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 provisions 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 Carolinas, LLC

is hereby authorized to discharge wastewater from a facility located at

Rogers Energy Complex

573 Duke Power Rd Mooresboro Rutherford County

to receiving waters designated as the Broad River and Suck Creek in the Broad River Basin

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

This permit shall become effective.

This permit and authorization to discharge shall expire at midnight on.

Signed this day.

S. Jay Zimmerman, P. G.

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 Carolinas, LLC is hereby authorized to:

- 1. Continue to operate the following systems located at the **Rogers Energy Complex**, 573 Duke Power Rd, Mooresboro, in Rutherford County:
- **Outfall 002 Ash Basin Treatment System**. Continue to discharge treated wastewater from the ash basin through outfall 002, containing low volume wastes, coal pile runoff, metal cleaning wastes, treated domestic wastewater, chemical metal cleaning wastes, water treatment system wastewaters, ash transport water, landfill leachate (landfill contains fly and bottom ash, and gypsum from FGD system), cooling towers blowdown, runoff from limestone stacking area and gypsum stacking area.
- Internal Outfall 004 Flue Gas Desulfurization Treatment System. Continue to operate a FGD wet scrubber treatment system consisting of equalization tank, reaction tank, clarifier, filters, and effluent tank discharging to the ash basin (Outfall 002) or to the Wastewater Treatment System (outfall 005).
- Outfall 005 Wastewater Treatment System (WWTS) Upon commencement of the discharge from the new Wastewater Treatment System discharge landfill leachate, holding basin discharge (stormwater runoff from coal, limestone and gypsum storage areas), low volume wastes, FGD WWTS discharge and heat exchanger effluent, cooling tower blowdown, wastewater from the under-boiler mechanical drag system, treated sanitary wastewater, holding cell discharge (Unit 5 process water and stormwater, Unit 6 stormwater and treated sanitary wastewater), Unit 5 yard sump, Unit 6 process water, water from auxiliary basin, decanting and dewatering of ash basin, and cooling water from FGD system.
- **Outfall 002B** Upon completion of construction of the holding cell discharge emergency overflow from holding cell for process wastewaters, treated domestic wastewater and stormwater.
- **Outfall 002C** Upon completion of construction of the holding basin discharge emergency overflow from new holding basin for coal pile runoff, gypsum pile runoff and limestone pile runoff and holding cell auxiliary basin overflow.
- Seep Outfalls 102, 103, 104, 106, 110, 111, 113, 114, 115, 116, 117, 121, 127, 128, 129, 130, 131, and 132 continue to discharge groundwaters seeps.
- 2. Discharge from said treatment works at the location specified on the attached map into the Broad River (Outfalls 002, 002B, 002C, 005, 102, 103, 104, 106, 110, 111, 113, 117) and Suck Creek (Outfalls 114, 115, 116, 121, 127, 128, 129, 130, 131, 132) which are classified WS-IV waters in the Broad River Basin.

PART I

A. (1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **outfall 002** – (Ash Settling Pond Discharge-decanting of the free water above the settled ash layer that does not involve mechanical disturbance of the ash). Such discharges shall be limited and monitored by the Permittee as specified below:

	Discharge l	Limitations	Monitoring Requirements			
Effluent Characteristics	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²	
Flow (MGD)			Weekly	Calculation or similar readings	Т	
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly	Grab	E	
Total Suspended Solids ^{3,4}	30.0 mg/L	50.0 mg/L	Monthly	Grab	E	
Total Copper	102 μg/L	111 μg/L	See Note 5	Grab	E	
Total Iron	1.0 mg/L	1.0 mg/L	See Note 5	Grab	E	
Total Chromium	0.2 mg/L	0.2 mg/L	Monthly	Grab	E	
Total Zinc	1.0 mg/L	1.0 mg/L	Monthly	Grab	E	
Total Residual Chlorine ⁶		28 μg/L	2/Month	Grab	E	
Total Selenium, µg/L	1		Monthly	Grab	E	
Total Cadmium, µg/L			Monthly	Grab	E	
Total Mercury ⁷ , ng/L			Monthly	Grab	E	
Total Arsenic, µg/L			Monthly	Grab	E	
Total Thallium	3.1 μg/L	3.1 μg/L	Monthly	Grab	E	
pH 8	6.0 to 9	0.0 S.U.	2/Month	Grab	E	
Hardness–Total as [CaCO ₃ or (Ca + Mg)] mg/L			Quarterly	Grab	E	
Turbidity ⁹ , NTU			Monthly	Grab	E	
BOD ₅	30 mg/1	45 mg/l	Monthly	Grab	E	
Fecal Coliform	200/100 mL	400/100 mL	Monthly	Grab	E	
Total Nitrogen (NO ₂ +NO ₃ +TKN)			Quarterly	Grab	E	
Total Phosphorus			Quarterly	Grab	E	
Chronic Toxicity 10			Monthly	Grab	E	
Temperature 11			Weekly	Grab	E	
Temperature ¹²	32 °C (89.6 °F)		Weekly ¹³	Grab	D	

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. (50).
- 2. Sample Locations: T Ash Basin Discharge Tower, E Effluent; Effluent sampling shall be conducted at the discharge from the ash settling pond prior to mixing with any other waste streams, D Downstream at the Gaffney Water Works.

