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

Draft PERMIT

TO DISCHARGE WASTEWATER UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

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

Duke Energy Carolinas, LLC

is hereby authorized to discharge wastewater from a facility located at the

Allen Steam Station
253 Plant Allen Road (NCSR 2525)
Belmont
Gaston County

to receiving waters designated as the Catawba River (Lake Wylie) and South Fork Catawba River in the Catawba River Basin in accordance with effluent limitations, monitoring requirements, and other applicable conditions set forth in Parts I, II, and III.

This permit shall become effective

This permit and authorization to discharge shall expire at midnight on

Signed this day

DRAFT

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

SUPPLEMENT TO PERMIT COVER SHEET

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

Duke Energy Carolinas, LLC is hereby authorized to:

1. Continue to discharge:
   - Outfall 001: once through cooling water.
   - Outfall 002: Ash Basin discharge. This outfall includes domestic wastewater, stormwater from the coal pile area, miscellaneous stormwater flows, ash sluice, wastewater from turbine non-destructive testing, landfill leachate, FGD blowdown, yard drain sump, water treatment filter backwash, treated groundwater, laboratory wastes, and the power house sump at Unit 5. The domestic waste is pre-treated by a septic tank. Outfall 002 wastewater is treated using chemical coagulation, settling, and pH neutralization.
   - Outfall 002A: coal yard sump overflow (discharge from coal handling and storage areas).
   - Outfall 002B: power house sump overflow (floor wash water, boiler blowdown, water treatment waste, condensates, equipment cooling water, sealing water and miscellaneous leakage).
   - Outfall 003: miscellaneous equipment non-contact cooling and sealing water.
   - Outfall 004: miscellaneous non-contact cooling water, vehicle washwater, and intake screen backwash.
   - Outfall 006: Upon completion of construction of the Retention Basin, discharge domestic wastewater, stormwater from the coal pile area, miscellaneous stormwater flows, ash sluice, wastewater from turbine non-destructive testing, landfill leachate, FGD blowdown, yard drain sump, water treatment filter backwash, treated groundwater, laboratory wastes, and the power house sump at Unit 5. The domestic waste is pre-treated by a septic tank. Outfall 006 wastewater is treated using chemical coagulation, settling, and pH neutralization.
   - Outfall 008: the emergency spillway of the retired Ash Pond. The spillway is designed for a flood greater than 100-year event. Sampling of this spillway is waived due to unsafe conditions associated with sampling during overflow event.
   - Outfall 009: internal outfall, discharging to the Retention Basin. It is comprised of the coal yard runoff and backwash from preheater washes. The discharge will be treated in the holding basin by adding polymers and adjusting pH.
   - Toe Drain Outfalls 103 and 104: 2 potentially contaminated toe drains.
   - Seep Outfalls 102, 108, 108B, 110 (discharges through the stormater basin): 4 potentially contaminated groundwater seeps.

   From a facility located at the Plant Allen Steam Station on Plant Allen Road (NCSR 2525), south of Belmont in Gaston County, and

2. Without adding detergents or chemicals of any kind, discharge Asiatic clam/debris filter backwash from the intake filter screen, in accordance with condition A. (10.), and

3. Continue to operate a Flue Gas Desulfurization (FGD) wet scrubber wastewater treatment system discharging to the Ash Basin through Internal Outfall 005; consisting of:
   - A flow equalization tank and a maintenance tank
   - Feed systems for lime, sulfide, ferric chloride, polymer, hydrochloric acid, and molasses-based nutrient
   - Two clarifiers
   - Dual heat exchangers
   - A selenium reduction bioreactors
   - A sludge treatment system including three filter presses; and

4. Upon completion of construction of Retention Basin, operate a Flue Gas Desulfurization (FGD) wet scrubber wastewater treatment system discharging to the Retention Basin through Internal Outfall 007; consisting of:
    - A flow equalization tank and a maintenance tank
    - Feed systems for lime, sulfide, ferric chloride, polymer, hydrochloric acid, and molasses-based nutrient
    - Two clarifiers
    - Dual heat exchangers
    - A selenium reduction bioreactors
    - A sludge treatment system including three filter presses; and

5. Discharge from said treatment works at the location specified on the attached map into the Catawba River (outfalls 002, 002A, 002B, 004, 006, 008, 102, 103, 104, 108, 108B, 110) and the South Fork Catawba River (outfalls 001 and 003) which are classified Class WS-IV B and Class WS-V waters, respectively, in the Catawba River Basin.

