zones of discharge (ZOD) to groundwater to the north, south, and west property lines and the mean high-water lines to the east of the site un-submerged land limits to the east, and an updated vertical ZOD as described below. The established extent of the horizontal and vertical ZOD for this permit are described in Permit Condition III.1. In addition, the horizontal ZOD is shown in Figure 1 on Attachment 3.

Based on hydrogeologic data collected between December 2016 and May 2017, the previously identified low permeability zone between -10 and -40 feet national geodetic vertical datum (NGVD) was determined to be discontinuous across the site. Therefore, this low permeability zone does not provide continuous hydraulic separation between the sediments above and below it. The hydrogeologic information shows the confining unit is located at approximately -204 feet North American Vertical Datum (NAVD), and the revised vertical zone of discharge is -186 to -204 feet NAVD. Existing groundwater monitoring well designations were revised to conform with the new vertical zone of discharge and additional wells will be installed to ensure compliance at the vertical zone of discharge. The list of wells monitored at the facility are shown in Conditions III.5.a and b.

The following changes have been made to the provisions of the section from the previous draft permit:

a. The vertical ZOD was revised based on the hydrogeological/ZOD investigation dated June 30, 2017 (available in the Department's Electronic Document Management System Oculus under solid waste WACS ID 99720).

b. Existing groundwater monitoring well designations were revised to conform with the new vertical zone of discharge, and additional wells will be installed to ensure compliance at the vertical zone of discharge.

c. Condition III.6.a. Boron, calcium and fluoride were added to the list of monitoring parameters for the ash landfill, in accordance with 40 CFR 257.94(a).

d. Footnotes were added to the monitoring well tables for those wells that are to be abandoned/installed and the timeframes for installation was added.

The Department has concurred in accordance with subsections 62-520.420(3) and (4), F.A.C., that elevated arsenic concentrations detected at the site are associated with natural concentration levels and geochemical processes, as described in the *Report on Findings Related to the Source of Arsenic in Groundwater at the Crist Electric Generating Plant* (Leggette, Brashears & Graham, Inc., July 19, 2006) and approved by the Department October 20, 2006, and therefore are not considered exceedances of the groundwater standards.

The Department has also concurred in accordance with subsections 62-520.420(3) and (4), F.A.C., that elevated mercury concentrations detected in the vicinity of former well MWC-10 (Test Site Number 9118) are associated with natural concentration levels and geochemical processes, as described in the *Assessment Report James F. Crist Generating Plant* (Geosyntec Consultants, December 2014) and approved by the Department on May 1, 2015, and therefore are not considered exceedances of the groundwater standards.

The permittee executed a Consent Order (OGC File No. 16-1250) with the Department in September 2016 to investigate and correct issues concerning elevated trends of groundwater parameters. Please see Section 8 below for additional information.

6. DISCUSSION OF OTHER CHANGES TO PERMIT LIMITATIONS FROM ORIGINAL DRAFT

The following changes were made to the permit from the previous cycle:

a. Page 1, Surface Water Description. The permit was revised to include references for issued UIC permits for injection wells IW-3 and IW-4.

b. Page 2, Solid Waste Management. The description of the solid waste management areas was revised to include the interim storage areas at the facility, Consent Orders issued by the Department and the closed ash landfill on Governor's Island.

c. Page 4, I.A.1. The effluent limitation table was updated to include additional monitoring requirements for total recoverable aluminum, beryllium, and vanadium.

d. Page 6, I.A.10. Interim requirements for the cooling water intake structures at the facility were organized under one condition.

e. Page 6, I.A.11. A new condition requires the facility to complete the studies pursuant to 40 CFR 122.21(r) for intake structure of the once-through cooling water system. See Section 4.b above for additional information.

f. Page 6, I.A.12. regarding "take" was included for compliance with the Endangered Species Act and the final 316(b) regulations requirements. See Section 4.b above for additional information.

g. Page 6, I.A.13. A new condition was included in the permit to require the permittee to provide the Department with a copy of all reports and associated documentation concerning threatened or endangered species sent to federal or state wildlife agencies.

h. Pages 9-10, I.B.1. Monitoring requirements for metals associated with coal ash were included in the requirements for the overflow from the industrial wastewater treatment pond (IWTP). See 4.a. above for additional information.

i. A new Permit Condition I.B.7 was included in the permit to account for the periods of time when the metal cleaning wastewater pond is dredged and cleaned and only stormwater is stored in the pond.

j. A new Permit Condition I.B.23 was included in the permit to allow for the discharge of a volume of condenser water to the IWTP during times of transition to river water and to include the volume of water discharged in this manner in the calculation of the total nitrogen and phosphorus for the facility's wasteload allocation (WLA).

k. Page 14, I.C.1. The description of the wastewater discharged in the underground injection system was updated to match the description included in the UIC permits issued to the facility.

l. Pages 18-19, I.D.16. New ambient surface water monitoring sites and requirements were included in the permit.

m. Page 19, I.D.17. A condition was included requiring the submittal and completion of a thermal confirmation study.

n. Page 19, II.4. The condition was modified to include the ash landfill area.

o. Page 19, II.8. The condition was revised to specify stormwater not covered under an individual permit or the facility's multi-sector generic permit.