- 3. A total suspended solids monthly average of 50 mg/L is permitted provided that the permittee can satisfactorily demonstrate that the difference between the monthly average of 30 mg/L and 50 mg/L is the result of the concentration of total suspended solids in the intake water.
- 4. The facility shall continuously monitor TSS concentration when the decanting process commences and the dewatering pump shall be shutoff automatically when 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 pumps are employed for decanting.
- 5. Monitoring shall be per occurrence of chemical metal cleaning and sample shall be from a representative discharge.
- 6. The Division shall consider all effluent TRC values reported below $50~\mu g/L$ to be in compliance with the permit. However, the permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below $50~\mu g/L$. Neither free available chlorine (FAC) nor TRC may be discharged from any single generating unit for more than two hours in any single day, and not more than one unit in the plant may discharge FAC or TRC, unless the discharger demonstrates to the Division that the unit(s) cannot operate at or below this level of chlorination.
- 7. The facility shall employ method 1631E.
- 8. The facility shall continuously monitor pH when the decanting process commences. The decanting pump shall be shutoff automatically when 15 minutes running average pH falls below 6.1 standard unis or rises above 8.9 standard units. Pumping will be allowed to continue if interruption might result in a dam failure or damage. Continuous pH monitoring is only required when pumps are employed for decanting.
- 9. 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
- 10. Chronic Toxicity Monthly (Ceriodaphnia) P/F at 7.7 %; See condition A. (25) of this permit.
- 11. The temperature mixing zone is defined as the area extending from the intake of the power plant to approximately twelve (12) miles downstream at a location between the Cherokee County, South Carolina/Cleveland County, North Carolina and the substation for Gaston Shoals Power Plant, at the Gaffney Water Works.
- 12. In no case should the ambient temperature exceed 32 °C (89.6 °F). When the effluent temperature is recorded below 32 °C, reporting and monitoring of the downstream water temperature is not required. The ambient temperature shall be defined as the weekly average downstream water temperature.
- 13. In cases when the permittee experiences equipment problems and is unable to obtain weekly temperature from the temperature monitoring system, monitoring shall be reestablished within five working days.

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

Metal cleaning waste, coal pile runoff, ash transport water, domestic wastewater, landfill leachate, cooling tower blowdown, limestone and gypsum stacking area runoff, and low volume wastes shall be discharged into the ash settling pond until the new treatment system is operational.

The permittee shall obtain authorization from the Division prior to using any biocide in the cooling water; see condition A. (38).

By November 1, 2018 there shall be no discharge of pollutants in fly ash transport waters. This requirement only applies to fly ash ash transport water generated after November 1, 2018.

By December 31, 2020 there shall be no discharge of pollutants in bottom ash transport waters. This requirement only applies to bottom ash transport water generated after November 1, 2018.

The facility is allowed to drawdown the wastewater in the ash pond to no less than three feet above the ash.

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.

The facility shall use a floating pump station with free water skimmed from the basin surface using an adjustable weir.

When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds by physical-chemical treatment.

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.

The facility shall notify DWR Complex NPDES Permitting Unit and DWR Asheville Regional Office seven calendar days prior to the commencement of the dewatering.

A. (2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the commencement of the dewatering operation and lasting until permit expiration, the Permittee is authorized to discharge from **outfall 002** (**Dewatering - removing the interstitial water**). Such discharges shall be limited and monitored by the Permittee as specified below:

	Discharge 1	Limitations	Monitoring Requirements			
Effluent Characteristics	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²	
Flow (MGD)		1 MGD	Weekly	Calculation or similar readings	Т	
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly	Grab	E	
Total Suspended Solids ^{3,4}	30.0 mg/L	50.0 mg/L	Monthly	Grab	E	
Total Chromium	0.2 mg/L	0.2 mg/L	Weekly	Grab	E	
Total Zinc	1.0 mg/L	1.0 mg/L	Weekly	Grab	Е	
Total Chromium	0.2 mg/L	0.2 mg/L	Weekly	Grab	Е	
Total Zinc	1.0 mg/L	1.0 mg/L	Weekly	Grab	Е	
Total Lead, μg/L			Weekly	Grab	E	
Total Mercury ⁵ , ng/L			Weekly	Grab	Е	
Total Arsenic, μg/L			Weekly	Grab	Е	
Total Selenium, µg/L			Weekly	Grab	Е	
Total Molybdenum, μg/L			Weekly	Grab	E	
Total Thallium, µg/L			Weekly	Grab	E	
Chronic Toxicity ⁶			Monthly	Grab	E	
Total Nitrogen (NO ₂ +NO ₃ +TKN)			Quarterly	Grab	E	
Total Phosphorus			Quarterly	Grab	E	
pH ⁷	6 to 9	9 S.U	2/Month	Grab	E	
Turbidity 8, NTU			Weekly	Grab	E	
Hardness–Total as [CaCO ₃ or (Ca + Mg)] mg/L			Quarterly	Grab	E	
BOD ₅	30 mg/1	45 mg/l	Monthly	Grab	E	
Fecal Coliform	200/100 mL	400/100 mL	Monthly	Grab	E	
Temperature			Weekly	Grab	E	