Part I

A. (1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001)
[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 001- Condenser Cooling Water (CCW)**. Such discharges shall be limited and monitored[2] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Max.	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Daily	Pump Logs	Effluent
Temperature (June 1 – September 30)[1]	38.9 ºC (102 ºF)		Daily	Grab or Instantaneous	Effluent
Temperature (October 1 – May 31)[1]	35 ºC (95 ºF)		Daily	Grab or Instantaneous	Effluent

Notes:
1. Based upon studies conducted by the permittee and submitted to the Division, it has been determined pursuant to Section 316(a) of the Clean Water Act that the thermal component of the discharge assures the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in the receiving water body.
2. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).

Chlorination of the once through condenser cooling water, discharged through outfall 001, is not allowed under this permit. Should Duke Energy Carolinas, LLC wish to chlorinate its condenser cooling water, a permit modification must be obtained beforehand.

A. (2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 002-normal operation/decanting)
[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 002 – ash pond effluent** (**decanting the free water above the settled ash layer that does not involve mechanical disturbance of the ash**). Such discharges shall be limited and monitored[4] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Weekly	Instantaneous or Estimate	Influent or Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly	Grab	Effluent
Total Suspended Solids[8]	30.0 mg/L	50.0 mg/L	Monthly	Grab	Effluent
Total Copper [1]	33.4 µg/L	38.2 µg/L	Monthly	Grab	Effluent
Total Iron [1]	1.0 mg/L	1.0 mg/L	Monthly	Grab	Effluent
BOD, 5-day, 20º C[6]	30.0 mg/L	45.0 mg/L	Weekly	Grab	Effluent
Fecal Coliform (geo. mean) [6]	200/100 mL	400/100 mL	Weekly	Grab	Effluent
Total Selenium , µg/L			Weekly	Grab	Effluent
Total Arsenic, µg/L			Weekly	Grab	Effluent
Total Silver	0.255 µg/L	1.081 µg/L	Weekly	Grab	Effluent
Total Mercury [2], ng/L			Weekly	Grab	Effluent
Total Nitrogen (NO_2 + NO_3 + TKN), mg/L			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Quarterly	Grab	Effluent
Chronic Toxicity [3]			Monthly	Grab	Effluent
Total Hardness, mg/L			Monthly	Grab	Effluent
Turbidity[5], NTU			Monthly	Grab	Effluent
Bromide, mg/L			Monthly	Grab	Effluent
pH[7]	Between 6.0 and 9.0 standard units		Monthly	Grab	Effluent

Footnotes:
1. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
2. Mercury shall be measured using EPA Method 1631E.
3. Whole Effluent Toxicity shall be monitored by chronic toxicity (Ceriodaphnia) P/F at 23.6%, see Special Condition A. (20.).
4. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).
5. The net turbidity shall not exceed 50 NTU using a grab sample and measured by the difference between the effluent turbidity and the background turbidity. The sample for the background turbidity shall be taken at point in the receiving waterbody upstream of the discharge location, and the background turbidity and the effluent turbidity samples shall be taken within the same 24 hour period. NTU - Nephelometric Turbidity Unit.
6. The limit and monitoring apply only when the domestic wastewater is being discharged to the basin.

7. The facility shall continuously monitor pH when the decanting process commences and the decanting pump shall be shutoff automatically when 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standard units. Pumping will be allowed to continue if interruption might result in a dam failure or damage.
8. The facility shall continuously monitor TSS concentration when the decanting process commences and the decanting pump shall be shutoff automatically when the one half of the Daily Maximum limit (15 minutes average) is exceeded. Pumping will be allowed to continue if interruption might result in a dam failure or damage.

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

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 suction pipe with free water skimmed from the basin surface using an adjustable weir.