p. Due to the abundance of naturally occurring iron in the area, total recoverable iron was removed from the monitoring requirements for ambient surface water monitoring locations and the ash landfill groundwater wells. However, total iron is still required to be monitored at the main outfall from the facility, due to provisions that take into account high intake concentrations of iron. The Department concurred with the de-listing of total iron on the Verified List of Impairments for the WBIDs in the vicinity of the facility in a letter on July 31, 2017.

q. Page 26, V.3. A condition was included in the permit to require the facility to review the structural integrity of all outfalls at the facility on a regular basis.

r. Page 26, VI.5. The schedule for compliance with the BAT Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (40 CFR Part 423) for bottom ash transport water was updated to reflect the change in status of the rule. See 4.f and 7.b for additional information.

s. Page 27, VII.2. Mercury minimization was added to Best Management Practices in conformance with the statewide Mercury TMDL in Subsection 62-304.900(1), F.A.C. See Section 4.d for additional information.

t. Page 31, VIII.E.4. Requirements were included in the permit related to concentrated seepage from any impoundment, including the IWTP, that could potential impact surface waters of the state. See 4.a for additional information.

u. Page 30, Section VIII.8.F. The section was revised to require the permittee to document and maintain information on-site concerning corrective actions taken as the result of the inspections.

v. Page 32, VIII.H.4. A new reopener clause was included in the permit for Effluent Limitations Guidelines and Standards (ELGS) for the Steam Electric Power Generating category (40 CFR 423) in the event that the EPA adopts new compliance deadlines or further revisions to the rule.

7. PERMIT SCHEDULES

a. As explained in Section 4.b above, the permittee submitted a request for an alternative schedule for meeting the requirements of the final rule for Section 316(b) of the CWA on cooling water intake structures. In accordance with the request, Schedule Item VI.3 was included in the permit to allow time for the facility to plan to meet the requirements of the final rule.

b. Included in the permit is a schedule for the permittee to meet the requirements of the provisions of 40 CFR 423.13(k)(1)(i) for bottom ash transport water. The permittee is required to meet with the Department prior to the completion of the review of the final rule by EPA to discuss the plan of coming into compliance with the BAT provisions for bottom ash transport water. The permittee shall meet any applicable revised effluent guidelines for bottom ash transport water no later than December 31, 2023.

c. A schedule was included in the permit for the permittee to develop and conduct a thermal confirmation study, in accordance with 62-302.520, F.A.C. The study may include any information and data already conducted by the permittee and other sources and will reaffirm that the daily average temperature limitation continues to be protective when the ambient river temperatures are at their highest (June through August). The permittee will consult with the FWC for the study.

d. A due date of February 28th of each year for the annual summary of the ambient surface water monitoring requirements was included in the permit.

8. CONSENT ORDERS (CO)

CO (OGC Case No. 16-1250)

This facility entered into CO (OGC Case No. 16-1250), executed on September 13, 2016, with the Department. The CO addresses elevated groundwater trends reported to the Department by the permittee. The CO requires the permittee to continue to investigate the source of the elevated trends in the groundwater wells and requires the permittee to submit quarterly progress reports as they continue the investigation. The CO also contains a compliance schedule to complete any corrective actions.

The permittee is currently in compliance with the requirements of the Consent Order.

CO (OGC Case No. 17-1224)

The facility entered into a CO (OGC Case No. 17-1224), executed on January 25, 2018 (publicly noticed on February 1, 2018), with the Department regarding potential discharges to waters of the state from the closed coal ash landfill.

This CO requires the permittee to develop a Plan of Study for conducting a geological and engineering site evaluation to determine the extent of the rehabilitation needed, evaluate the integrity of the closed ash landfill, and identify any potential discharge areas. This CO also requires the permittee to conduct rehabilitation activities at the site, perform water quality monitoring and submit quarterly progress reports.

The CO also addresses a one-time exceedance of the facility's copper limit. The facility is currently in compliance with that effluent limitation; however, the CO requires the applicant to develop a Plan of Study to identify potential copper sources at the facility and evaluate engineering solutions to ensure they meet the total recoverable copper limit in their industrial wastewater permit. During the CO period, an interim copper limitation of "Report" applies at Outfall D-010.

Both Plans of Study were submitted to the Department's Northwest District Office on April 13, 2018, and subsequently approved on April 25. The permittee is currently in compliance with the requirements of the Consent Order.

9. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

No variances or mixing zones were requested for this facility.

10. THE ADMINISTRATIVE RECORD

The administrative record including application, draft permit, fact sheet, public notice (after release), comments received and additional information is available for public inspection during normal business hours at the location specified in Section 13. Copies will be provided at a minimal charge per page.

11. PROPOSED SCHEDULE FOR PERMIT ISSUANCE

Draft Permit and Public Notice to Applicant and EPA:	June 1, 2018
Public Comment Period	Beginning: June 8, 2018 Ending: July 7, 2018
Proposed Permit to EPA:	July 27, 2018
Notice of Intent to Issue:	July 27, 2018
Notice of Permit Issuance:	August 10, 2018

12. DEP CONTACT

Additional information concerning the permit and proposed schedule for permit issuance may be obtained during normal business hours from:

Marc Harris, P.E.
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone Number: (850) 245-8589

Fax Number: (850) 245-8669

13. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Public Comment Period

The Department of Environmental Protection proposes to issue a wastewater facility permit to this applicant subject to the aforementioned effluent limitations and conditions. This decision is tentative and open to comment from the public.