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. (50).
- 2. Sample Locations: T Ash Basin Discharge Tower, E Effluent; Effluent sampling shall be conducted at the discharge from the ash settling pond prior to mixing with any other waste streams, D Downstream at the Gaffney Water Works.
- 3. A total suspended solids monthly average of 50 mg/L is permitted provided that the permittee can satisfactorily demonstrate that the difference between the monthly average of 30 mg/L and 50 mg/L is the result of the concentration of total suspended solids in the intake water.

- 4. The facility shall continuously monitor TSS concentration when the dewatering process commences and the dewatering pump shall be shutoff automatically when 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 for dewatering.
- 5. The facility shall employ method 1631E.
- 6. Chronic Toxicity Monthly (Ceriodaphnia) P/F at 0.5 %; See condition A. (26) of this permit.
- 7. 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 unis or rises above 8.9 standard units. Pumping will be allowed to continue if interruption might result in a dam failure or damage.
- 8. 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.

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

By November 1, 2018 there shall be no discharge of pollutants in fly ash transport waters. This requirement only applies to fly ash transport water generated after November 1, 2018.

By December 31, 2020 there shall be no discharge of pollutants in bottom ash transport waters. This requirement only applies to fly ash transport water generated after November 1, 2018.

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.

The facility shall use a floating pump station with free water skimmed from the basin surface using an adjustable weir.

When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds by physical-chemical treatment.

A. (3) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [15A NCAC 02B .0400 et seq., 02B .0500 et eq.]

During the period beginning upon commencement of operations of the new holding cell and lasting until expiration, the Permittee is authorized to discharge from **outfall 002B** – **Holding Cell Emergency Overflow**. Such discharges shall be limited and monitored by the Permittee as specified below:

Effluent	Discharge Limitations		Monitoring Requirements			
Characteristics	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location	
Flow (MGD)			Per discharge event	Estimate	Effluent	
Oil and Grease	15 mg/L	20 mg/L	Per discharge event	Grab	Effluent	
Total Suspended Solids	30 mg/L	100 mg/L	Per discharge event	Grab	Effluent	
pH ²			Per discharge event	Grab	Effluent	
BOD_5	30 mg/L	45 mg/L	Per discharge event	Grab	Effluent	
Fecal Coliform	200/100 mL	400/100 mL	Per discharge event	Grab	Effluent	
Total Copper	102 μg/L	111 μg/L	See Note 3	Grab	Effluent	
Total Iron	1.0 mg/L	1.0 mg/L	See Note 3	Grab	Effluent	
Acute Toxicity ⁴			Per discharge event	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. (50).
- 2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 3. Monitor only if the emergency overflow is used when chemical metal cleaning waste is being discharged.
- 4. Acute Toxicity Per discharge event, See Special Condition A. (28).

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

EPISODIC SAMPLING IS REQUIRED PER OCCURRANCE WHEN POND OVERFLOWS OCCUR FOR LONGER THAN ONE HOUR. ALL SAMPLES SHALL BE OF A REPRESENTATIVE DISCHARGE. THE DIVISION SHALL BE NOTIFIED IF THE EMERGENCY BASIN DISCHARGES.

A. (4) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **outfall 002C** – **Holding Basin Emergency Overflow**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

Effluent	Discharge Limitations		Monitoring Requirements			
Characteristics	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location	
Flow (MGD)			Per discharge event	Estimate	Effluent	
Oil and Grease	15 mg/L	20 mg/L	Per discharge event	Grab	Effluent	
Total Suspended Solids	30 mg/L	50 mg/L	Per discharge event	Grab	Effluent	
pH ²			Per discharge event	Grab	Effluent	
BOD ₅	30mg/L	45 mg/L	Per discharge event	Grab	Effluent	
Fecal Coliform	200/100 mL	400/100 mL	Per discharge event	Grab	Effluent	
Total Copper	102 μg/L	111 μg/L	See Note 3	Grab	Effluent	
Total Iron	1.0 mg/L	1.0 mg/L	See Note 3	Grab	Effluent	
Acute Toxicity ⁴			Per discharge event	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. (50).
- 2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 3. Monitor only if the emergency overflow is used when chemical metal cleaning waste is being discharged.
- 4. Acute Toxicity Per discharge event, See Special Condition A. (28).

EPISODIC SAMPLING IS REQUIRED PER OCCURRANCE WHEN POND OVERFLOWS OCCUR FOR LONGER THAN ONE HOUR. ALL SAMPLES SHALL BE OF A REPRESENTATIVE DISCHARGE. THE DIVISION SHALL BE NOTIFIED IF THE EMERGENCY BASIN DISCHARGES.

