# STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES

### **PERMIT**

TO DISCHARGE WASTEWATER UNDER THE

### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provision of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended,

### **Duke Energy Progress, LLC**

is hereby authorized to discharge wastewater from a facility located at

### H.F. Lee Energy Complex

1199 Black Jack Church Road Goldsboro, North Carolina Wayne County

to receiving waters designated as the Neuse River and unnamed tributaries in the Neuse River Basin

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

The permit shall become effective	XXXX, 2016.
This permit and the authorization	to discharge shall expire at midnight on May 31, 20XX
Signed this dayXXXX,	2016.

S. Jay Zimmerman P.G., Director Division of Water Resources By Authority of the Environmental Management Commission

#### SUPPLEMENT TO PERMIT COVER SHEET

All previous NPDES Permits issued to this facility, whether for operation or discharge are hereby revoked. As of this permit issuance, any previously issued permit bearing this number is no longer effective. Therefore, the exclusive authority to operate and discharge from this facility arises under the permit conditions, requirements, terms, and provisions included herein.

### Duke Energy Progress, Inc.

is hereby authorized to:

- Continue to discharge the following treated wastestreams from Duke Energy Progress H.
   F. Lee Energy Complex located at 1199 Black Jack Church Road, Goldsboro, Wayne County:
  - Outfall 001 Active Ash Basin 2.16 MGD

No process wastewaters are discharged to Outfall 001. The facility shall treat wastewater discharged from the ash pond/ponds using physical-chemical wastewater treatment.

- o Ash Pond Decant, Phase I
- o Ash Pond Dewatering and Groundwater Extraction, Phase II
- Groundwater Extraction and Ash Landfill Leachate from the new Lined Ash Landfill, Phase III
- Active Ash Basin Seep Outfalls 101A LOLA (LOLA S-01 commingles with LOLA S-01A), 101B LOLA, 102, 109 (S-06, S-07, and S-08 commingles with S-09), 118, 125 (S-22, S-23, and S-24 commingles with S-25), 126 (S-04 commingles with S-26), 128 (S-27 commingles with S-28), 103A (S-03 commingles with S-03A) 9 potentially contaminated seeps.
- Outfall 002 and 002A Cooling Pond No Flow Limit

  The facility uses an existing 545 acre closed-cycle cooling pond with baffled dikes to treat recirculating condenser cooling and process water.
  - o Recirculated condenser cooling water (~369 MGD)
  - o Lee Combined Cycle Plant Site wastewaters:
    - Cooling tower blowdown from the Wet Surface Air Cooler and the combined cycle Heat Recovery Steam Generator (HRSG),
    - Wayne County Combustion Turbine Site wastewaters from the sump lift station,
    - Wayne County Combustion Reverse osmosis reject wastewaters from the water treatment plant and RO cleaning wastewaters
    - Filter plant wastewaters
  - o Sanitary wastewaters (treated in a septic tank followed by sand bed filtration)
  - o Low volume Wastewaters
  - o Stormwater from drains and Combustion Turbine Site secondary containment and fuel forwarding area
  - o Equipment and containment drains and wash waters
  - Miscellaneous wastewaters as described in the application

- o Coal pile runoff (ceased)
- Outfall 002A additional outfall to be used only during severe weather or required maintenance

No metal cleaning wastes shall be discharged to Outfall 002 or Outfall 002A.

- Cooling Pond Seep Outfalls CPS-201, CPS-202, CPS-203, CPS-204, CPS-205, CPS-215 (CPS-13 and CPS-14 commingles with CPS-15), CPS-216, CPS-207 (CPS-06 commingles with CPS-07), CPS-208, CPS-209, CPS-217, CPS-218, CPS-219, CPS-220, and CPS-221 15 potentially contaminated seeps surrounding the cooling pond.
- Outfall 003 Lee Combined Cycle Plant Site Wastewaters (Optional)- No Flow Limit
  - Lee Combined Cycle Plant Site wastewaters:
    - Cooling tower blowdown from the Wet Surface Air Cooler and the combined cycle Heat Recovery Steam Generator (HRSG),
    - Wayne County Combustion Turbine Site wastewaters from the sump lift station,
    - Wayne County Combustion Reverse osmosis reject wastewaters from the water treatment plant and RO cleaning wastewaters
    - Filter plant wastewaters
  - Equipment and containment drains and wash waters

No metal cleaning wastes shall be discharged to Outfall 003.

- 2. Discharge from said treatment works or seeps via Outfalls 001, Active Ash Basin Seep Outfalls 101A LOLA, 101B LOLA, 102, 109, 118, 125, 126, Outfalls 002 and 002A, Cooling Pond Seep Outfalls CPS-201, CPS-202, CPS-203, CPS-204, CPS-205, CPS-215, and Outfall 003, into the Neuse River, a Class WS-IV; NSW water in the Neuse River Basin, at the locations specified on the attached map.
- 3. Discharge from said treatment works or seeps via Ash Basin Seep Outfalls 103A and Outfall 128 and Cooling Pond Seep Outfalls CPS-208, CPS-209, and CPS-217, into unnamed tributaries, Class WS-IV; NSW waters in the Neuse River Basin, at the locations specified on the attached map.

#### Part I

## A.(1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Phase I - Ash Pond Decant - Outfall 001) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

a. During the period beginning on the effective date of this permit and lasting until expiration, the permittee is authorized to discharge effluent from Outfall 001 (decanting the free water above the settled ash layer that does not involve mechanical disturbance of the ash). Such discharges shall be limited and monitored¹ by the permittee as specified below:

EFFLUENT	LIMITS		MONITORING REQUIREMENTS			
CHARACTERISTICS	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>2</sup>	
Flow, MGD		2.16	Daily	Pump Logs or estimate	Effluent	
pH <sup>3</sup>	6.0 ≤ p	H ≤ 9.0	2/Month	Grab	Effluent	
Total Suspended Solids <sup>4</sup>	30.0 mg/L	100.0 mg/L	2/Month	Grab	Effluent	
Oil and Grease	15.0 mg/L	20.0 mg/L	2/Month	Grab	Effluent	
Total Kjeldahl Nitrogen (TKN), mg/L			Monthly	Grab	Effluent	
Total Nitrogen (TN), mg/L TN = $(NO_2 + NO_3) + TKN$			Monthly	Calculated	Effluent	
TN Load <sup>5</sup>	-	port (lbs/month) eport (lbs/year)	Monthly Annually	Calculated Calculated	Effluent	
Total Phosphorus, mg/L			Monthly	Grab	Effluent	
Chronic Toxicity <sup>6</sup>			Monthly	Grab	Effluent	
Turbidity <sup>7</sup> , NTU			Monthly	Grab	Effluent	
Total Hardness, mg/L [CaCO <sub>3</sub> or (Ca + Mg)]			Monthly	Grab	Effluent	
Total Arsenic, μg/L			Monthly	Grab	Effluent	
Total Mercury <sup>8</sup> , ng/L			Monthly	Grab	Effluent	
Total Selenium, µg/L			Monthly	Grab	Effluent	
Nitrate/nitrite as N, mg/L			Monthly	Grab	Effluent	

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. Effluent sampling shall be conducted at the discharge from the ash settling pond prior to mixing with any other waste stream.
- 3. The facility shall continuously monitor pH when the decanting process commences and the decanting pump shall be shutoff automatically when 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standard units. Pumping will be allowed to continue if interruption might result in a dam failure or damage.
- 4. The facility shall continuously monitor TSS concentration when the decanting process commences and the pump shall be shutoff automatically when the one half of the Daily Maximum limit (15 minutes average) is exceeded. Pumping will be allowed to continue if interruption might result in a dam failure or damage. Continuous TSS monitoring is only required when the pumps are employed.
- 5. See Special Condition A. (35.) Total Nitrogen Calculations
- 6. Chronic Toxicity (Ceriodaphnia) at 1.3%; Monthly; see Special Condition A (33).

(footnotes continue on next page)

- 7. The net turbidity shall not exceed 50 NTU using a grab sample and measured by the difference between the effluent turbidity and the background turbidity. The sample for the background turbidity shall be taken at point in the receiving waterbody upstream of the discharge location, and the background turbidity and the effluent turbidity samples shall be taken within the same 24 hour period.
  - NTU Nephelometric Turbidity Unit.
- 8. The facility shall use EPA method 1631E.
- b. When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds by the physical-chemical treatment facilities.
- c. The facility is allowed to drawdown the wastewater in the ash pond to no less than three feet above the ash.
- d. The level of water in the ash pond should not be lowered more than 1 ft/week, unless approved by the DEQ Dam Safety Program.
- e. The facility shall use a floating pump station with free water skimmed from the basin surface using an adjustable weir.
- f. The limits and conditions in Section A. (2.) of the permit apply when water in the ash settling basin is lowered below the three feet trigger mark.
- g. The facility shall notify DWR NPDES Permitting Unit and DWR Washington Regional Office, in writing, seven calendar days prior to the commencement of the dewatering.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of polychlorinated biphenyls (PCBs).