Interested persons are invited to submit written comments regarding permit issuance on the draft permit limitations and conditions to the following address:

Department of Environmental Protection
2600 Blair Stone Road
Mail Station 3545
Tallahassee, FL 32399-2400
Attn.: Marc Harris, P.E.

All comments received within 30 days following the date of public notice, pursuant to Rule 62-620.550, F.A.C., will be considered in the formulation of the final decision with regard to permit issuance.

Any interested person may submit written comments on the Department's proposed permitting decision or may submit a written request for a public meeting to the address specified above, in accordance with Rule 62-620.555, F.A.C. The comments or request for a public meeting must contain the information set forth below and must be received in the above address of the Department within 30 days of receipt or publication of the public notice. Failure to submit comments or request a public meeting within this time period will constitute a waiver of any right such person may have to submit comments or request a public meeting under Rule 62-620.555, F.A.C.

The comments or request for a public meeting shall contain the following information:
(1) The commenter's name, address and telephone number, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(2) A statement of how and when notice of the draft permit was received;
(3) A description of any changes the commenter proposes for the draft permit;
(4) A full explanation of the factual and legal reasons for each proposed change to the draft permit; and
(5) A request that a public meeting be scheduled (if applicable) including a statement of the nature of the issues proposed to be raised at the meeting.

b. Public Meeting

The Department will hold a public meeting if there is a significant degree of public interest in the draft permit or if it determines that useful information and data may be obtained thereby. Public notice of such a meeting shall be published by the applicant at least 30 days prior to the meeting.

If a public meeting is scheduled the public comment period is extended until the close of the public meeting. If a public meeting is held any person may submit oral or written statements and data at the meeting on the Department's proposed action.

c. Issuance of the Permit

The Department will make its decision regarding permit issuance after consideration of all written comments, including comments from the United States Environmental Protection Agency on surface water discharge (NPDES) aspects of the draft or proposed permit; the requirements of Chapter 403, F.S., and appropriate rules; and, if a public meeting is held, after consideration of all comments, statements and data presented at the public meeting. The Department will respond to all significant comments in writing. The Department's response to significant comments will be included in the administrative record of the permit and will be available for public inspection at the above address of the Department.

Unless a request for an administrative hearing, or an extension of time to file a petition for an administrative hearing, pursuant to Chapter 120, F.S., as indicated in d. below, is granted, the Department will take final agency action by issuing the permit or denying the permit application. If an administrative hearing is convened, final agency action will be based on the outcome of the hearing.

d. Administrative Hearing

A person whose substantial interests are affected by the Department's proposed permitting decision has the opportunity to petition for an administrative proceeding (hearing) to challenge the Department's decision in accordance with Section 120.57, F.S.

An administrative hearing is an evidentiary proceeding in which evidence is presented by testimony and exhibits before an independent hearing officer. The result of an administrative hearing is the issuance of the hearing officer's recommended order to the Department, including the hearing officers findings of fact, based on the evidence presented at the hearing. The Department will issue a final order, granting or denying the permit, based on the hearing officer's recommended order.

The petition for an administrative hearing must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, within 14 days of publication of no tice of agency action or within 14 days of personal receipt of notice of agency action, whichever occurs first. The petitioner is to mail a copy of the petition to the applicant at the time of filing. Failure to file a petition within this time period will constitute a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57, F.S. The petition is to contain the following information:

(1) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(2) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(3) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(4) A statement of the material facts which the petitioner contends warrant reversal or modification of the Department's action or proposed action;
(5) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
(6) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in the notice of agency action. Persons whose substantial interests will be affected by any decision of the Department on the application have the right to petition to become a party to the proceeding, regardless of their agreement or disagreement with the Department's proposed action indicated in the notice of agency action.

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-IW1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: D-010
MONITORING GROUP DESCRIPTION: Main Plant Combined Discharge
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Monthly
PROGRAM: Industrial

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
PARM Code 50050 I Mon. Site No. FLW-1	Permit Requirement	Report (Day.Max.)	Report (Day.Avg.)	MGD						Daily; 24 hours	Pump Curve
Flow	Sample Measurement										
PARM Code 50050 Y Mon. Site No. FLW-1	Permit Requirement		Report (An.Avg.)	MGD						Monthly	Pump Curve
Temperature (F), Water	Sample Measurement										
PARM Code 00011 I Mon. Site No. EFF-1	Permit Requirement						94.0 (Day.Avg.)	Deg F		Continuous	Calculated
pH	Sample Measurement										
PARM Code 00400 I Mon. Site No. EFF-1	Permit Requirement				6.0 (Day.Min.)		8.5 (Day.Max.)	s.u.		Weekly	Grab
Oxidants, Total Residual	Sample Measurement										
PARM Code 34044 I Mon. Site No. EFF-1	Permit Requirement					0.01 (Mo.Avg.)	0.01 (Day.Max.)	mg/L		Weekly	Multiple Grab
7-DAY CHRONIC STATRE Americamysis (Mysidopsis) bahia (Routine)	Sample Measurement										
PARM Code TRP3E P Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		Semi-Annually; twice per year	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):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Gulf Power Crist Steam | MONITORING GROUP NUMBER: D-010 | PERMIT NUMBER: FL0002275-018-IW1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
7-DAY CHRONIC STATRE Americamysis (Mysidopsis) bahia (Additional)	Sample Measurement										
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 Americamysis (Mysidopsis) bahia (Additional)	Sample Measurement										
PARM Code TRP3E R Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		As needed	As required by the permit
7-DAY CHRONIC STATRE Menidia beryllina (Routine)	Sample Measurement										
PARM Code TRP6B P Mon. Site No. EFF-1	Permit Requirement				100 (Min.)			percent		Semi-Annually; twice per year	Grab
7-DAY CHRONIC STATRE Menidia beryllina (Additional)	Sample Measurement										
PARM Code TRP6B Q Mon. Site No. EFF-1	Permit Requirement				100 (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 permit