The limits and conditions in Section A. (3.) of the permit apply when water in the ash settling basin is lowered below the three feet trigger mark.

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

By February 28, 2021 there shall be no discharge of pollutants in bottom ash transport water (if the decision made on December 31, 2017 is not to retire the facility early). This requirement only applies to bottom ash transport water generated after February 28, 2021.

By December 31, 2023 there shall be no discharge of pollutants in bottom ash transport water (if the decision made on December 31, 2017 is the early retirement). This requirement only applies to bottom ash transport water generated after December 31, 2023.

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

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

A. (3.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 002-dewatering)
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the commencement of dewatering and lasting until expiration, the Permittee is authorized to discharge from **outfall 002 – ash pond effluent** (**dewatering-removing the interstitial water**). Such discharges shall be limited and monitored[4] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD		1.0	Weekly	Instantaneous or Estimate	Influent or Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Weekly	Grab	Effluent
Total Suspended Solids[6]	30.0 mg/L	50.0 mg/L	Weekly	Grab	Effluent
Total Copper [1]	33.4 µg/L	38.2 µg/L	Weekly	Grab	Effluent
Total Iron [1]	1.0 mg/L	1.0 mg/L	Weekly	Grab	Effluent
BOD, 5-day, 20º C[7]	30.0 mg/L	45.0 mg/L	Weekly	Grab	Effluent
Fecal Coliform (geo. mean) [7]	200/100 mL	400/100 mL	Weekly	Grab	Effluent
Total Selenium, µg/L			Weekly	Grab	Effluent
Total Arsenic, µg/L			Weekly	Grab	Effluent
Total Silver	0.255 µg/L	1.081 µg/L	Weekly	Grab	Effluent
Total Mercury [2], ng/L			Weekly	Grab	Effluent
Total Nitrogen (NO_2 + NO_3 + TKN), mg/L			Weekly	Grab	Effluent
Total Phosphorus, mg/L			Weekly	Grab	Effluent
Chronic Toxicity [3]			Monthly	Grab	Effluent
Total Hardness, mg/L			Weekly	Grab	Effluent
Turbidity[5], NTU			Weekly	Grab	Effluent
Bromide, mg/L			Weekly	Grab	Effluent
pH[8]	Between 6.0 and 9.0 standard units		Weekly	Grab	Effluent

Footnotes:

1. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
2. Mercury shall be measured using EPA Method 1631E.
3. Whole Effluent Toxicity shall be monitored by chronic toxicity (Ceriodaphnia) P/F at 1.6%, see Special Condition A. (20.).
4. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).
5. The net turbidity shall not exceed 50 NTU using a grab sample and measured by the difference between the effluent turbidity and the background turbidity. The sample for the background turbidity shall be taken at point in the receiving waterbody upstream of the discharge location, and the background turbidity and the effluent turbidity samples shall be taken within the same 24 hour period. NTU - Nephelometric Turbidity Unit.
6. The facility shall continuously monitor TSS concentration when the dewatering process commences and the dewatering pump shall be shutoff automatically when the one half of the Daily Maximum limit (15 minutes

average) is exceeded. Pumping will be allowed to continue if interruption might result in a dam failure or damage.

7. The limit and monitoring apply only when the domestic wastewater is being discharged to the basin.
8. The facility shall continuously monitor pH when the dewatering process commences and the dewatering pump shall be shutoff automatically when 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standard units. Pumping will be allowed to continue if interruption might result in a dam failure or damage.

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

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 suction pipe with free water skimmed from the basin surface using an adjustable weir.

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

By February 28, 2021 there shall be no discharge of pollutants in bottom ash transport water (if the decision made on December 31, 2017 is not to retire the facility early). This requirement only applies to bottom ash transport water generated after February 28, 2021.

By December 31, 2023 there shall be no discharge of pollutants in bottom ash transport water (if the decision made on December 31, 2017 is the early retirement). This requirement only applies to bottom ash transport water generated after December 31, 2023.

The facility shall notify DWR Complex NPDES Permitting Unit and DWR Winston-Salem Regional Office seven calendar days prior to the commencement of the decanting.