This facility is currently classified as "non-nutrient bearing".

# A. (2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Phase II - Ash Pond Dewatering and Groundwater Extraction - Outfall 001) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

a. During the period beginning on the commencement date of the dewatering operation and lasting until expiration, the Permittee is authorized to discharge treated effluent from Outfall 001 (ash pond dewatering or the removal of the interstitial water and groundwater extraction from remediation wells). Such discharges shall be limited and monitored¹ by the permittee as specified below:

ENERGY LIEDBUCK	LIMITS		MONITORING REQUIREMENTS			
EFFLUENT CHARACTERISTICS	Monthly	Daily	Measurement	Sample	Sample	
CHARACTERISTICS	Average	Maximum	Frequency	Type	Location <sup>2</sup>	
Flow		2.16 MGD	Weekly	Pump Logs or estimate	Effluent	
pH <sup>3</sup>	6.0 ≤ pl	H ≤ 9.0	Weekly	Grab	Effluent	
Total Suspended Solids <sup>4</sup>	30.0 mg/L	100.0 mg/L	Weekly	Composite	Effluent	
Oil and Grease	15.0 mg/L	20.0 mg/L	Weekly	Grab	Effluent	
Total Kjeldahl Nitrogen (TKN), mg/L			Monthly	Composite	Effluent	
Total Nitrogen (TN), mg/L TN = $(NO_2 + NO_3) + TKN$			Monthly	Calculated	Effluent	
TN Load⁵	Monitor & Repo	, ,	Monthly Annually	Calculated Calculated	Effluent	
Total Phosphorus, mg/L			Monthly	Composite	Effluent	
Chronic Toxicity <sup>6</sup>			Monthly	Composite	Effluent	
Turbidity <sup>7</sup> , NTU			Weekly	Grab	Effluent	
Total Hardness, mg/L [CaCO <sub>3</sub> or (Ca + Mg)]			Weekly	Composite	Effluent	
Total Arsenic, µg/L	3295 μg/L	21994 μg/L	Weekly	Composite	Effluent	
Total Mercury <sup>8</sup> , ng/L			Weekly	Composite	Effluent	
Total Selenium, µg/L			Weekly	Composite	Effluent	
Nitrate/nitrite as N, mg/L			Weekly	Composite	Effluent	

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. Effluent sampling shall be conducted at the discharge from the ash settling pond prior to mixing with any other waste stream.
- 3. The facility shall continuously monitor pH when the dewatering process commences and the dewatering pump shall be shutoff automatically when 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standard units. Pumping will be allowed to continue if interruption might result in a dam failure or damage.
- 4. The facility shall continuously monitor TSS concentration when the dewatering process commences and the dewatering pump shall be shutoff automatically when the one half of the Daily Maximum limit (15 minutes average) is exceeded. Pumping will be allowed to continue if interruption might result in a dam failure or damage. Continuous TSS monitoring is only required when the pumps are employed.
- 5. See Special Condition A. (35.) Total Nitrogen Calculations
- 6. Chronic Toxicity (Ceriodaphnia) at 1.3%; Monthly; see Special Condition A (33).

(footnotes continue on the next page)

- 7. The net turbidity shall not exceed 50 NTU using a grab sample and measured by the difference between the effluent turbidity and the background turbidity. The sample for the background turbidity shall be taken at point in the receiving waterbody upstream of the discharge location, and the background turbidity and the effluent turbidity samples shall be taken within the same 24 hour period.
  - NTU Nephelometric Turbidity Unit.
- 8. The facility shall use EPA method 1631E.
- b. The level of water in the ash pond should not be lowered more than 1 ft/week, unless approved by the DEQ Dam Safety Program.
- c. The facility shall use a floating pump station with free water skimmed from the basin surface using an adjustable weir.
- d. When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds by the physical-chemical treatment facilities.
- e. When groundwater extraction and remediation treatment commences, Duke Energy shall sample and submit EPA Form 2C for Outfall 001 as soon as practicable, but no later than 180 days from the commencement of groundwater remediation discharges through Outfall 001.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of polychlorinated biphenyls (PCBs).

This facility is currently classified as "non-nutrient bearing".

# A. (3.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Phase III - Groundwater Extraction and Landfill Leachate- Outfall 001) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

a. During the period when ash pond dewatering has finished and beginning on the commencement date of the landfill leachate discharge and lasting until expiration, the Permittee is authorized to discharge treated effluent from Outfall 001 (consisting of groundwater extraction from remediation wells and ash landfill leachate from the lined ash landfill). Such discharges shall be limited and monitored¹ by the permittee as specified below:

ENDEL LIERUS	LIN	IITS	MONITORI	NG REQUIRE	MENTS
EFFLUENT CHARACTERISTICS	Monthly	Daily	Measurement	Sample	Sample
CHARACTERISTICS	Average	Maximum	Frequency	Туре	Location <sup>2</sup>
Flow		2.16 MGD	Weekly	Pump Logs or estimate	Effluent
рН	6.0 ≤ p	oH ≤ 9.0	2/ Month	Grab	Effluent
Total Suspended Solids	30.0 mg/L	100.0 mg/L	2/ Month	Composite	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	2/ Month	Grab	Effluent
Total Kjeldahl Nitrogen (TKN), mg/L			Monthly	Composite	Effluent
Total Nitrogen (TN), mg/L TN = $(NO_2 + NO_3) + TKN$			Monthly	Calculated	Effluent
TN Load <sup>3</sup>	_	oort (lbs/month) port (lbs/year)	Monthly Annually	Calculated Calculated	Effluent
Total Phosphorus, mg/L			Monthly	Composite	Effluent
Chronic Toxicity <sup>4</sup>			Monthly	Composite	Effluent
Turbidity <sup>5</sup> , NTU			Monthly	Grab	Effluent
Total Hardness, mg/L [CaCO <sub>3</sub> or (Ca + Mg)]			Monthly	Composite	Effluent
Total Arsenic	3295 μg/L	21994 μg/L	Monthly	Composite	Effluent
Total Cadmium	46.9 μg/L	209.6 μg/L	Monthly	Composite	Effluent
Total Copper, µg/L			Monthly	Composite	Effluent
Total Lead	234 μg/L	4,883 μg/L	Monthly	Composite	Effluent
Total Mercury <sup>6</sup> , ng/L			Monthly	Composite	Effluent
Total Barium	80 mg/L	80 mg/L	Monthly	Composite	Effluent
Total Selenium	398 μg/L	3623 μg/L	Monthly	Composite	Effluent
Nitrate/nitrite as N, mg/L			Monthly	Composite	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. Effluent sampling shall be conducted at the discharge from the Wastewater Treatment System prior to mixing with any other waste stream.
- 3. See Special Condition A. (35.) Total Nitrogen Calculations
- 4. Chronic Toxicity (Ceriodaphnia) at 1.3%; Monthly; see Special Condition A (33).
- 5. The net turbidity shall not exceed 50 NTU using a grab sample and measured by the difference between the effluent turbidity and the background turbidity. The sample for the background turbidity shall be taken at point in the receiving waterbody upstream of the discharge location, and the background turbidity and the effluent turbidity samples shall be taken within the same 24 hour period.
  - NTU Nephelometric Turbidity Unit.

(footnotes continue on the next page)

- 6. The facility shall use EPA method 1631E.
- b. When landfill leachate and treatment commences, Duke Energy shall sample and submit EPA Form 2C for Outfall 001 as soon as practicable, but no later than 180 days from the commencement of ash landfill leachate discharges through Outfall 001.