ISSUANCE/REISSUANCE DATE: March 2019
DMR EFFECTIVE DATE: 1st day of the 2nd month following effective date of permit - Permit expiration

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-IW1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: D-010
MONITORING GROUP DESCRIPTION: Main Plant Combined Discharge
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Quarterly
PROGRAM: Industrial

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
TRO-Discharge Time	Sample Measurement										
PARM Code 04223 1 Mon. Site No. EFF-1	Permit Requirement					120 (Mo.Avg.)	120 (Day.Max.)	min/day		Quarterly	Meter
Oil and Grease	Sample Measurement										
PARM Code 00556 1 Mon. Site No. EFF-1	Permit Requirement					5.0 (Mo.Avg.)	5.0 (Day.Max.)	mg/L		Quarterly	Grab
Aluminum, Total Recoverable	Sample Measurement										
PARM Code 01104 1 Mon. Site No. EFF-1	Permit Requirement					Report (Mo.Avg.)	Report (Day.Max.)	mg/L		Quarterly	24-hr TPC
Aluminum, Total Recoverable	Sample Measurement										
PARM Code 01104 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day.Max.)	mg/L		Quarterly	24-hr TPC
Antimony, Total Recoverable	Sample Measurement										
PARM Code 01268 Y Mon. Site No. EFF-1	Permit Requirement					240 (An.Avg.)		ug/L		Quarterly	24-hr TPC
Antimony, Total Recoverable	Sample Measurement										
PARM Code 01268 7 Mon. Site No. INT-1	Permit Requirement					Report (An.Avg.)		ug/L		Quarterly	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):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Gulf Power Crist Steam | MONITORING GROUP NUMBER: D-010 | PERMIT NUMBER: FL0002275-018-IW1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Arsenic, Total Recoverable	Sample Measurement										
PARM Code 00978 1 Mon. Site No. EFF-1	Permit Requirement					50.0 (Mo.Avg.)	50.0 (Day.Max.)	ug/L		Quarterly	24-hr TPC
Arsenic, Total Recoverable	Sample Measurement										
PARM Code 00978 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day.Max.)	ug/L		Quarterly	24-hr TPC
Beryllium, Total Recoverable[1]	Sample Measurement										
PARM Code 00998 Y Mon. Site No. EFF-1	Permit Requirement					0.13 (An.Avg.)		ug/L		Quarterly	24-hr TPC
Beryllium, Total Recoverable	Sample Measurement										
PARM Code 00998 1 Mon. Site No. INT-1	Permit Requirement					Report (An.Avg.)		ug/L		Quarterly	24-hr TPC
Boron, Total Recoverable	Sample Measurement										
PARM Code 00999 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	ug/L		Quarterly	24-hr TPC
Boron, Total Recoverable	Sample Measurement										
PARM Code 00999 7 Mon. Site No. INT-1	Permit Requirement						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 (Max.)	ug/L		Quarterly	24-hr TPC
Cadmium, Total Recoverable (calculated limit)	Sample Measurement										
PARM Code 01113 P Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Quarterly	Calculated
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample Measurement										
PARM Code 01113 Q Mon. Site No. EFF-1	Permit Requirement						0.0 (Max.)	ug/L		Quarterly	Calculated
Cadmium, Total Recoverable	Sample Measurement										
PARM Code 01113 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day.Max.)	ug/L		Quarterly	24-hr TPC

[1] If Beryllium, Total Recoverable is not detected at or above the MDL for the test method used, the permittee shall report "BDL" on the DMR. A value of one-half the effluent limit shall be used for that sample when necessary to calculate an average for the parameter. Test methods used shall be in accordance with applicable Department rules, including Rule 62-4.246 and Chapter 62-160, F.A.C., and the permit. For all other parameters not detected at or above the MDL for the test method used, the DMR shall be completed following the directions in the "Instructions for Completing the Wastewater Discharge Monitoring Report" attached to the DMR.