A. (5.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **internal outfall 004 – FGD Wastewater Treatment System**. Such discharges shall be limited and monitored by the Permittee as specified below:

	Discharge l	Limitations	Monitoring Requirements			
Effluent Characteristics	nent Characteristics Monthly Average		Measurement Frequency	Sample Type	Sample Location ²	
Flow			Monthly	Pump Logs or similar readings	Effluent	
Total Suspended Solids	30 mg/L	100 mg/L	Quarterly	Grab	Effluent	
Oil and Grease	15 mg/L	20 mg/L	Quarterly	Grab	Effluent	
Total Arsenic ³	8 µg/L	11 μg/L	Quarterly	Grab	Effluent	
Total Mercury ³	356 ng/L	788 ng/L	Quarterly	Grab	Effluent	
Total Selenium ³	12 μg/L	23 μg/L	Quarterly	Grab	Effluent	
Nitrate & Nitrite as N ³	4.4 mg/L	17 mg/L	Quarterly	Grab	Effluent	
pH ⁴			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. (50).
- 2. Samples taken in compliance with the monitoring requirements listed above shall be taken after bioreactor treatment and prior to mixing with other sources of wastewater.
- 3. The limits shall become effective December 31, 2023.
- 4. The pH shall not be less than 6.0 standard units, nor greater than 9.0 standard units.

A. (6.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning upon commencement of discharge from the new WWTS and lasting until permit expiration, the Permittee is authorized to discharge from **outfall 005 – WWTS.** Such discharges shall be limited and monitored by the Permittee as specified below:

	Discharge L	imitations	Monitoring Requirements			
Effluent Characteristics	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²	
Flow (MGD)			Continuous	Recorder ³	E	
Oil and Grease	15.0 mg/L	20.0 mg/L	2/Month	Composite	E	
Total Suspended Solids	30.0 mg/L	50.0 mg/L	2/Month	Composite	E	
Total Copper	251 μg/L	272 μg/L	See Note 4	Composite	E	
Total Iron	1.0 mg/L	1.0 mg/L	See Note 4	Composite	E	
Total Chromium	0.2 mg/L	0.2 mg/L	Monthly	Grab	E	
Total Zinc	1.0 mg/L	1.0 mg/L	Monthly	Grab	E	
Chronic Toxicity ⁵			Quarterly	Composite	E	
Total Nitrogen (NO ₂ +NO ₃ +TKN)			Quarterly	Composite	E	
Total Phosphorus			Quarterly	Composite	E	
pH ⁶			2/Month	Grab	E	
Total Residual Chlorine ⁷		28 μg/L	2/Month	Grab	E	
BOD, 5-day, 20° C	30.0 mg/L	45.0 mg/L	Monthly	Composite	E	
Fecal Coliform (geo. mean)	200/100 mL	400/100 mL	Monthly	Composite	E	
Hardness–Total as [CaCO ₃ or (Ca + Mg)] mg/L) Quarterly	Composite	E	
Temperature 8			Weekly	Grab	E	
Temperature ⁹	32°C (89.6°F)		Weekly ¹⁰	Grab	D	
Total Selenium 11, µg/L			Monthly/Weekly	Grab	E	
Total Cadmium 11, µg/L			Monthly/Weekly	Grab	E	
Total Mercury 11, 12, ng/L			Monthly/Weekly	Grab	E	
Total Arsenic 11, µg/L			Monthly/Weekly	Grab	E	
Total Thallium 11	3.1 μg/L	3.1 μg/L	Monthly/Weekly	Grab	E	

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. (50).
- 2. Sample Locations: E Effluent from treatment system, D Downstream at the Gaffney Water Works.
- 3. Flow may be measured by pump logs.
- 4. Monitoring shall be per occurrence of chemical metal cleaning and sample shall be from a representative discharge.
- 5. Chronic Toxicity (Ceriodaphnia) P/F at 3.14 %; March, June, September, and December; See Special Condition A. (27) of this permit.
- 6. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

- 7. The Division shall consider all effluent TRC values reported below 50 $\mu g/L$ to be in compliance with the permit. However, the permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below 50 $\mu g/L$. Neither free available chlorine (FAC) nor TRC may be discharged from any single generating unit for more than two hours in any single day, and not more than one unit in the plant may discharge FAC or TRC, unless the discharger demonstrates to the Division that the unit(s) cannot operate at or below this level of chlorination.
- 8. The temperature mixing zone is defined as the area extending from the intake of the power plant to approximately twelve (12) miles downstream at a location between the Cherokee County, South Carolina/Cleveland County, North Carolina and the substation for Gaston Shoals Power Plant, at the Gaffney Water Works.
- 9. In no case should the ambient temperature exceed 32°C (89.6°F). When the effluent temperature is recorded below 32 °C, reporting and monitoring of the downstream water temperature is not required. The ambient temperature shall be defined as the weekly average downstream water temperature.
- 10. In cases when the permittee experiences equipment problems and is unable to obtain weekly temperature from the temperature monitoring system, monitoring shall be reestablished within five working days.
- 11. Limits and monitoring is only required if the decanting and/or dewatering of the ash basin is treated through the Wastewater Treatment System. Monthly monitoring is required during decanting, weekly monitoring during dewatering. The limitation for thallium only applies when decanting.
- 12. The facility shall employ method 1631E.