### A. (4.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond - Outfall 002) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

**a.** During the period beginning on the effective date of this permit and lasting until expiration, the permittee is authorized to discharge treated effluent from **Outfall 002** (consisting primarily of recirculated condenser cooling water, low volume wastes, sanitary wastewaters, cooling tower blowdown, combustion turbine site wastewaters, reverse osmosis reject wastewaters, filter plant wastewaters, storm water, coal pile runoff (ceased) and equipment wash waters). Such discharges shall be limited and monitored<sup>1</sup> by the permittee as specified below:

	LIMITS		MONITORING REQUIREMENTS			
EFFLUENT CHARACTERISTICS	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location	
Flow, MGD <sup>2</sup>			Each Event	Pump Logs	Outfall Structure	
Temperature <sup>3</sup>		32.0 °C	Each Event	Grab	Outfall Structure	
Total Suspended Solids	30.0 mg/L	50.0 mg/L	Each Event	Grab	Outfall Structure	
Oil and Grease	15.0 mg/L	20.0 mg/L	Each Event	Grab	Outfall Structure	
BOD, 5-day, 20° C	30.0 mg/L	45.0 mg/L	Each Event	Grab	Outfall Structure	
Fecal Coliform (geo. mean)	200/100 mL	400/100 mL	Each Event	Grab	Outfall Structure	
рН	6.0 ≤ p	H ≤ 9.0	Each Event	Grab	Outfall Structure	
Total Residual Chlorine <sup>4</sup>		28.0 μg/L	Each Event	Grab	Outfall Structure	
Free Available Chlorine <sup>4</sup>	200 μg/L	500 μg/L	Each Event	Grab	Outfall Structure	
Fluoride, mg/L			Each Event	Grab	Outfall Structure	
Total Hardness, mg/L [CaCO <sub>3</sub> or (Ca + Mg)]			Each Event	Grab	Outfall Structure	
Total Arsenic μg/L,			Each Event	Grab	Outfall Structure	
Total Chromium	200 μg/L	200 μg/L	Each Event	Grab	Outfall Structure	
Total Zinc	1000 μg/L	1000 μg/L	Each Event	Grab	Outfall Structure	
Total Lead, μg/L			Each Event	Grab	Outfall Structure	
Total Mercury <sup>5</sup> , ng/L			Each Event	Grab	Outfall Structure	
Total Molybdenum, µg/L	13,734 μg/L	13,734 μg/L	Each Event	Grab	Outfall Structure	
Acute Episodic Toxicity <sup>6</sup>			See A. (33.)	Grab	Outfall Structure	
The 126 Priority Pollutants (40 CFR Part 423, Appendix A) Exclusive of Zinc and Chromium <sup>7</sup>	No Detectable Amount		Each Event	Grab	Outfall Structure	

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. This discharge is permitted only in the following cases: a) caused by extreme rainfall; b) where unavoidable to prevent loss of life, severe property damage, or damage to the cooling pond structure; or c) for necessary maintenance activities. In the event that a discharge occurs, the permittee shall inform the Washington Regional Office (252-946-6481) by telephone as soon as possible, but in no case later than 48 hours after the discharge occurs. The permittee shall also provide the following information, in writing, to the Division within 10 days of the discharge: a) a description and cause of the discharge; b) the duration of the discharge, including time and dates, anticipated time the discharge is expected to continue, and steps being taken to reduce, prevent, and eliminate reoccurrence of the discharge. The permittee shall take all reasonable

- steps necessary to minimize any adverse impact to navigable waters resulting from the discharge, including such monitoring as necessary to determine the environmental impact of the discharge.
- 3. As a result of this discharge, the temperature of the receiving water shall not be increased by more than 2.8°C above ambient water temperature and in no case exceed 32°C.
- 4. Monitoring requirement for total residual chlorine applies only when chlorine is added to the recirculating condenser cooling or process water discharged to the pond. Neither free available chlorine nor total residual chorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division that discharge for more than two hours is required for macroinvertebrate control. The 500 μg/L is a daily maximum limitation and is to be measured during the chlorine release period. The 200 μg/L limitation is an average during the chlorine release period. Monitoring is required only when chlorine is added to the cooling water system.
- 5. The facility shall use EPA method 1631E.
- 6. Acute Episodic Toxicity (Fathead Minnow 24-hr); LC50; see Special Condition A. (34).
- 7. These limitations and monitoring requirements apply if these substances are added by the Permittee for cooling tower maintenance. There shall be no detectable amounts of the 126 priority pollutants (40 CFR 423 Appendix A) contained in chemicals added for cooling tower except for total chromium and total zinc. Compliance with the limitations for the 126 priority pollutants in 40 CFR Section 423.13(d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136.
- b. All domestic wastewater produced at the power plant is to be fully treated through the onsite wastewater treatment system prior to being discharged.
- c. The permittee shall obtain authorization from the Division of Water Resources prior to using any biocide in the cooling water; see condition A. (38.).

There shall be no discharge of polychlorinated biphenyls (PCBs).

There shall be no discharge of metal cleaning wastes.

### A. (5.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond - Outfall 002A) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

**a.** During the period beginning on the effective date of this permit and lasting until expiration, the permittee is authorized to discharge treated effluent from **Outfall 002A only during severe weather events or required maintenance** (this wastewater primarily consists of recirculated condenser cooling water, low volume wastes, treated sanitary wastewaters, cooling tower blowdown, combustion turbine site wastewaters, reverse osmosis reject wastewaters, filter plant wastewaters, storm water, and equipment wash waters). Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT	LIM	IITS	MONITORING REQUIREMENTS			
CHARACTERISTICS	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location	
Flow, MGD <sup>2</sup>			Each Event	Pump Logs	Outfall Structure	
Temperature <sup>3</sup>		32.0 °C	Each Event	Grab	Outfall Structure	
Total Suspended Solids	30.0 mg/L	50.0 mg/L	Each Event	Grab	Outfall Structure	
Oil and Grease	15.0 mg/L	20.0 mg/L	Each Event	Grab	Outfall Structure	
BOD, 5-day, 20° C	30.0 mg/L	45.0 mg/L	Each Event	Grab	Outfall Structure	
Fecal Coliform (geo. mean)	200/100 mL	400/100 mL	Each Event	Grab	Outfall Structure	
рН	6.0 ≤ p	H ≤ 9.0	Each Event	Grab	Outfall Structure	
Total Residual Chlorine <sup>4</sup>		28.0 μg/L	Each Event	Grab	Outfall Structure	
Free Available Chlorine <sup>4</sup>	200 μg/L	500 μg/L	Each Event	Grab	Outfall Structure	
Fluoride, mg/L			Each Event	Grab	Outfall Structure	
Total Hardness, mg/L [CaCO <sub>3</sub> or (Ca + Mg)]			Each Event	Grab	Outfall Structure	
Total Arsenic μg/L,			Each Event	Grab	Outfall Structure	
Total Chromium	200 μg/L	200 μg/L	Each Event	Grab	Outfall Structure	
Total Zinc	1000 μg/L	1000 μg/L	Each Event	Grab	Outfall Structure	
Total Lead, µg/L			Each Event	Grab	Outfall Structure	
Total Mercury <sup>5</sup> , ng/L			Each Event	Grab	Outfall Structure	
Total Molybdenum, µg/L	13,734 μg/L	13,734 μg/L	Each Event	Grab	Outfall Structure	
Acute Episodic Toxicity <sup>6</sup>			See A. (33.)	Grab	Outfall Structure	
The 126 Priority Pollutants (40 CFR Part 423, Appendix A) Exclusive of Zinc and Chromium <sup>7</sup>	No Detectable Amount		Each Event	Grab	Outfall Structure	

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. This discharge is permitted only in the following cases: a) caused by extreme rainfall; b) where unavoidable to prevent loss of life, severe property damage, or damage to the cooling pond structure; or c) for necessary maintenance activities. In the event that a discharge occurs, the permittee shall inform the Washington Regional Office (252-946-6481) by telephone as soon as possible, but in no case later than 48 hours after the discharge occurs. The permittee shall also provide the following information, in writing, to the Division within 10 days of the discharge: a) a description and cause of the discharge; b) the duration of the discharge, including time and dates, anticipated time the discharge is expected to continue, and steps being taken to reduce, prevent, and eliminate reoccurrence of the discharge. The permittee shall take all reasonable

- steps necessary to minimize any adverse impact to navigable waters resulting from the discharge, including such monitoring as necessary to determine the environmental impact of the discharge.
- 3. As a result of this discharge, the temperature of the receiving water shall not be increased by more than 2.8°C above ambient water temperature and in no case exceed 32°C.
- 4. Monitoring requirement for total residual chlorine applies only when chlorine is added to the recirculating condenser cooling or process water discharged to the pond. Neither free available chlorine nor total residual chorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division that discharge for more than two hours is required for macroinvertebrate control. The 500 μg/L is a daily maximum limitation and is to be measured during the chlorine release period. The 200 μg/L limitation is an average during the chlorine release period. Monitoring is required only when chlorine is added to the cooling water system.
- 5. The facility shall use EPA method 1631E.
- 6. Acute Episodic Toxicity (Fathead Minnow 24-hr); LC50; see Special Condition A. (34).
- 7. These limitations and monitoring requirements apply if these substances are added by the Permittee for cooling tower maintenance. There shall be no detectable amounts of the 126 priority pollutants (40 CFR 423 Appendix A) contained in chemicals added for cooling tower except for total chromium and total zinc. Compliance with the limitations for the 126 priority pollutants in 40 CFR Section 423.13(d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136.
- b. All domestic wastewater produced at the power plant is to be fully treated through the onsite wastewater treatment system prior to being discharged.
- c. The permittee shall obtain authorization from the Division of Water Resources prior to using any biocide in the cooling water; see condition A. (38.).