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY Gulf Power Crist Steam MONITORING GROUP NUMBER D-010 PERMIT NUMBER FL0002275-018-IW1S

MONITORING PERIOD From _____ To _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Chromium, Hexavalent Total Recoverable	Sample Measurement										
PARM Code 78247 1 Mon. Site No. EFF-1	Permit Requirement					11 (Mo Avg.)	11 (Day Max.)	ug/L		Quarterly	24-hr TPC
Chromium, Hexavalent Total Recoverable	Sample Measurement										
PARM Code 78247 7 Mon. Site No. INT-1	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						Report (Max.)	ug/L		Quarterly	24-hr TPC
Copper, Total Recoverable (calculated limit)	Sample Measurement										
PARM Code 01119 P Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Quarterly	Calculated
Copper, Total Recoverable (effluent minus calculated limit)	Sample Measurement										
PARM Code 01119 Q Mon. Site No. EFF-1	Permit Requirement						0.0 (Max.)	ug/L		Quarterly	Calculated
Copper, Total Recoverable	Sample Measurement										
PARM Code 01119 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 1 Mon. Site No. EFF-1	Permit Requirement					1.0 (Mo Avg.)	1.0 (Day Max.)	mg/L		Quarterly	24-hr TPC
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo Avg.)	Report (Day Max.)	mg/L		Quarterly	24-hr TPC
Lead, Total Recoverable (effluent)	Sample Measurement										
PARM Code 01114 1 Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Quarterly	24-hr TPC
Lead, Total Recoverable (calculated limit)	Sample Measurement										
PARM Code 01114 P Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Quarterly	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Gulf Power Crist Steam

MONITORING GROUP NUMBER: D-010

PERMIT NUMBER: FL0002275-018-IW1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Lead, Total Recoverable (effluent minus calculated limit)	Sample Measurement										
PARM Code 01114 Q Mon. Site No. EFF-1	Permit Requirement						0.0 (Max.)	ug/L		Quarterly	Calculated
Lead, Total Recoverable	Sample Measurement										
PARM Code 01114 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Mercury, Total Recoverable	Sample Measurement										
PARM Code 71901 1 Mon. Site No. EFF-1	Permit Requirement					0.012 (Mo.Avg.)	0.012 (Day Max.)	ug/L		Quarterly	Grab
Mercury, Total Recoverable	Sample Measurement										
PARM Code 71901 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Quarterly	Grab
Vanadium, Total Recoverable	Sample Measurement										
PARM Code 01128 1 Mon. Site No. EFF-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Vanadium, Total Recoverable	Sample Measurement										
PARM Code 01128 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC
Zinc, Total Recoverable (effluent)	Sample Measurement										
PARM Code 01094 1 Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Quarterly	24-hr TPC
Zinc, Total Recoverable (calculated limit)	Sample Measurement										
PARM Code 01094 P Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Quarterly	Calculated
Zinc, Total Recoverable (effluent minus calculated limit)	Sample Measurement										
PARM Code 01094 Q Mon. Site No. EFF-1	Permit Requirement						0.0 (Max.)	ug/L		Quarterly	Calculated
Zinc, Total Recoverable	Sample Measurement										
PARM Code 01094 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Quarterly	24-hr TPC

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Gulf Power Crist Steam | MONITORING GROUP NUMBER: D-010 | PERMIT NUMBER: FL0002275-018-1W1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Hardness, Total (as CaCO3)	Sample Measurement										
PARM Code 00900 1 Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	mg/L		Quarterly	24-hr TPC
Alpha, Gross Particle Activity	Sample Measurement										
PARM Code 80045 1 Mon. Site No. EFF-1	Permit Requirement					15.0 (Mo Avg.)	15.0 (Day Max.)	pCi/L		Quarterly	24-hr TPC
Alpha, Gross Particle Activity	Sample Measurement										
PARM Code 80045 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo Avg.)	Report (Day Max.)	pCi/L		Quarterly	24-hr TPC
Radium 226 + Radium 228, Total	Sample Measurement										
PARM Code 11503 1 Mon. Site No. EFF-1	Permit Requirement					5.0 (Mo Avg.)	5.0 (Day Max.)	pCi/L		Quarterly	24-hr TPC
Radium 226 + Radium 228, Total	Sample Measurement										
PARM Code 11503 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo Avg.)	Report (Day Max.)	pCi/L		Quarterly	24-hr TPC

ISSUANCE/REISSUANCE DATE: March 2019
DMR EFFECTIVE DATE: 1st day of the 2nd month following effective date of permit - Permit expiration

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

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-IW1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: D-010
MONITORING GROUP DESCRIPTION: Main Plant Combined Discharge
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Annually
PROGRAM: Industrial

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Nickel, Total Recoverable (effluent)	Sample Measurement										
PARM Code 01074 1 Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Annually	24-hr TPC
Nickel, Total Recoverable (calculated limit)	Sample Measurement										
PARM Code 01074 P Mon. Site No. EFF-1	Permit Requirement						Report (Max.)	ug/L		Annually	Calculated
Nickel, Total Recoverable (effluent minus calculated limit)	Sample Measurement										
PARM Code 01074 Q Mon. Site No. EFF-1	Permit Requirement						0.0 (Max.)	ug/L		Annually	Calculated
Nickel, Total Recoverable	Sample Measurement										
PARM Code 01074 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo.Avg.)	Report (Day Max.)	ug/L		Annually	24-hr TPC
Selenium, Total Recoverable	Sample Measurement										
PARM Code 00981 1 Mon. Site No. EFF-1	Permit Requirement					5.0 (Mo Avg.)	5.0 (Day Max.)	ug/L		Annually	24-hr TPC
Selenium, Total Recoverable	Sample Measurement										
PARM Code 00981 7 Mon. Site No. INT-1	Permit Requirement					Report (Mo Avg.)	Report (Day Max.)	ug/L		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):