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

A. (4.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 002A)
[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 002A – Coal Yard Sump Overflows**. Such discharges shall be limited and monitored[2] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow, MGD			Per discharge event	Estimate	Effluent
pH	Between 6.0 and 9.0 standard units		Per discharge event	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Per discharge event	Grab	Effluent
Total Suspended Solids	30.0 mg/L	50.0 mg/L	Per discharge event	Grab	Effluent
BOD, 5-day, 20º C[4]	30.0 mg/L	45.0 mg/L	Per discharge event	Grab	Effluent
Fecal Coliform (geo. mean)[4]	200/100 mL	400/100 mL	Per discharge event	Grab	Effluent
Total Copper[3]	1.0 mg/L	1.0 mg/L	Per discharge event	Grab	Effluent
Total Iron[3]	1.0 mg/L	1.0 mg/L	Per discharge event	Grab	Effluent

Footnotes:
1. Effluent sampling shall be conducted at a point upstream of discharge to the receiving stream.
2. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).
3. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
4. The limit and monitoring apply only when the domestic wastewater is being discharged to the basin.

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

All flows shall be reported on monthly DMRs. If no flow occurs during a given month, the words "no flow" should be clearly written on the front of the DMR. All samples shall be of a representative discharge.

A. (5.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 002B)
[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 002B – Power House Sump Overflows**. Such discharges shall be limited and monitored[4] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow, MGD			Per discharge event	Estimate	Effluent
pH	Between 6.0 and 9.0 standard units		Per discharge event	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Per discharge event	Grab	Effluent
Total Suspended Solids	30.0 mg/L	100.0 mg/L	Per discharge event	Grab	Effluent
Total Copper[2]	1.0 mg/L	1.0 mg/L	Per discharge event	Grab	Effluent
Total Iron[2]	1.0 mg/L	1.0mg/L	Per discharge event	Grab	Effluent

Footnotes:
1. Effluent sampling shall be conducted at a point upstream of discharge to the receiving stream.
2. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
3. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).

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

All flows shall be reported on monthly DMRs. If no flow occurs during a given month, the words "no flow" should be clearly written on the front of the DMR. All samples shall be of a representative discharge.

A. (6.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 003)
[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 003 – miscellaneous equipment non-contact water and sealing water**. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Weekly	Estimate	Effluent

Footnotes:
1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).

Chlorination of the once through cooling water, discharged through outfall 003, is not allowed under this permit. If Duke Energy Carolinas, LLC wishes to chlorinate this once through cooling water, a permit modification must be obtained beforehand.

A. (7.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 004)
[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 004- miscellaneous non-contact cooling water, vehicle washwater, and intake screen backwash**. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Weekly	Estimate	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Quarterly	Grab	Effluent

Footnotes:
1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).

Chlorination of the once through cooling water, discharged through outfall 004, is not allowed under this permit. If Duke Energy Carolinas, LLC wishes to chlorinate this once through cooling water, a permit modification must be obtained beforehand.

A. (8.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Internal Outfall 005)
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until permit expiration, the Permittee is authorized to discharge from **internal outfall 005- treated FGD wet scrubber wastewater to ash settling basin**. Such discharges shall be limited and monitored[2] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow, MGD	Monitor & Report		Monthly	Pump logs or similar readings	Effluent
Total Arsenic	8.0 µg/L[4]	11.0 µg/L[4]	Quarterly	Grab	Effluent
Total Mercury[3], ng/L	356.0 ng/L[4]	788.0 ng/L[4]	Quarterly	Grab	Effluent
Total Selenium	12.0 µg/L[4]	23.0 µg/L[4]	Quarterly	Grab	Effluent
Nitrate/nitrite as N	4.4 mg/L[4]	17.0 mg/L[4]	Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Quarterly	Grab	Effluent
pH	Between 6.0 and 9.0 standard units		Quarterly	Grab	Effluent

Footnotes:

1. "Effluent" shall be defined as the discharge from the FGD wastewater treatment system prior to discharge to the ash settling basin.
2. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).
3. The facility shall use method 1631E.
4. The limits shall be met by February 28, 2021 (if the decision made on December 31, 2017 is not to retire the facility early). The limits shall be met by December 31, 2023 (if the decision made on December 31, 2017 is the early retirement). This time period is provided in order for the facility to budget, design, and construct the treatment system. Permit might be re-opened to implement the final EPA Effluent Guidelines and more stringent limits might be added.