There shall be no discharge of polychlorinated biphenyls (PCBs).

There shall be no discharge of metal cleaning wastes.

## A.(6) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Wastewater Pond -Outfall 003) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

**a.** During the period beginning on the effective date of this permit and lasting until expiration, the permittee is authorized to discharge filter plant wastewaters, equipment and containment drains, reverse osmosis reject and filter backwash, quenched heat recovery steam generator blowdown, combustion turbine wash waters, and equipment wash water from **Outfall 003**. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT		IITS	MONITORING REQUIREMENTS			
CHARACTERISTICS	Monthly	Daily	Measurement	Sample	Sample	
	Average	Maximum	Frequency	Type	Location	
Flow, MGD	0.5		Daily	Pump Logs	Effluent	
Temperature <sup>2</sup>		32.0 °C	2/ Month	Grab	Effluent	
Total Suspended Solids	30.0 mg/L	100.0 mg/L	2/ Month	Composite	Effluent	
Oil and Grease	15.0 mg/L	20.0 mg/L	2/ Month	Grab	Effluent	
рН	6.0 ≤ p	H ≤ 9.0	2/ Month	Grab	Effluent	
Total Residual Chlorine <sup>3</sup>		28.0 μg/L	2/ Month	Grab	Effluent	
Free Available Chlorine <sup>3</sup>	200 μg/L	500 μg/L	2/ Month	Grab	Effluent	
Fluoride, mg/L			Quarterly	Grab	Effluent	
Total Hardness, mg/L [CaCO <sub>3</sub> or (Ca + Mg)]			Quarterly	Composite	Effluent	
Total Arsenic µg/L,			Quarterly	Composite	Effluent	
Total Chromium	200 μg/L	200 μg/L	Monthly	Composite	Effluent	
Total Zinc	1000 μg/L	1000 μg/L	Monthly	Composite	Effluent	
Turbidity <sup>5</sup> , NTU			Monthly	Grab	Effluent	
Total Lead, µg/L			Quarterly	Composite	Effluent	
Total Mercury <sup>4</sup> , ng/L			Quarterly	Grab	Effluent	
Total Molybdenum, µg/L			Quarterly	Composite	Effluent	
Total Selenium, µg/L			Quarterly	Composite	Effluent	
Acute Toxicity <sup>5</sup>			See A.(33.)	Composite	Effluent	
The 126 Priority Pollutants (40 CFR Part 423, Appendix A) Exclusive of Zinc and Chromium <sup>6</sup>	No Detectable Amount		Annual	40 CFR 136	Effluent	

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. As a result of this discharge, the temperature of the receiving water shall not be increased by more than 2.8°C above ambient water temperature and in no case exceed 32°C.
- 3. Monitoring requirement for total residual chlorine applies only when chlorine is added to the blowdown or process water discharged to the pond. Neither free available chlorine nor total residual chorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division that discharge for more than two hours is required for macroinvertebrate control. The 500  $\mu$ g/L is a daily maximum limitation and is to be measured during the chlorine release period. The 200  $\mu$ g/L limitation is an average during the chlorine release period. Monitoring is required only when chlorine is added to the cooling water system.

(footnotes continue on the next page)

- 4. The facility shall use EPA method 1631E.
- 5. Acute Episodic Toxicity (Fathead Minnow 24-hr); LC50; see Special Condition A. (33).
- 6. These limitations and monitoring requirements apply if these substances are added by the Permittee for cooling tower maintenance. There shall be no detectable amounts of the 126 priority pollutants (40 CFR 423 Appendix A) contained in chemicals added for cooling tower except for total chromium and total zinc. Compliance with the limitations for the 126 priority pollutants in 40 CFR Section 423.13(d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136.
- b. The permittee shall obtain authorization from the Division of Water Resources prior to using any biocide in the cooling water; see condition A. (38.).
- c. When wastewater discharges to outfall 003 commence, Duke Energy shall sample and submit EPA Form 2C for Outfall 003 as soon as practicable, but no later than 180 days from the commencement of discharge through Outfall 003.

There shall be no discharge of polychlorinated biphenyls (PCBs).

There shall be no discharge of metal cleaning wastes.

## A. (7.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 101A LOLA) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 101A LOLA – Seep Discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS MONITORING REQUIREMENTS			ENTS	
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	915 μg/L	6304 µg/L	Monthly/Quarterly	Grab	Effluent
Total Aluminum, µg/L			Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, μg/L			Monthly/Quarterly	Grab	Effluent
Total Lead	,		Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (8.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 101B LOLA) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 101B LOLA – Seep Discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	915 μg/L	6304 µg/L	Monthly/Quarterly	Grab	Effluent
Total Aluminum, µg/L			Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead			Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, °C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

## A. (9.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 102) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 102 – Seep Discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT	LIMITS		MONITORING REQUIREMENTS		
CHARACTERISTICS	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, μg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	915 μg/L	6304 µg/L	Monthly/Quarterly	Grab	Effluent
Total Aluminum, µg/L			Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead			Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

### A. (10.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 109) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 109 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIM	ITS	MONITORING REQUIREMENTS		
CHARACTERISTICS	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	915 μg/L	6304 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, °C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

### A. (11.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 118) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 118 – Seep Discharge and stormwater discharge.

Such discharges shall be limited and monitored<sup>1</sup> by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS MONITORING REQUIREM				ENTS
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	915 μg/L	6304 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, °C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### <u>Notes:</u>

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

## A. (12.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 125) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 125 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	915 μg/L	6304 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, μg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

### A. (13.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 126) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 126 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
ommuter 2 August 100	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	915 μg/L	6304 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### <u>Notes:</u>

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (14.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 103A) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 103A – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup>	12 ng/L ann	ual average	Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, μg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, μg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, μg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, μg/L			Monthly/Quarterly	Grab	Effluent
Total Molybdenum, μg/L			Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

### A. (15.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Ash Basin Seep Outfall 128) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 128 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT LIMITS MONITORING REQUI					MENTS
CHARACTERISTICS	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L	Ŭ,		Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, μg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, μg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	1		Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly/Quarterly	Grab	Effluent
Chlorides, mg/L			Monthly/Quarterly	Grab	Effluent
TDS, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (16.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-201) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-201 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT LIMITS MONITORING REQUIRE CHARACTERISTICS				REQUIREM	
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

## A. (17.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-202) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-202 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIM	ITS	MONITORING REQUIREMENTS			
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent	
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent	
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent	
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent	
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent	
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent	
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent	
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent	
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent	
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent	

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (18.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-203) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-203 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS MONITORING REQUIREMEN				
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (19.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-204) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-204 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIM	LIMITS MONITORING REQUIREMENTS			
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (20.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-205) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-205 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS		LIMITS MONITORING REQUIREMENTS			
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (21.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-215) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-215 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, μg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, μg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (22.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-216) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-216 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS		LIMITS MONITORING REQUIREMENTS			
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (23.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-207) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-207 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS		LIMITS MONITORING REQUIREMENTS			
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead	5.3 μg/L	136 μg/L	Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (24.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-208) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-208 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS		IITS	MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, μg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

## A. (25.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-209) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-209 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS		ITS	MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, μg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (26.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-217) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-217 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIM	ITS	MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (27.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-218) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-218 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

# A. (28.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-219) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-219 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIM	ITS	MONITORING REQUIREMENTS			
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent	
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent	
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent	
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent	
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent	
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent	
Total Copper, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Lead	6.2 μg/L	159 μg/L	Monthly/Quarterly	Grab	Effluent	
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent	
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent	
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent	
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent	

#### Notes:

- 1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

There shall be no discharge of floating solids or visible foam in other than trace amounts.