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-IW1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: I-150
MONITORING GROUP DESCRIPTION: Metal Cleaning Wastes to Ash Pond
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Monthly
PROGRAM: Industrial

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
PARM Code 50050 1 Mon. Site No. FLW-3	Permit Requirement	Report (Day Max.)	Report (Mo Avg.)	MGD						Per discharge	Pump Curve
Copper, Total Recoverable	Sample Measurement										
PARM Code 01119 P Mon. Site No. OUI-3	Permit Requirement					1.0 (Mo Avg.)	1.0 (Day Max.)	mg/L		Per discharge	Time Proportional Composite
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 P Mon. Site No. OUI-3	Permit Requirement					1.0 (Mo Avg.)	1.0 (Day Max.)	mg/L		Per discharge	Time Proportional Composite
Oil and Grease	Sample Measurement										
PARM Code 00556 P Mon. Site No. OUI-3	Permit Requirement					15.0 (Mo Avg.)	20.0 (Day Max.)	mg/L		Weekly	Time Proportional Composite
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 P Mon. Site No. OUI-3	Permit Requirement					30.0 (Mo Avg.)	100.0 (Day Max.)	mg/L		Weekly	Time Proportional Composite

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):

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-IW1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: I-170
MONITORING GROUP DESCRIPTION: Cooling Tower Blowndown
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Monthly
PROGRAM: Industrial

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
PARM Code 50050 1 Mon. Site No. FLW-4	Permit Requirement	Report (Day Max.)	Report (Mo Avg.)	MGD						Weekly, when discharging	Pump Curve
TRO-Discharge Time	Sample Measurement										
PARM Code 04223 1 Mon. Site No. EFF-1	Permit Requirement					120 (Mo.Avg.)	120 (Day Max.)	min/day		Daily, when discharging	Meter
Oxidants, Free Available	Sample Measurement										
PARM Code 34045 P Mon. Site No. OUI-4	Permit Requirement					0.2 (Mo.Avg.)	0.5 (Day Max.)	mg/L		Per occurrence	Grab
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 P Mon. Site No. OUI-8	Permit Requirement					30.0 (Mo.Avg.)	100.0 (Day Max.)	mg/L		Monthly, when discharging	Grab
Oil and Grease	Sample Measurement										
PARM Code 00556 P Mon. Site No. OUI-8	Permit Requirement					15.0 (Mo.Avg.)	20.0 (Day Max.)	mg/L		Monthly, 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):

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-IW1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: I-180
MONITORING GROUP DESCRIPTION: ECUA Reclaimed Water and Units 6 and 7 Cooling Tower Blowdown when ECUA Reclaimed Water is Used as Makeup "Spent Reclaimed Water"

REPORT FREQUENCY: Monthly
PROGRAM: Industrial

RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
PARM Code 50050 Y Mon. Site No. FLW-5	Permit Requirement		20 (Day An Avg.)	MGD						Continuous	Meter
Flow	Sample Measurement										
PARM Code 50050 I Mon. Site No. FLW-5	Permit Requirement		Report (Mo Avg.)	MGD						Continuous	Meter
Flow	Sample Measurement										
PARM Code 50050 P Mon. Site No. FLW-6	Permit Requirement	Report (An Max.)	Report (Day Max.)	MGD						Continuous	Meter
Flow	Sample Measurement										
PARM Code 50050 Q Mon. Site No. FLW-6	Permit Requirement		Report (Mo Avg.)	MGD						Continuous	Meter
Flow	Sample Measurement										
PARM Code 50050 R Mon. Site No. FLW-7	Permit Requirement	Report (An.Max.)	Report (Day Max.)	MGD						Continuous	Meter
Flow	Sample Measurement										
PARM Code 50050 S Mon. Site No. FLW-7	Permit Requirement		Report (Mo.Avg.)	MGD						Continuous	Meter
Flow (Condenser Volume)	Sample Measurement										
PARM Code 82220 I Mon. Site No. CAL-1	Permit Requirement		Report (Day Max.)	Mgal						When discharging	Estimated