All domestic wastewater produced at the power plant is to be fully treated through the onsite wastewater treatment system prior to being discharged.

The permittee shall obtain authorization from the Division prior to using any biocide in the cooling water; see condition A. (38).

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

See Special condition A. (51) Notification of Start-up

A. (7.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS 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 monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS MONITORING REQUIREME			IENTS	
	Monthly	Daily	Measurement	Sample	Sample
	Average	Maximum	Frequency ²	Туре	Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, μg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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	7,965 mg/L	7,965 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, ⁰ 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. (50).
- 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 Outfall 103 [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 103 – Seep discharge**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monitoring Requirements			
	Monthly	Daily	Measurement	Sample	Sample	
	Average	Maximum	Frequency ²	Type	Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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, ⁰ 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. (50).
- 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 Outfall 104 [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 104 – Seep discharge**. Such discharges shall be

limited and monitored¹ by the Permittee as specified below: **EFFLUENT CHARACTERISTICS DISCHARGE LIMITATIONS** MONITORING REQUIREMENTS Monthly Daily Measurement Sample Sample Average Maximum Frequency² Type Location Flow, MGD Effluent Monthly/Quarterly Estimate рН3 Monthly/Quarterly Grab Effluent Monthly/Quarterly **TSS** 30.0 mg/L 100.0 mg/L Effluent Grab Oil and Grease 15.0 mg/L 20.0 mg/L Monthly/Quarterly Grab Effluent Fluoride, µg/L Monthly/Quarterly Grab Effluent Total Mercury⁴, ng/L Monthly/Quarterly Grab Effluent Total Barium, mg/L Monthly/Quarterly Effluent Grab Total Iron, µg/L Monthly/Quarterly Grab Effluent Total Manganese, µg/L Monthly/Quarterly Grab Effluent Effluent Total Zinc, µg/L Monthly/Quarterly Grab Total Arsenic, µg/L Monthly/Quarterly Grab Effluent Total Cadmium, µg/L Monthly/Quarterly Effluent Grab Total Chromium, µg/L Monthly/Quarterly Grab Effluent Total Copper, µg/L Effluent Monthly/Quarterly Grab Total Lead, µg/L Monthly/Quarterly Grab Effluent Total Nickel, µg/L Monthly/Quarterly Grab Effluent Effluent Total Selenium, µg/L Monthly/Quarterly Grab Nitrate/nitrite as N, mg/L Monthly/Quarterly Grab Effluent Sulfates, mg/L Monthly/Quarterly Grab Effluent Chlorides, mg/L Monthly/Quarterly Effluent Grab TDS, mg/L Monthly/Quarterly Grab Effluent Effluent Total Hardness, mg/L Monthly/Quarterly Grab Temperature, ⁰C Monthly/Quarterly Grab Effluent Conductivity, µmho/cm Monthly/Quarterly Effluent Grab

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. (50).
- 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 Outfall 106 [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 106 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	cs Discharge Limitations Monitoring Requirem			IENTS	
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location
Flow, MGD	IIveluge		Monthly/Quarterly	Estimate	Effluent
pH ³			Monthly/Quarterly Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly Monthly/Quarterly	Grab	Effluent
Fluoride, µg/L	15.0 Hig/L	20.0 Hig/L	Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴ , ng/L			Monthly/Quarterly Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly Monthly/Quarterly	Grab	Effluent
Total Iron, µg/L			Monthly/Quarterly Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, μg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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, ⁰ 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. (50).
- 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 Outfall 110 [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 110 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monitoring Requirements			
	Monthly	Daily	Measurement	Sample	Sample	
	Average	Maximum	Frequency ²	Type	Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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, ⁰ 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. (50).
- 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 Outfall 111 [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 111 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monitoring Requirements			
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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, ⁰ 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. (50).
- 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 Outfall 113 [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 113 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	cs Discharge Limitations Monitoring Require			ORING REQUIREM	REMENTS	
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location	
Flow, MGD	Average	Maximum	Monthly/Quarterly	Estimate	Effluent	
pH ³				Grab	Effluent	
	20.0 /7	100.0 //	Monthly/Quarterly			
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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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. (50).
- 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 Outfall 114 [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 114 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		Monitoring Requirements			
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location	
DI MOD	Avelage	Waxiiiuiii				
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³		1000 /5	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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Copper	7.8 μg/L	10.7 μg/L	Monthly/Quarterly	Grab	Effluent	
Total Lead	2.9 μg/L	75 μg/L	Monthly/Quarterly	Grab	Effluent	
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Thallium	0.47 μg/L	0.47 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, ⁰ 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. (50).
- 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.
- 5. Total Mercury is an annual average limit.