# A. (29.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-220) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-220 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIM	ITS	MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency <sup>2</sup>	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, μg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, μg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 5. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 6. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 7. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 8. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

There shall be no discharge of floating solids or visible foam in other than trace amounts.

# A. (30.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Cooling Pond Seep Outfall CPS-221) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall CPS-221 – Seep Discharge and stormwater discharge. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIM	ITS	MONITORING REQUIREMENTS		
	Monthly Daily Measurement Average Maximum Frequency <sup>2</sup>			Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH <sup>3</sup>			Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Fluoride, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury <sup>4</sup> , ng/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium	200 μg/L	200 μg/L	Monthly/Quarterly	Grab	Effluent
Total Zinc	1000 μg/L	1000 μg/L	Monthly/Quarterly	Grab	Effluent
Total Arsenic	10 μg/L	340 μg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L			Monthly/Quarterly	Grab	Effluent
Chloride, mg/L			Monthly/Quarterly	Grab	Effluent
Nitrate/nitrite as N, mg/L			Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L			Monthly/Quarterly	Grab	Effluent
Temperature, <sup>0</sup> C			Monthly/Quarterly	Grab	Effluent
Conductivity, µmho/cm			Monthly/Quarterly	Grab	Effluent

#### Notes:

- 9. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (48.).
- 10. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
- 11. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 12. The facility shall use EPA method 1631E.

If the facility is unable to obtain a seep sample due to the dry or low flow conditions preventing the facility from obtaining a representative sample, then "no flow" should be reported on the DMR. This requirement is established in the Section D of the Standard Conditions and 40 CFR 122.41 (j).

There shall be no discharge of floating solids or visible foam in other than trace amounts.

## A. (31.) TOXICITY RE-OPENER CONDITION

This permit shall be modified, or revoked and reissued, to incorporate additional toxicity limitations and monitoring requirements in the event that toxicity testing or other studies conducted on the effluent or receiving stream indicate that detrimental effects may be expected in the receiving stream as a result of this discharge.

#### A. (32.) ADDITIONAL CONDITIONS AND DEFINITIONS

The following special conditions are applicable to all outfalls regulated by this permit:

- a) There shall be no discharge of polychlorinated biphenyl compounds such as those once commonly used for transformer fluid.
- b) Nothing contained in this permit shall be construed as a waiver by the permittee of any right to a hearing it may have pursuant to State or Federal laws or regulations.
- c) Discharge of any waste resulting from the combustion of toxic or hazardous waste to any waste stream which ultimately discharges to waters of the United States is prohibited, unless specifically authorized in this permit.
- d) The permittee shall report all visible discharges of floating materials (such as an oil slick) to the Director when submitting DMRs.
- e) "Upset," means an exceptional incident in which there is an unintentional and temporary non-compliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent cause by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or improper operations.
- f) All flows shall be reported on monthly DMRs. Should no flow occur during a given month, the words "no flow" should be clearly written on the front of the DMR.
- g) EPA methods 200.7 or 200.8 (or the most current versions) shall be used for analyses of all metals except for total mercury.
- h) All effluent samples for all external outfalls shall be taken at the most accessible location after the final treatment but prior to discharge to waters of the U.S. (40 CFR 122.41(j)).
- i) The term *low volume waste sources* means wastewater from all sources except those for which specific limitations are otherwise established in this part (40 CFR 423.11 (b)).
- j) The term *chemical metal cleaning waste* means any wastewater resulting from cleaning any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning (40 CFR 423.11 (c)).
- k) The term *metal cleaning waste* means any wastewater resulting from cleaning [with or without chemical cleaning compounds] any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning (40 CFR 423.11 (d)).
- l) For all outfalls where the flow measurement is to be "estimated" the estimate can be done by using calibrated V-notch weir, stop-watch and graduated cylinder, or other method approved by the Division.

## A. (33.) CHRONIC TOXICITY LIMIT (Monthly - Outfall 001)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to *Ceriodaphnia dubia* at an effluent concentration of 1.3 %.

The permit holder shall perform at a minimum, **monthly** monitoring using test procedures outlined in the "North Carolina Ceriodaphnia Chronic Effluent Bioassay Procedure," Revised December 2010, or subsequent versions or "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised- December 2010) or subsequent versions. Effluent sampling for this testing must be obtained during representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

If the test procedure performed as the first test of any month results in a <u>failure</u> or ChV below the permit limit, then multiple-concentration testing shall be performed at a minimum, in each of the two following months as described in "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-December 2010) or subsequent versions.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the months in which tests were performed, using the parameter code **TGP3B** for the pass/fail results and **THP3B** for the Chronic Value. Additionally, DWR Form AT-3 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Resources

Water Sciences Section/Aquatic Toxicology Branch

1621 Mail Service Center

Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Water Sciences Section no later than 30 days after the end of the reporting period for which the report is made.

Test data shall be complete, accurate, include all supporting chemical/physical measurements and all concentration/response data, and be certified by laboratory supervisor and ORC or approved designate signature. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during a month in which toxicity monitoring is required, the permittee will complete the information located at the top of the aquatic toxicity (AT) test form indicating the facility name, permit number, pipe number, county, and the month/year of the report with the notation of "No Flow" in the comment area of the form. The report shall be submitted to the Water Sciences Section at the address cited above.

Should the permittee fail to monitor during a month in which toxicity monitoring is required, monitoring will be required during the following month. Assessment of toxicity compliance is based on the toxicity testing month.

Should any test data from this monitoring requirement or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival, minimum control organism reproduction, and appropriate environmental controls, shall constitute an **invalid test** and will require immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.

## A. (34.) ACUTE TOXICITY MONITORING - Outfalls 002, 002A, and 003

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

The permittee shall conduct FIVE acute toxicity tests using protocols defined as definitive in EPA Document EPA/600/4–90/027 entitled "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms." The monitoring shall be performed as a Fathead Minnow (*Pimephales promelas*) 24 hour static test. Effluent samples for self-monitoring purposes must be obtained below all waste treatment. For each Outfall, sampling and subsequent testing will occur during the first five discrete discharge events after the effective day of this permit. After monitoring of the first five toxicity tests, the permittee will conduct one test annually, with the annual period beginning in January of the next calendar year. The annual test requirement must be performed and reported by June 30. If no discharge occurs by June 30, verbal notification shall be made to the Division within two weeks of this date by contacting the Aquatic Toxicology Unit at 919-743-8401. Verbal notification shall be followed by the Aquatic Toxicity Test Form indicating "No Discharge

through June 30<sup>th</sup>" within 30 days following the reporting period. Toxicity testing shall be performed on the next discharge event for the annual test requirement.

The parameter code for this test is TAE6C. All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Form (MR-1) for the month in which it was performed, using the appropriate parameter code. Additionally, DWR Form AT-1 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Resources Water Sciences Section/Aquatic Toxicology Branch 1621 Mail Service Center Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Water Sciences Section no later than 30 days after the end of the reporting period for which the report is made.

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival and appropriate environmental controls, shall constitute an invalid test and will require immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.

## A. (35.) CALCULATION OF TOTAL NITROGEN LOADS - Outfall 001 (Ash Pond)

- a. The Permittee shall calculate monthly and annual TN Loads as follows:
  - i. Monthly TN Load (lb/mo) = TN x TMF x 8.34 where:
    - TN = the average Total Nitrogen concentration (mg/L) of the samples collected during the month
    - TMF = the Total Monthly Flow of wastewater discharged during the month (MG/mo)
    - 8.34 = conversion factor, from (mg/L x MG) to pounds
- ii. Annual TN Load (lb/yr) = Sum of the 12 Monthly TN Loads for the calendar year
   b. The Permittee shall report monthly Total Nitrogen results (mg/L and lb/mo) in the discharge monitoring report for that month and shall report each year's annual results (lb/yr) in the December report for that year.

#### A. (36.) ANNUAL LIMITS FOR TOTAL NITROGEN

- a. Total Nitrogen (TN) allocations and TN Load limits for NPDES dischargers in the Neuse River basin apply on a calendar year basis.
- b. For any given calendar year, the Permittee shall be in compliance with the annual TN Load limit in this Permit if:
  - i. the Permittee's annual TN discharge is less than or equal to its TN Load limit, or
  - ii. the Permittee is a co-permittee member of a compliance association.
- c. If the Permittee is not a co-permittee member of a compliance association and the Permittee's cumulative annual TN discharge exceeds the effective TN Load limit in this permit at any point during the calendar year, the Permittee is in violation of its TN Load limit, and each day of a continuing violation shall constitute a separate violation.