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: Gulf Power Crist Steam | MONITORING GROUP NUMBER: I-180 | PERMIT NUMBER: FL0002275-018-IW1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Duration of Discharge	Sample Measurement										
PARM Code 81381 I Mon. Site No. FLW-6	Permit Requirement	Report (Mo.Total)	Report (An.Total)	hr/day						Weekly, when discharging	Calculated
Duration of Discharge	Sample Measurement										
PARM Code 81381 P Mon. Site No. FLW-7	Permit Requirement	Report (Mo.Total)	Report (An.Total)	hr/day						Weekly, when discharging	Calculated
TRO-Discharge Time	Sample Measurement										
PARM Code 04223 P Mon. Site No. OUI-6	Permit Requirement					120 (Mo Avg.)	120 (Day Max.)	min/day		Weekly, when discharging	Calculated
Oxidants, Total Residual	Sample Measurement										
PARM Code 34044 P Mon. Site No. OUI-6	Permit Requirement					0.2 (Mo Avg.)	0.5 (Day Max.)	mg/L		Weekly, when discharging	Grab
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 P Mon. Site No. OUI-8	Permit Requirement					30.0 (Mo Avg.)	100.0 (Day Max.)	mg/L		Monthly, when discharging	Grab
Oil and Grease	Sample Measurement										
PARM Code 00556 P Mon. Site No. OUI-8	Permit Requirement					15.0 (Mo.Avg.)	20.0 (Day Max.)	mg/L		Monthly, when discharging	Grab
Nitrogen, Total	Sample Measurement										
PARM Code 00600 P Mon. Site No. OUI-5	Permit Requirement				Report (Max.Wk Avg.)	Report (Day Max.)	Report (Mo Avg.)	mg/L		Weekly, when discharging	Calculated
Nitrogen, Total	Sample Measurement										
PARM Code 00600 Q Mon. Site No. OUI-6	Permit Requirement					Report (Mo Avg.)	Report (Max.Wk.Avg.)	mg/L		Weekly, when discharging	Calculated
Nitrogen, Total	Sample Measurement										
PARM Code 00600 R Mon. Site No. OUI-7	Permit Requirement					Report (Mo Avg.)	Report (Max.Wk.Avg.)	mg/L		Weekly, when discharging	Calculated
Nitrogen, Ammonia, Total (as N)	Sample Measurement										
PARM Code 00610 P Mon. Site No. OUI-6	Permit Requirement					Report (Mo.Avg.)	Report (Max.Wk.Avg.)	mg/L		Weekly, when discharging	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Gulf Power Crist Steam | MONITORING GROUP NUMBER: I-180 | PERMIT NUMBER: FL0002275-018-IW1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Nitrogen, Ammonia, Total (as N)	Sample Measurement										
PARM Code 00610 Q Mon. Site No. OUI-7	Permit Requirement					Report (Mo.Avg.)	Report (Max.Wk.Avg.)	mg/L		Weekly, when discharging	Calculated
Nitrogen, Total (Monthly Net Loading)	Sample Measurement										
PARM Code 00600 S Mon. Site No. OUI-5	Permit Requirement		Report (Mo.Total)	lb/mth						Weekly, when discharging	Calculated
Nitrogen, Total (Monthly Net Loading)	Sample Measurement										
PARM Code 00600 T Mon. Site No. OUI-6	Permit Requirement		Report (Mo.Total)	lb/mth						Weekly, when discharging	Calculated
Nitrogen, Total (Monthly Net Loading)	Sample Measurement										
PARM Code 00600 U Mon. Site No. OUI-7	Permit Requirement		Report (Mo.Total)	lb/mth						Weekly, when discharging	Calculated
Nitrogen, Total (Annual Net Loading)	Sample Measurement										
PARM Code 00600 V Mon. Site No. OUI-5	Permit Requirement		Report (An.Total)	lb/yr						Weekly, when discharging	Calculated
Nitrogen, Total (Annual Net Loading)	Sample Measurement										
PARM Code 00600 W Mon. Site No. OUI-6	Permit Requirement		Report (An.Total)	lb/yr						Weekly, when discharging	Calculated
Nitrogen, Total (Annual Net Loading)	Sample Measurement										
PARM Code 00600 I Mon. Site No. OUI-7	Permit Requirement		Report (An.Total)	lb/yr						Weekly, when discharging	Calculated
Nitrogen, Total	Sample Measurement										
PARM Code 00600 6 Mon. Site No. OUI-6	Permit Requirement		21392 (An.Total)	lb/yr						Daily, when discharging	Calculated
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 P Mon. Site No. OUI-5	Permit Requirement				Report (Max.Wk.Avg.)	Report (Day.Max.)	Report (Mo.Avg.)	mg/L		Weekly, when discharging	Grab
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 Q Mon. Site No. OUI-6	Permit Requirement						Report (Max.Wk.Avg.)	mg/L		Weekly, when discharging	Grab

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Gulf Power Crist Steam | MONITORING GROUP NUMBER: I-180 | PERMIT NUMBER: FL0002275-018-IW1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex	Frequency of Analysis	Sample Type
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 R Mon. Site No. OUI-7	Permit Requirement						Report (Max.Wk.Avg.)	mg/L		Weekly, when discharging	Grab
Phosphorus, Total (as P) (Monthly Net Loading)	Sample Measurement										
PARM Code 00665 S Mon. Site No. OUI-5	Permit Requirement		Report (Mo.Total)	lb/mth						Weekly, when discharging	Calculated
Phosphorus, Total (as P) (Monthly Net Loading)	Sample Measurement										
PARM Code 00665 T Mon. Site No. OUI-6	Permit Requirement		Report (Mo.Total)	lb/mth						Weekly, when discharging	Calculated
Phosphorus, Total (as P) (Monthly Net Loading)	Sample Measurement										
PARM Code 00665 U Mon. Site No. OUI-7	Permit Requirement		Report (Mo.Total)	lb/mth						Weekly, when discharging	Calculated
Phosphorus, Total (as P) (Annual Net Loading)	Sample Measurement										
PARM Code 00665 V Mon. Site No. OUI-5	Permit Requirement		Report (An.Total)	lb/yr						Weekly, when discharging	Calculated
Phosphorus, Total (as P) (Annual Net Loading)	Sample Measurement										
PARM Code 00665 W Mon. Site No. OUI-6	Permit Requirement		Report (An.Total)	lb/yr						Weekly, when discharging	Calculated
Phosphorus, Total (as P) (Annual Net Loading)	Sample Measurement										
PARM Code 00665 1 Mon. Site No. OUI-7	Permit Requirement		Report (An.Total)	lb/yr						Weekly, when discharging	Calculated
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 6 Mon. Site No. OUI-6	Permit Requirement		2852 (An.Total)	lb/yr						Weekly, when discharging	Calculated