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 Outfall 115 [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 115 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monit	IENTS	
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper	7.8 μg/L	10.7 μg/L	Monthly/Quarterly	Grab	Effluent
Total Lead	2.9 μg/L	75 μg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Thallium	0.47 μg/L	0.47 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, ⁰ 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. (50).
- 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.
- 5. Total Mercury is an annual average limit.

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 Outfall 116 [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 116 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monit	IENTS	
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, μg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper	7.8 μg/L	10.7 μg/L	Monthly/Quarterly	Grab	Effluent
Total Lead	2.9 μg/L	75 μg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, μg/L			Monthly/Quarterly	Grab	Effluent
Total Thallium	0.47 μg/L	0.47 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, ⁰ 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. (50).
- 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.
- 5. Total Mercury is an annual average limit.

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 Outfall 117 [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 117 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monitoring Requirements		
	Monthly	Daily	Measurement	Sample	Sample
	Average	Maximum	Frequency ²	Туре	Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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	103 μg/L	$2,216~\mu g/L$	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, ⁰ 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. (50).
- 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 Outfall 121 [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 121 – Seep discharge**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	Limitations	Monitoring Requirements		
	Monthly	Daily	Measurement	Sample	Sample
	Average	Maximum	Frequency ²	Type	Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper	7.8 μg/L	10.7 μg/L	Monthly/Quarterly	Grab	Effluent
Total Lead	2.9 μg/L	75 μg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Thallium	0.47 μg/L	0.47 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, ⁰ C			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. (50).
- 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.
- 5. Total Mercury is an annual average limit.

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 Outfall 127 [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 127 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monitoring Requirements		
	Monthly	Daily	Measurement	Sample	Sample
	Average	Maximum	Frequency ²	Type	Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴ , ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Cadmium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper	7.8 μg/L	10.7 μg/L	Monthly/Quarterly	Grab	Effluent
Total Lead	2.9 μg/L	75 μg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Thallium	0.47 μg/L	0.47 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, ⁰ C			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. (50).
- 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.
- 5. Total Mercury is an annual average limit.

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 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**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE	LIMITATIONS	Monitoring Requirement		
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location
Flow, MGD	Average	Maximum	Monthly/Quarterly	Estimate	Effluent
pH ³			, , , , , , , , , , , , , , , , , , ,	Grab	Effluent
1	20.0 /1	1000 / / /	Monthly/Quarterly		
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, µg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury ⁴			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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/Quarte	Grab	Effluent
			rly		
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, ⁰ 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. (50).
- 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 Outfall 129 [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 129 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		Monitoring Requirements			
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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, ⁰ 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. (50).
- 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 Outfall 130 [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 130 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		Monitoring Requirements			
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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, ⁰ 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. (50).
- 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 Outfall 131 [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 131 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		Monitoring Requirements			
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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, ⁰ 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. (50).
- 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 Outfall 132 [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 132 – Seep discharge**. Such discharges shall be limited and monitored¹ by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		Monitoring Requirements			
	Monthly Average	Daily Maximum	Measurement Frequency ²	Sample Type	Sample Location	
Flow, MGD			Monthly/Quarterly	Estimate	Effluent	
pH ³			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, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Mercury ⁴			Monthly/Quarterly	Grab	Effluent	
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent	
Total Iron, μg/L			Monthly/Quarterly	Grab	Effluent	
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent	
Total Arsenic, 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, ⁰ 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. (50).
- 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.) CHRONIC TOXICITY PERMIT LIMIT (MONTHLY) (Outfall 002 - Ash Pond decanting) [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 7.7 %.

The permit holder shall perform at a minimum, <u>monthly</u> 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 single quarter 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, NC 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 quarter, which is the three month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third 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 reopened 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. (26.) CHRONIC TOXICITY PERMIT LIMIT (MONTHLY) (Outfall 002 - Ash Pond Dewatering) [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 0.5 %.

The permit holder shall perform at a minimum, <u>monthly</u> 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. The tests will be performed *during the months of* March, June, September and December. These months signify the first month of each three-month toxicity testing quarter assigned to the facility. 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 single quarter 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, NC 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 quarter, which is the three month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third 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 reopened 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. (27.) CHRONIC TOXICITY PERMIT LIMIT (QUARTERLY) (Outfall 005) [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 3.14 %.

The permit holder shall perform at a minimum, *quarterly* 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. The tests will be performed *during the months of* March, June, September and December. These months signify the first month of each three-month toxicity testing quarter assigned to the facility. 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 single quarter 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, NC 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 quarter, which is the three month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third 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 reopened 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. (28.) ACUTE TOXICITY MONITORING - EPISODIC (Outfalls 002B, 002C) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

The permittee shall conduct FIVE acute toxicity tests using protocols defined as definitive in E.P.A. 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. Sampling and subsequent testing will occur during the first five discrete discharge events after the effective date 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, notification will be made to the Division within 2 weeks after June 30. Toxicity testing will 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, DWQ 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. (29) ASH POND

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. (30.) INSTREAM MONITORING

The facility shall conduct semiannual instream monitoring at the following locations:

- 1) Broad River -upstream at Alternate Route 221 and downstream at Hwy 150.
- 2) Suck Creek at least 100 feet upstream from outfall 132 and downstream before the confluence with the Broad River.