- d. The TN Load limit in this Permit (if any) may be modified as the result of allowable changes in the Permittee's TN allocation.
  - i. Allowable changes include those resulting from purchase of TN allocation from the Wetlands Restoration Fund; purchase, sale, trade, or lease of allocation between the Permittee and other dischargers; regionalization; and other transactions approved by the Division.
  - ii. The Permittee may request a modification of the TN Load limit in this Permit to reflect allowable changes in its TN allocation. Upon receipt of timely and proper application, the Division will modify the permit as appropriate and in accordance with state and federal program requirements.
  - iii. Changes in TN limits become effective on January 1 of the year following permit modification. The Division must receive application no later than August 31 for changes proposed for the following calendar year.
  - iv. Application shall be sent to:

NCDWR / NPDES Programs
Attn: Neuse River Basin Coordinator
1617 Mail Service Center
Raleigh, NC 27699-1617

- e. If the Permittee is a member and co-permittee of an approved compliance association, its TN discharge during that year is governed by that association's group NPDES permit and the TN limits therein.
  - i. The Permittee shall be considered a Co-Permittee Member for any given calendar year in which it is identified as such in Appendix A of the association's group NPDES permit.
  - ii. Association roster(s) and members' TN allocations will be updated annually and in accordance with state and federal program requirements.
  - iii. If the Permittee intends to join or leave a compliance association, the Division must be notified of the proposed action in accordance with the procedures defined in the association's NPDES permit.
    - (A) Upon receipt of timely and proper notification, the Division will modify the permit as appropriate and in accordance with state and federal program requirements.
    - (B) Membership changes in a compliance association become effective on January 1 of the year following modification of the association's permit.
- f. The TN monitoring and reporting requirements in this Permit remain in effect until expiration of this Permit and are not affected by the Permittee's membership in a compliance association.

## A. (37.) TOTAL NITROGEN ALLOCATIONS

a. The following table lists the Total Nitrogen (TN) allocation(s) assigned to, acquired by, or transferred to the Permittee in accordance with the Neuse River nutrient management rule (T15A NCAC 02B .0234) and the status of each as of permit issuance. For compliance purposes, this table does not supersede any TN limit(s) established elsewhere in this permit or in the NPDES permit of a compliance association of which the Permittee is a Co-Permittee Member.

ALLOCATION			ALLOCATIO	ON AMOUNT 1	
ALLOCATION TYPE	SOURCE	DATE	Estuary (lb/yr)	Discharge (lb/yr)	STATUS
NA	See Footnote 2.	-	-	-	-
		TOTAL	-	-	-

#### Footnote:

1. Transport Factor = 70%

- 2. Duke Energy Progress' H.F. Lee Energy Complex received no TN allocation under the Neuse rule but is allowed a baseline TN load of 3,260 lb/yr at its Outfall 001 (2,282 lb/yr at the estuary), which is not part of the point source waste load allocation.
- b. Any addition, deletion, or modification of the listed allocations (other than typographical errors) or any change to Active status of any of the listed allocations shall be considered a major modification of this permit and shall be subject to the public review process afforded such modifications under state and federal rules.

## A. (38.) BIOCIDE CONDITION

The permittee shall not use any biocides except those approved in conjunction with the permit application or in accordance with this condition. The permittee shall notify the Director in writing not later than ninety (90) days prior to instituting use of any additional biocide used in cooling systems which may be toxic to aquatic life other than those previously reported to the Division of Water Resources. Such notification shall include completion of Biocide Worksheet Form 101 and a map locating the discharge point and receiving stream. Completion of Biocide Worksheet Form 101 is not necessary for those outfalls containing toxicity testing. Division approval is not necessary for the introduction of new biocides into outfalls currently tested for whole effluent toxicity.

## A. (39.) ASH POND WORKING CAPACITY

Beginning on the effective date of this permit and lasting until expiration, there shall be no discharge of plant wastes to the ash pond unless the permittee provides and maintains at all times a minimum free water volume (between the top of the sediment level and the minimum discharge elevation) equivalent to the sum of the maximum 24-hour plant discharges plus all direct rainfall and all runoff flows to the pond resulting from a 10-year, 24-hour rainfall event, when using a runoff coefficient of 1.0.

During the term of the permit, the permittee shall remove settled material from the ponds or otherwise enlarge the available storage capacities in order to maintain the required minimum volumes at all times. The permittee shall annually determine and report to the permit issuing authority: (1) the actual free water volume of the ash pond, (2) physical measurements of the dimensions of the free water volume in sufficient detail to allow validation of the calculated volume, and (3) a certification that the required volume is available with adequate safety factor to include all solids expected to be deposited in the ponds for the following year. Any changes to plant operations affecting such certification shall be reported to the Director within five days.

NOTE: In the event that adequate volume has been certified to exist for the term of the permit, periodic certification is not needed.

#### A. (40.) CLEAN WATER ACT SECTION 316(B)

The permittee shall comply with the Cooling Water Intake Structure Rule per 40 CFR 125.95. The permittee shall submit all the materials required by the Rule with the next renewal application.

Copies of all the study plans, study results, and any other applicable materials shall be submitted to:

- 1) Electronic Version Only (PDF and CD)
  Division of Water Resources
  WQ Permitting Section NPDES
  1617 Mail Service Center
  Raleigh, NC 27699-1617
- Electronic Version (PDF and CD) and Hard Copy
   Division of Water Resources
   WSS Biological Assessment Branch
   1621 Mail Service Center

#### A. (41.) GROUNDWATER MONITORING WELL CONSTRUCTION AND SAMPLING

The permittee shall conduct groundwater monitoring to determine the compliance of this NPDES permitted facility with the current groundwater Standards found under 15A NCAC 2L .0200. The monitoring shall be conducted in accordance with the Sampling Plan approved by the Division. See Attachment 1.

#### A. (42.) STRUCTURAL INTEGRITY INSPECTIONS OF ASH POND DAM

The facility shall meet the dam design and dam safety requirements per 15A NCAC 2K.

### A. (43.) ASH POND CLOSURE

The facility shall prepare an Ash Ponds Closure Plan. This Plan shall be submitted to the Division one month prior to the closure of the ash ponds to the address listed below:

Electronic Version Only (PDF and CD) Division of Water Resources WQ Permitting Section - NPDES 1617 Mail Service Center Raleigh, NC 27699-1617

## A. (44.) INSTREAM MONITORING

The facility shall conduct semiannual instream monitoring (upstream of Outfall 002 - at the Railroad bridge, and downstream of Outfall 003 - at Stevens Mill Road bridge) for total arsenic, total selenium, total mercury (method 1631E), total chromium, dissolved lead, dissolved cadmium, dissolved copper, dissolved zinc, bromide, total hardness, and total dissolved solids (TDS). The monitoring results shall be reported in the monthly DMRs and summarized with the NPDES permit renewal application. For the purposes of this requirement, semiannual means that samples are collected twice per year with at least 120 calendar days between sampling events. Sampling periods and the samples collected shall be representative of the surface waters.

## A. (45.) FISH TISSUE MONITORING NEAR ASH POND DISCHARGE (Outfall 001)

The facility shall conduct fish tissue monitoring once during the permit term and submit the results with the NPDES permit renewal application. The objective of the monitoring is to evaluate potential uptake of pollutants by fish tissue near the Ash Pond discharge. The parameters analyzed in fish tissue shall be arsenic, selenium, and mercury. The monitoring shall be conducted in accordance with the Sampling Plan approved by the Division. The sampling Plan and any other applicable materials shall be submitted to:

- 1) Electronic Version Only (PDF and CD)
  Division of Water Resources
  WQ Permitting Section NPDES
  1617 Mail Service Center
  Raleigh, NC 27699-1617
- 2) Electronic Version (PDF and CD) and Hard Copy Division of Water Resources WSS - Biological Assessment Branch 1621 Mail Service Center Raleigh, NC 27699-1621

## A. (46.) APPLICABLE STATE LAW (STATE ENFORCEABLE ONLY)

This facility shall meet the requirements of Senate Bill 729 (Coal Ash Management Act). This permit may be reopened to include new requirements imposed by Senate Bill 729.

### A. (47.) DOMESTIC WASTEWATER TREATMENT PLANT

The domestic wastewater treatment facility shall be properly operated and maintained at all times. Its effluent must meet secondary limits for domestic wastewater, and not cause contravention of any water quality standards.

## A. (48.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS [G.S. 143-215.1(b)]

Federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and program reports and specify that, if a state does not establish a system to receive such submittals, then permittees must submit monitoring data and reports electronically to the Environmental Protection Agency (EPA). The final NPDES Electronic Reporting Rule was adopted and became effective on December 21, 2015.