ISSUANCE/REISSUANCE DATE: March 2019
DMR EFFECTIVE DATE: 1st day of the 2nd month following effective date of permit - Permit expiration

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-1W1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: I-1C0
MONITORING GROUP DESCRIPTION: Ash Pond Discharge
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Monthly
PROGRAM: Industrial

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement										
PARM Code 50050 1 Mon. Site No. FLW-2	Permit Requirement	Report (Day.Max.)	Report (Mo.Avg.)	MGD						Daily, when discharging	Flow Meter
Oil and Grease	Sample Measurement										
PARM Code 00556 P Mon. Site No. OUI-2	Permit Requirement					10.0 (Day Avg.)	7.0 (Mo.Avg.)	mg/L		Bi-weekly; every 2 weeks	Grab
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 P Mon. Site No. OUI-2	Permit Requirement					65.0 (Day.Avg.)	30.0 (Mo.Avg.)	mg/L		Weekly, when discharging	24-hr TPC
Hydrazine	Sample Measurement										
PARM Code 81313 P Mon. Site No. OUI-2	Permit Requirement						300 (Inst.Max.)	mg/L		See I.B.3	Multiple Grab
pH	Sample Measurement										
PARM Code 00400 P Mon. Site No. OUI-2	Permit Requirement				6.0 (Day.Min.)		9.0 (Day.Max.)	s.u.		Weekly, when discharging	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):

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: http://www.fldepportal.com/go/

PERMITTEE NAME: Gulf Power
MAILING ADDRESS: One Energy Place
Pensacola, Florida 32520-328

FACILITY: Gulf Power Crist Steam
LOCATION: Ten Mile Road
Pensacola, FL

COUNTY: Escambia
OFFICE: Northwest District

PERMIT NUMBER: FL0002275-018-IW1S

LIMIT: Final
CLASS SIZE: MA
MONITORING GROUP NUMBER: I-1C0
MONITORING GROUP DESCRIPTION: Ash Pond Discharge
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Quarterly
PROGRAM: Industrial

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Aluminum, Total Recoverable	Sample Measurement										
PARM Code 01104 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	mg/L		Quarterly	Composite
Arsenic, Total Recoverable	Sample Measurement										
PARM Code 00978 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Beryllium, Total Recoverable	Sample Measurement										
PARM Code 00998 Y Mon. Site No. OUI-2	Permit Requirement					Report (An Avg.)		ug/L		Quarterly	Composite
Boron, Total Recoverable	Sample Measurement										
PARM Code 00999 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Cadmium, Total Recoverable	Sample Measurement										
PARM Code 01113 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Chromium, Hexavalent Total Recoverable	Sample Measurement										
PARM Code 78247 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite

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: Gulf Power Crist Steam | MONITORING GROUP NUMBER: 1-1C0 | PERMIT NUMBER: FL0002275-018-IW1S

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Copper, Total Recoverable	Sample Measurement										
PARM Code 01119 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	mg/L		Quarterly	Composite
Lead, Total Recoverable	Sample Measurement										
PARM Code 01114 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Mercury, Total Recoverable	Sample Measurement										
PARM Code 71901 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Grab
Nickel, Total Recoverable	Sample Measurement										
PARM Code 01074 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Selenium, Total Recoverable	Sample Measurement										
PARM Code 00981 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Vanadium, Total Recoverable	Sample Measurement										
PARM Code 01128 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite
Zinc, Total Recoverable	Sample Measurement										
PARM Code 01094 P Mon. Site No. OUI-2	Permit Requirement						Report (Day Max.)	ug/L		Quarterly	Composite

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

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 month following the monitoring period. Facilities who submit their DMR(s) electronically through eDMR do not need to submit a hardcopy DMR. The DMR shall not be submitted before the end 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 facility. 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.
SEF	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, unless indicated otherwise in the permit or on the DMR:

1. Results greater than or equal to the PQL shall be reported as the measured quantity.
2. Results less than the PQL 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. Data qualifier codes are not to be reported on Part A.
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.
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 62-160, F.A.C., contains 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.
A	Value reported is the mean (average) of two or more determinations.
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. Data qualifier codes are not to be reported on Part D.
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, divide the average upstream flow rate by the average discharge flow rate. Enter 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 Factor was greater than the Stream Dilution Ratio.
$CBOD_5$: Enter the average $CBOD_5$ 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.