Sampling shall be conducted for arsenic, selenium, mercury (method 1631E), chromium, lead, cadmium, copper, zinc, bromide, hardness, and total dissolved solids (TDS). The monitoring results shall be reported in the DMRs and summarized with the NPDES permit renewal application.

A. (31.) BEST MANAGEMENT PRACTICES

It has been determined from information submitted that the plans and procedures in place at the Rogers Energy Center are equivalent to that of a Best Management Practice (BMP).

A. (32.) 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.

A. (33.) DOWNSTREAM VIOLATIONS

Upon acceptance of this permit, it is agreed that a violation of the temperature water quality standard at the specified downstream monitoring station, which is located in the state of South Carolina, shall be considered a legally enforceable violation in the state of North Carolina. For purposes of downstream violations, the point of compliance shall be considered the North Carolina/South Carolina state line.

A. (34.) ADDITIONAL CONDITIONS AND DEFINITIONS

- 1. EPA methods 200.7 or 200.8 (or the most current versions) shall be used for analyses of all metals except for total mercury (EPA Method 1631E).
- 2. 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)).
- 3. 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)).
- 4. 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)).
- 5. 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)).
- 6. 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.
- 7. The term "FGD wet scrubber wastewater" means wastewater resulting from the use of the flue-gas desulfurization wet scrubber.

A. (35.) DIKE INSPECTIONS

The permittee shall maintain and monitor diked areas in accordance with the 15A NCAC 2K.

A. (36.) FLOATING MATERIALS

The Permittee shall report all visible discharges of floating materials, such as an oil sheen, to the Director when submitting DMRs.

A. (37.) INTAKE SCREEN BACKWASH

Continued intake screen backwash discharge and overflow from the settling basin are permitted without limitations or monitoring requirements.

A. (38.) BIOCIDE CONDITION

The permittee shall not use any biocides except those approved in conjunction with the permit application. 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.) POLYCHLORINATED BIPHENYL COMPOUNDS

There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

A. (40.) CHEMICAL METAL CLEANING WASTES

It has been demonstrated that under certain conditions it is possible to reduce the concentration of metals in boiler cleaning wastes in the range of 92 to 99+ percent by treatment in ash ponds. Because of dilution

problems, and the existence of boundary interface layers at the extremities of the plume, it is difficult to prove beyond doubt that the quantity of iron and copper discharged will always be less than one milligram per liter times the flow of metal cleaning when treated in this manner.

The application of physical/chemical methods of treating wastes has also been demonstrated to be effective in the treatment of metal cleaning wastes. However, the effectiveness of ash pond treatment should be considered in relation to the small differences in effluent quality realized between the two methods.

It has been demonstrated that the presence of ions of copper, iron, nickel, and zinc in the ash pond waters was not measurably increased during the ash pond equivalency demonstration at the Duke Energy's Riverbend Steam Station. Therefore, when the following conditions are implemented during metal cleaning procedures, effective treatment for metals can be obtained at this facility:

- (1) Large ash basin providing potential reaction volumes in the ratio of 100 to 1.
- (2) Well-defined shallow ash delta near the ash basin influent.
- (3) Ash pond pH of no less than 6.5 prior to metal cleaning waste addition.
- (4) Four days retention time in ash pond with effluent virtually stopped.
- (5) Boiler volume less than 86,000 gallons.
- (6) Chemicals for cleaning to include only one or more of the following:
 - (a) Copper removal step- sodium bromate, NaBrO; ammonium carbonate, (NH)CO; and ammonium hydroxide, NHOH.
 - (b) Iron removal step-hydrochloric acid, HCl; and ammonium bifluoride, (NH)BF and proprietary inhibitors.
- (7) Maximum dilution of wastes before entering ash pond should not be greater than 6 to 1.
- (8) After treatment of metal cleaning wastes, if monitoring of basin effluents as required by the permit reveals discharges outside the limits of the permit. permittee will re-close the basin discharge, conduct such in-basin sampling as necessary to determine the cause of nonconformance, will take appropriate corrective actions, and will file a report with EPA including all pertinent data.

A. (41.) TOXICITY REOPENER CONDITION

This permit shall be modified, or revoked and reissued to incorporate toxicity limitations and monitoring requirements in the event 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. (42.) WAIVERS

Nothing contained in this permit shall be construed as a waiver by permittee or any right to a hearing it may have pursuant to State or Federal laws or regulations.

A. (43.) DOMESTIC WASTEWATER TREATMENT PLANT

The permittee shall at all times properly operate and maintain the domestic wastewater treatment plant to meet secondary standards.