NOTE: This special condition supplements or supersedes the following sections within Part II of this permit (*Standard Conditions for NPDES Permits*):

- Section B. (11.) Signatory Requirements
- Section D. (2.) Reporting
- Section D. (6.) Records Retention
- Section E. (5.) Monitoring Reports

#### 1. Reporting Requirements [Supersedes Section D. (2.) and Section E. (5.) (a)]

Effective **December 21, 2016**, the permittee shall report discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application.

Monitoring results obtained during the previous month(s) shall be summarized for each month and submitted electronically using eDMR. The eDMR system allows permitted facilities to enter monitoring data and submit DMRs electronically using the internet. Until such time that the state's eDMR application is compliant with EPA's Cross-Media Electronic Reporting Regulation (CROMERR), permittees will be required to submit all discharge monitoring data to the state electronically using eDMR and will be required to complete the eDMR submission by printing, signing, and submitting one signed original and a copy of the computer printed eDMR to the following address:

NC DEQ / Division of Water Resources / Water Quality Permitting Section ATTENTION: Central Files 1617 Mail Service Center Raleigh, North Carolina 27699-1617

If a permittee is unable to use the eDMR system due to a demonstrated hardship or due to the facility being physically located in an area where less than 10 percent of the households have broadband access, then a temporary waiver from the NPDES electronic reporting requirements may be granted and discharge monitoring data may be submitted on paper DMR forms (MR 1, 1.1, 2, 3) or alternative forms approved by the Director. Duplicate signed copies shall be submitted to the mailing address above. See "How to Request a Waiver from Electronic Reporting" section below.

Regardless of the submission method, the first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge.

Starting on **December 21, 2020**, the permittee must electronically report the following compliance monitoring data and reports, when applicable:

- Sewer Overflow/Bypass Event Reports;
- Pretreatment Program Annual Reports; and
- Clean Water Act (CWA) Section 316(b) Annual Reports.

The permittee may seek an electronic reporting waiver from the Division (see "How to Request a Waiver from Electronic Reporting" section below).

#### 2. Electronic Submissions

In accordance with 40 CFR 122.41(l)(9), the permittee must identify the initial recipient at the time of each electronic submission. The permittee should use the EPA's website resources to identify the initial recipient for the electronic submission.

Initial recipient of electronic NPDES information from NPDES-regulated facilities means the entity (EPA or the state authorized by EPA to implement the NPDES program) that is the designated entity for receiving electronic NPDES data [see 40 CFR 127.2(b)].

EPA plans to establish a website that will also link to the appropriate electronic reporting tool for each type of electronic submission and for each state. Instructions on how to access and use the appropriate electronic reporting tool will be available as well. Information on EPA's NPDES Electronic Reporting Rule is found at: <a href="http://www2.epa.gov/compliance/final-national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule">http://www2.epa.gov/compliance/final-national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule</a>.

Electronic submissions must start by the dates listed in the "Reporting Requirements" section above.

#### 3. How to Request a Waiver from Electronic Reporting

The permittee may seek a temporary electronic reporting waiver from the Division. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to the Division. Requests for temporary electronic reporting waivers must be submitted in writing to the Division for written approval at least sixty (60) days prior to the date the facility would be required under this permit to begin submitting monitoring data and reports. The duration of a temporary waiver shall not exceed 5 years and shall thereupon expire. At such time, monitoring data and reports shall be submitted electronically to the Division unless the permittee re-applies for and is granted a new temporary electronic reporting waiver by the Division. Approved electronic reporting waivers are not transferrable. Only permittees with an approved reporting waiver request may submit monitoring data and reports on paper to the Division for the period that the approved reporting waiver request is effective.

Information on eDMR and the application for a temporary electronic reporting waiver are found on the following web page:

http://deq.nc.gov/about/divisions/water-resources/edmr

## 4. Signatory Requirements [Supplements Section B. (11.) (b) and Supersedes Section B. (11.) (d)]

All eDMRs submitted to the permit issuing authority shall be signed by a person described in Part II, Section B. (11.)(a) or by a duly authorized representative of that person as described in Part II, Section B. (11.)(b). A person, and not a position, must be delegated signatory authority for eDMR reporting purposes.

For eDMR submissions, the person signing and submitting the DMR must obtain an eDMR user account and login credentials to access the eDMR system. For more information on North Carolina's eDMR system, registering for eDMR and obtaining an eDMR user account, please visit the following web page:

## http://deq.nc.gov/about/divisions/water-resources/edmr

Certification. Any person submitting an electronic DMR using the state's eDMR system shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:

"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 fines and imprisonment for knowing violations."

### 5. Records Retention [Supplements Section D. (6.)]

The permittee shall retain records of all Discharge Monitoring Reports, including eDMR submissions. These records or copies shall be maintained for a period of at least 3 years from the date of the report. This period may be extended by request of the Director at any time [40 CFR 122.41].

## A. (49.) SEEP POLLUTANT ANALYSIS

Existing Discharges from Seepage from the Ash Settling Basin

The facility identified 9 non-engineered discharges from seepage from the ash settling basin. The locations of the seeps are identified below and are depicted on the map attached to the permit.

Table 1. Seep Coordinates and Assigned Outfall Numbers	Table 1.	Seep (	Coordinates	and Assigned	Outfall Numbers
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Seep ID	Latitude	Longitude	Outfall number
LOLA S-01	35.379568	-78.075043	101A LOLA
LOLA S-01A	35.379648	-78.074632	101A LOLA
LOLA S-01B	35.380846	-78.077697	101B LOLA
S-02	35.384001	-78.081383	102
S-03	35.382666	-78.084374	103A
S-03A	35.381806	-78.084052	103A
S-04	35.381993	-78.078784	126
S-06	35.386968	-78.071942	109
S-07	35.382767	-78.069655	109
S-08	35.380510	-78.068532	109
S-09	35.379492	-78.067718	109
S-18	35.379222	-78.101206	118
S-22	35.381466	-78.077819	125
S-23	35.381175	-78.077136	125
S-24	35.381063	-78.076431	125
S-25	35.380922	-78.076001	125
S-26	35.381640	-78.078322	126
S-27	35.385848	-78.075999	128
S-28	35.385133	-78.078197	128

## Existing Discharges from Seepage from the Cooling Pond

The facility identified 15 non-engineered discharges from seepage from the Cooling Pond. The locations of the seeps are identified below and are depicted on the map attached to the permit.

Table 2. Seep Coordinates and Assigned Outfall Numbers

Seep ID	Latitude	Longitude	Outfall number
CPS-01	35.3792364	-78.0737774	CPS-201
CPS-02	35.3790054	-78.0729841	CPS-202
CPS-03	35.3789480	-78.0672044	CPS-203
CPS-04	35.3790159	-78.0670749	CPS-204
CPS-05	35.3799795	-78.0657386	CPS-205
CPS-06	35.3717880	-78.0664208	CPS-207
CPS-07	35.3717706	-78.0666082	CPS-207
CPS-08	35.3711473	-78.0677987	CPS-208
CPS-09	35.3692168	-78.0787969	CPS-209
CPS-13	35.3797170	-78.0754000	CPS-215
CPS-14	35.3796330	-78.0752670	CPS-215
CPS-15	35.3796170	-78.0746000	CPS-215
CPS-16	35.3794170	-78.0742330	CPS-216
CPS-17	35.3746500	-78.0616500	CPS-217
CPS-18	35.3719500	-78.0660470	CPS-218
CPS-19	35.3719160	-78.0662490	CPS-219
CPS-20	35.3720230	-78.0663020	CPS-220
CPS-21	35.3698330	-78.0758000	CPS-221

Within 180 days of the effective date of this permit, the permittee shall demonstrate, through instream sampling meeting the requirements of condition A. (43.), that the water quality standards in the receiving stream are not contravened.

#### Discharges from Seepage Identified After Permit Issuance

The facility shall comply with the "Plan for Identification of New Discharges" as contained in Attachment 2. For any discharge identified pursuant to this Plan, the facility shall, within 90 days of the seep discovery or within 90 days of the effective date of this permit, determine if the discharge seep meets the state water quality standards established in 15A NCAC 2B .0200 and submit the results of this determination to the Division. If the standards are not contravened, the facility shall conduct monitoring for the parameters specified in A. (6.) through A. (29.).