All flows shall be reported on monthly DMRs. If no flow occurs during a given month, the words "no flow" shall be clearly written on the front of the DMR. All samples shall be of a representative discharge.

A. (9.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Internal Outfall 007)
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until permit expiration, the Permittee is authorized to discharge from **internal outfall 007- treated FGD wet scrubber wastewater to Retention Basin**. Such discharges shall be limited and monitored[2] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow, MGD	Monitor & Report		Monthly	Pump logs or similar readings	Effluent
Total Arsenic	8.0 µg/L[4]	11.0 µg/L[4]	Quarterly	Grab	Effluent
Total Mercury[3], ng/L	356.0 ng/L[4]	788.0 ng/L[4]	Quarterly	Grab	Effluent
Total Selenium	12.0 µg/L[4]	23.0 µg/L[4]	Quarterly	Grab	Effluent
Nitrate/nitrite as N	4.4 mg/L[4]	17.0 mg/L[4]	Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Quarterly	Grab	Effluent
pH	Between 6.0 and 9.0 standard units		Quarterly	Grab	Effluent

Footnotes:

1. "Effluent" shall be defined as the discharge from the FGD wastewater treatment system prior to discharge to the retention basin.
2. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).
3. The facility shall use method 1631E.
4. The limits shall be met by February 28, 2021 (if the decision made on December 31, 2017 is not to retire the facility early). The limits shall be met by December 31, 2023 (if the decision made on December 31, 2017 is the early retirement). This time period is provided in order for the facility to budget, design, and construct the treatment system. Permit might be re-opened to implement the final EPA Effluent Guidelines and more stringent limits might be added.

All flows shall be reported on monthly DMRs. If no flow occurs during a given month, the words "no flow" shall be clearly written on the front of the DMR. All samples shall be of a representative discharge.

A. (10.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 006)

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

During the period beginning upon commencement of operations and lasting until expiration, the Permittee is authorized to discharge from **outfall 006** – Retention Basin discharge. Such discharges shall be limited and monitored[1] 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			Weekly	Instantaneous or Estimate	Effluent
pH	Between 6.0 and 9.0 standard units		Monthly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly	Grab	Effluent
BOD, 5-day, 20º C[5]	30.0 mg/L	45.0 mg/L	Monthly	Grab	Effluent
Fecal Coliform (geo. mean)[5]	200/100 mL	400/100 mL	Monthly	Grab	Effluent
Fluoride, mg/L			Monthly	Grab	Effluent
Total Mercury[2], ng/L			Monthly	Grab	Effluent
Total Silver, µg/L			Monthly	Grab	Effluent
Total Iron[3]	1.0 mg/L	1.0 mg/L	Monthly	Grab	Effluent
Total Zinc, µg/L			Monthly	Grab	Effluent
Total Arsenic, µg/L			Monthly	Grab	Effluent
Total Cadmium, µg/L			Monthly	Grab	Effluent
Total Chromium, µg/L			Monthly	Grab	Effluent
Total Copper[3]	33.4 µg/L	38.2 µg/L	Monthly	Grab	Effluent
Total Lead, µg/L			Monthly	Grab	Effluent
Total Nickel, µg/L			Monthly	Grab	Effluent
Total Selenium, µg/L			Monthly	Grab	Effluent
Total Nitrogen (NO_2 + NO_3 + TKN), mg/L			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Quarterly	Grab	Effluent
Sulfates, mg/L			Monthly	Grab	Effluent
Chlorides, mg/L			Monthly	Grab	Effluent
Bromide, mg/L			Monthly	Grab	Effluent
TDS, mg/L			Monthly	Grab	Effluent
Total Hardness, mg/L			Monthly	Grab	Effluent
Temperature, ^{0}C			Monthly	Grab	Effluent
Conductivity, µmho/cm			Monthly	Grab	Effluent
Chronic Toxicity[4]			Monthly	Grab	Effluent

Notes:

1. Starting on December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (31.).
2. The facility shall use EPA method 1631E.
3. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
4. Whole Effluent Toxicity shall be monitored by chronic toxicity (Ceriodaphnia) P/F at 23.6%, see Special Condition A. (20.).
5. The limit and monitoring apply only when the domestic wastewater is being discharged to the basin.