A. (44.) CWA 316(b) REQUIREMENTS

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 should be submitted to:

- 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 Water Sciences Section 1623 Mail Service Center Raleigh, NC 27699-1623

A. (45.) APPLICABLE STATE LAW (STATE ENFORCEABLE ONLY)

The 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. (46.) 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.

A. (47.) 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. (48.) FISH TISSUE MONITORING NEAR ASH POND DISCHARGE

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.

A. (49.) DISCHARGE FROM SEEPAGE

Existing Discharges from Seepage

The facility identified 21 non-engineered discharges from seepage from the ash settling basins. The locations of the seeps are identified below and are depicted on the map attached to the permit.

Table 1.	Discharge	Coordinates	and Assigned	Outfall Numbers
Table 1.	Diocitaisc	Coordinates	aria ribbigita	Oddan Hanseld

Seep ID	Latitude	Longitude	Outfall number
S-2	35.217	-81.768	102
S-3	35.220	-81.758	103
S-4	35.218	-81.753	104
S-6	35.218	-81.748	106
S-10	35.220	-81.757	110
S-11	35.219	-81.756	111
S-13	35.218	-81.750	113
S-14	35.214	-81.756	114
S-15	35.214	-81.756	115
S-16	35.214	-81.756	116
S-17	35.217	-81.769	117
S-18	35.216	-81.768	102
S-19	35.216	-81.768	102
S-19a	35.216	-81.769	102
S-21	35.214	-81.755	121
S-27	35.21383	-81.756478	127
S-28	35.211677	-81.753876	128
S-29	35.211542	-81.753993	129
S-30	35.211496	-81.75391	130
S-31	35.211482	-81.753887	131
S-32	35.211258	-81.753646	132

The outfall for these discharges is through an effluent channel meeting the requirements in 15A NCAC 2B .0228. Within 180 days of the effective date of this permit, the permittee shall demonstrate, through in-stream sampling meeting the requirements of condition A. (30.), 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, 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 special condition A. (7).

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 Broad River or Suck Creek, 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.

3) 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 seep 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.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS

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 DENR / 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: http://www2.epa.gov/compliance/final-national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule.

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.)]

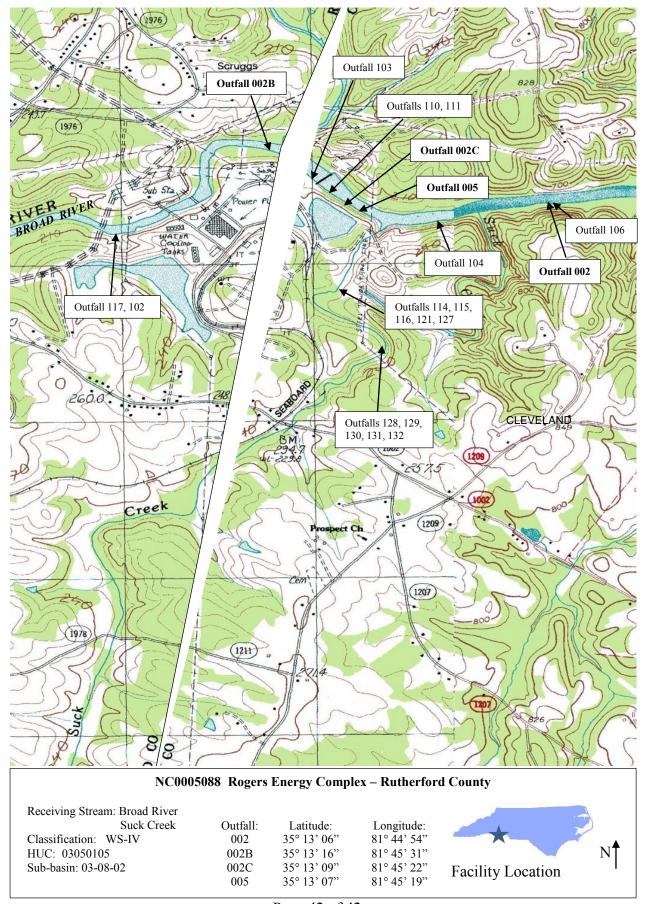
The permittee shall retain records of all Discharge Monitoring Reports, including eDMR submissions. These records or copies shall be maintained for a period of at least 3 years from the date of the report. This period may be extended by request of the Director at any time [40 CFR 122.41].

A. (51.) NOTIFICATION OF START-UP - OUTFALL 005

The permittee shall notify the Asheville Regional Office and the NPDES Permitting Unit in writing, seven (7) calendar days prior to the commencement of the discharge from the new waste water treatment system (Outfall 005). Notification shall be sent to the following addresses:

Division of Water Resources WQ Permitting Section - NPDES 1617 Mail Service Center Raleigh, NC 27699-1617

Division of Water Resources Asheville Water Quality Regional Operations Section 2090 U.S. 70 Highway Swannanoa, NC 28778-8211



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