If any of the water quality standards are exceeded, the facility shall be considered in violation until one of the options below is fully implemented:

- 1) Submit a complete application for 404 Permit (within 30 days after determining that a water quality standards is exceeded) to pump the seep discharge to one of the existing outfalls, install a pipe to discharge the seep to the Neuse River, or install an in-situ treatment system. After the 404 Permit is obtained, the facility shall complete the installation of the pump, pipe, or treatment system within 180 days from the date of the 404 permit receipt and begin pumping/discharging or treatment.
- 2) Demonstrate through modeling that the decanting and dewatering of the ash basin will result in the elimination of the seep. The modeling results shall be submitted to the Division within 120 days from the date of the seep discovery. Within 180 days from the completion of the dewatering the facility shall confirm that the seep flow ceased. If the seep flow continues, the facility shall choose one of the other options in this Special Condition.
- Demonstrate that the seep is discharging through the designated "Effluent Channel" and the water quality standards in the receiving stream are not contravened. This demonstration should be submitted to the Division no later than 180 days from the date of the seep discovery. The "Effluent Channel" designation should be established by the DEQ Regional

Office personnel prior to the issuance of the permit. This permit shall be reopened for cause to include the "Effluent Channel" in a revised permit.

All effluent limits, including water quality-based effluent limits, remain applicable notwithstanding any action by the Permittee to address the violation through one of the identified options, so that any discharge in exceedance of an applicable effluent limit is a violation of the Permit as long as the seep remains flowing.

### New Identified Seeps

If new seeps are identified, the facility shall follow the procedures outlined above. The deadlines for new seeps shall be calculated from the date of the seep discovery. The new identified seeps are not permitted until the permit is modified and the new seep included in the permit and the new outfall established for the seep.

## A. (50.) CHEMICAL DISCHARGES

Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to lakes, rivers, streams or other waters of the United States is prohibited unless specifically authorized elsewhere in this permit. Discharge of chlorine from the use of chlorine gas, sodium hypochlorite, or other similar chlorination compounds for disinfection in plant potable and service water systems and in sewage treatment is authorized. Use of restricted use pesticides for lake management purposes by applicators licensed by the N.C. Pesticide Board is allowed.



#### ATTACHMENT 1

#### GROUNDWATER MONITORING PLAN

The permittee shall conduct groundwater monitoring as may be required to determine the compliance of this NPDES permitted facility with the current groundwater Standards found under 15A NCAC 2L .0200.

#### 1. WELL CONSTRUCTION

- a. Monitoring wells shall be constructed in accordance with 15A NCAC 02C .0108 (Standards of Construction for Wells Other than Water Supply) and any other jurisdictional laws and regulations pertaining to well construction.
- b. Monitoring wells must be constructed by a North Carolina Certified Well Contractor, the property owner, or the property lessee according to General Statutes 87-98.4. If the construction is not performed by a certified well contractor, the property owner or lessee, provided they are a natural person, must physically perform the actual well construction activities.
- c. Within 30 days of completion of well construction, a completed Well Construction Record (Form GW-1) must be submitted for each compliance monitoring well to Division of Water Resources, Water Quality Regional Operations Section (WQROS), 1636 Mail Service Center, Raleigh, NC 27699-1636.
- d. The Washington Regional Office, telephone number (252) 946-6481, shall approve the location of new compliance monitoring wells prior to installation. The regional office shall be notified at least 48 hours prior to the construction of any compliance monitoring well and such notification to the WQROS regional supervisor shall be made from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays.
- e. All monitoring wells shall be regularly maintained. Such maintenance shall include ensuring that the well caps are rust-free and locked at all times, the outer casing is upright and undamaged, and the well does not serve as a conduit for contamination.
- f. If the Permittee intends to abandon a compliance monitoring well either temporarily or permanently, the Permittee shall justify the abandonment and request approval from the WQROS Regional Office within 30 business days prior to initiating abandonment procedures.
- g. Monitoring wells shall be abandoned in accordance with 15A NCAC 02C .0113 (Abandonment of Wells). Within 30 days of completion of well abandonment, a completed Well Abandonment Record (Form GW-30) must be submitted for each monitoring well to WQROS, 1636 Mail Service Center, Raleigh, NC 27699-1636.
- h. A map shall be provided within 60 days when compliance wells are added or deleted from the plan. The map shall be of appropriate scale to easily identify all features overlaid on the most recent aerial photograph. At a minimum, the map shall include the following information:
  - i. The location and identity of each monitoring well.
  - ii. The date the map is prepared and/or revised.
  - iii. Topographic contours in no more than ten (10) foot intervals. For areas of high relief, 20 foot intervals shall be acceptable.
- i. The map and any supporting documentation shall be sent to the WQROS, 1636 Mail Service Center, Raleigh, NC 27699-1636.

#### 2. GROUNDWATER SAMPLING AND COMPLIANCE.

- a. The compliance boundary for the disposal system shall be specified in accordance with 15A NCAC 02L .0107(a) or (b) dependent upon the date permitted. An exceedance of groundwater standards at or beyond the compliance boundary is subject to remediation action according to 15A NCAC 02L .0106(c) or (d) as well as enforcement actions in accordance with North Carolina General Statute 143-215.6A through 143-215.6C.
- b. Monitoring wells shall be sampled after construction and thereafter at the frequencies and for the parameters as specified in this plan. All maps, well construction forms, well abandonment forms and monitoring data shall refer to the permit number and the well nomenclature.

- c. Per 15A NCAC 02H .0800, a Division certified laboratory shall conduct all laboratory analyses for the required effluent, groundwater or surface water parameters.
- d. The measurement of water levels shall be made prior to purging the wells. The depth to water in each well shall be measured from the surveyed point on the top of the casing.
- e. The measuring points (top of well casing) of all monitoring wells shall be surveyed to provide the relative elevation of the measuring point for each monitoring well. The measuring points (top of casing) of all monitoring wells shall be surveyed relative to a common datum.
- f. Two copies of the monitoring well sampling shall be submitted on a Compliance Monitoring Form (GW-59CCR), and received no later than 60 days from the sampling date. Copies of the laboratory analyses shall be kept on site, and made available upon request. The Compliance Monitoring Form (GW-59CCR) shall include this permit number and the appropriate well identification number. The Compliance Monitoring Forms (GW-59CCR) shall be submitted to the Division of Water Resources Information Processing Unit, 1617 Mail Service Center, Raleigh, North Carolina 27699-1617
- g. For groundwater samples that exceed the ground water quality standards in 15A NCAC 02L .0202, the Regional Office shall be contacted within 30 days after submission of the groundwater monitoring form; an evaluation may be required to determine the impact of the waste disposal activities. Failure to do so may subject the permittee to a Notice of Violation, fines, and/or penalties.
- h. The provisions of sections 3(f) and 3(g) apply only to the sampling events described in 3(b) above. The reporting requirements for any sampling events other than those described in 3(b) above shall be in accordance with the general provisions of 15A NCAC 02L.
- 3. MONITORING WELLS, PARAMETERS, AND SAMPLING FREQUENCY.
  - a. Laboratory methods shall be EPA approved and sufficient to detect constituent quantities at or below their individual 15A NCAC 02L groundwater standards.
  - b. The following chart contains the compliance monitoring wells to be sampled, the parameters to be sampled, and the frequency in which the samples shall be collected.

MONITORING WELLS		FREQUENCY			
		Laboratory	Parameters		
	Aluminum	Antimony	Arsenic	Barium	
	Beryllium	Boron	Cadmium	Calcium	
	Cobalt	Chromium	Copper	Iron	
Active Ponds	Lead	Magnesium	Manganese	Molybdenum	
CTMW-1, CMW-5,	Mercury	Nickel	Potassium	Selenium	
CMW-6R, CMW-7, CMW-8, CMW-10,	Sodium	Strontium	Thallium	Vanadium	
BGMW-9, BGMW-10	Zinc	Chloride	Sulfate	Alkalinity	March, June,
<u>Inactive Ponds</u>	Bicarbonate	Carbonate	Total Dissolved Solids	Total Suspended Solids	October
BW-1, CW-1, CW-2,	Field Parameters				
CW-3, CW-4	Turbidity	рН	Temperature	Specific Conductance	
	Dissolved Oxygen	Oxidation Reduction Potential	Water level		

## **ATTACHMENT 2**

Plan for Identification of New Discharges as approved by the Division (State Enforceable Only).

 $\frac{http://deq.nc.gov/about/divisions/water-resources/water-resources-hot-topics/dwr-coal-ash-regulation/duke-energy-npdes-permits-for-facilities-with-coal-ash-ponds/duke-energy-npdes-modifications-renewals}$ 