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

A. (11.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 008)
[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 008** – Emergency spillway of the retired ash basin. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Waived	Estimate	Effluent
pH			Waived	Grab	Effluent
TSS			Waived	Grab	Effluent
Oil and Grease			Waived	Grab	Effluent

The emergency spillway is designed for a flood greater than 100-year event. Sampling of this spillway is waived due to unsafe conditions associated with sampling during overflow event.

A. (12.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Internal Outfall 009)
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning upon commencement of operation of the yard sump and lasting until expiration, the Permittee is authorized to discharge from **internal outfall 009** – Coal yard runoff and backwash water from preheater washes. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Waived	Estimate	Effluent
pH			Waived	Grab	Effluent
TSS	30.0 mg/L	50.0 mg/L	Waived	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Waived	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. (31.).

A. (13.) 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 monitored[1] 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, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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 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. (31.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (14.) 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 – Toe Drain Discharge. Such discharges shall be limited and monitored[1] 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, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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 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. (31.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (15.) 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 – Toe Drain Discharge. Such discharges shall be limited and monitored[1] 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, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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 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. (31.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (16.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 108)
[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 108 – Seep Discharge. Such discharges shall be limited and monitored[1] 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, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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 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. (31.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (17.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 108B)
[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 108B – Seep Discharge. Such discharges shall be limited and monitored[1] 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, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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 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. (31.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (18.) 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 monitored[1] 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, mg/L			Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium, mg/L			Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, 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 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. (31.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (19.) SPECIAL CONDITION FOR THE DISCHARGE OF ASIATIC CLAM/DEBRIS FILTER BACKWASH

The permittee may backwash the intake filter for Unit 5 condenser cooling water on an as-needed basis. It is understood that this wash water will contain materials indigenous to the Catawba River such as Asiatic clams and light debris. As these are naturally occurring in the river environment, they may be discharged with no adverse affects to the receiving stream. The Permittee may not add any detergent, chemicals or other non-indigenous material to the wash water without explicit permission from the Division of Water Resources.

A. (20.) CHRONIC TOXICITY PASS/FAIL PERMIT LIMIT (MONTHLY) (Outfall 002 and Outfall 006) [15A NCAC 02B .0200 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 23.6% for decanting/normal operations (Outfall 002) and retention basin discharge (Outfall 006), and 1.6% for dewatering (Outfall 002).

The permit holder shall perform at a minimum, ***monthly*** monitoring using test procedures outlined in the "North Carolina *Ceriodaphnia* Chronic Effluent Bioassay Procedure," Revised December 2010, or subsequent versions or "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised- December 2010) or subsequent versions. The tests will be performed **during the months of January, April, July, and October**. 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 month results in a failure 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
1623 Mail Service Center
Raleigh, North Carolina 27699-1623

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 re-opened and modified to include alternate monitoring requirements or limits.

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

A. (21.) 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. (22.) 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* is 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.
8. There shall be no discharge of polychlorinated biphenyl compounds.
9. The permittee shall report the presence of cenospheres observed in any samples.
10. The applicant is permitted to discharge chemical metal cleaning wastes to the ash basin under the conditions outlined in the 1976 Riverbend Ash Basin Equivalency Demonstration and the 1994 Allen Steam Station permit application.
11. Nothing contained in this permit shall be construed as a waiver by the permittee of any right to a hearing it may have pursuant to State or Federal laws and regulations.

A. (23.) 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. (24.) STRUCTURAL INTEGRITY INSPECTIONS OF ASH DAMS

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

A. (25.) CLEAN WATER ACT SECTION 316 (a) THERMAL VARIANCE

The thermal variance granted under Section 316(a) terminates on expiration of this NPDES permit. Should the permittee wish a continuation of its 316(a) thermal variance beyond the term of this permit, reapplication for such continuation shall be submitted in accordance with 40 CFR Part 125, Subpart H and Section 122.21(1) (6) not later than 180 days prior to permit expiration. Reapplication shall include a basis for continuation such as a) plant operating conditions and load factors are unchanged and are expected to remain so for the term of the reissued permit; b) there are no changes to plant discharges or other discharges in the plant site area which could interact with the thermal discharges; and c) there are no changes to the biotic community of the receiving water body which would impact the previous variance determination.

The next 316(a) studies shall be performed in accordance with the Division of Water Resources approved plan. The temperature analysis and the balanced and indigenous study plan shall conform to the specifications outlined in 40 CFR 125 Subpart H, the EPA's Draft 316(a) Guidance Manual, dated 1977, and the Region 4 letter to NCDENR, dated June 3, 2010. EPA shall be provided an opportunity to review the plan prior to the commencement of the study.

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

1) Electronic Version Only (pdf and CD)
   Division of Water Resources
   WQ Permitting Section - NPDES
   1617 Mail Service Center
   Raleigh, NC 27699-1617
2) Electronic Version (pdf and CD) and Hard Copy
   Division of Water Resources
   Water Sciences Section
   1623 Mail Service Center
   Raleigh, NC 27699-1623

A. (26.) CLEAN WATER ACT SECTION 316 (b)

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

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

1) Electronic Version Only (pdf and CD)
   Division of Water Resources
   WQ Permitting Section - NPDES
   1617 Mail Service Center
   Raleigh, NC 27699-1617
2) Electronic Version (pdf and CD) and Hard Copy
   Division of Water Resources
   Water Sciences Section
   1623 Mail Service Center
   Raleigh, NC 27699-1623

A. (27.) FISH TISSUE MONITORING NEAR ASH POND DISCHARGE

The facility shall conduct fish tissue monitoring annually and submit the results with the NPDES permit renewal application. The objective of this 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. Upon approval, the plan becomes an enforceable part of the permit.

A. (28.) INSTREAM MONITORING

The facility shall conduct semiannual in-stream monitoring (one upstream and one downstream of the ash pond discharge) for arsenic, selenium, mercury, chromium, lead, cadmium, copper, zinc, bromide, hardness, turbidity, and total dissolved solids (TDS). The upstream site (Station 250) is approximately 1.1 miles upstream of the discharge and downstream location (Station 235) is approximately 3 miles downstream of the discharge. In-stream monitoring should be conducted at the stations that have already been established through the BIP monitoring program. The monitoring results shall be submitted with the NPDES permit renewal application.

A. (29.) PRIORITY POLLUTANT ANALYSIS

The permittee shall conduct a priority pollutant analysis (in accordance with 40 CFR Part 136) once per permit cycle at all external outfalls and submit the results with the application for permit renewal.

A. (30.) DISCHARGE FROM SEEPAGE

The facility identified 14 unpermitted seeps (12 non-engineered and 2 toe drains) from the ash settling basin. However, 8 of the seeps do not need coverage under the permit based on the low concentration of the constituents associated with the coal ash and or/absence of the discharge to the "Waters of the State". These seeps are not considered point-source wastewater discharges under the Clean Water Act. 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

Discharge ID	Latitude	Longitude	Outfall number
S-2	35^{0}10.426'	81^{0}0.344'	102
S-3 (toe drain)	35^{0}10.513'	81^{0}0.360'	103
S-4 (toe drain)	35^{0}10.513'	81^{0}0.360'	104
S-8	35^{0}10.706'	81^{0}0.391'	108
S-8B	35^{0}10.41'	81^{0}0.23'	108B
S-10	35^{0}10.50'	81^{0}0.49'	110

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. (28.), 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 A. (13.).

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 standard is exceeded) to pump the seep discharge to one of the existing outfalls, install a pipe to discharge the seep to the Catawba River, or install an *in-situ* treatment system. After the 404 Permit is obtained, the facility shall complete the installation of the pump, pipe, or treatment system within 180 days from the date of the 404 permit receipt and begin pumping/discharging or treatment.
2) Demonstrate through modeling that the decanting and dewatering of the ash basin will result in the elimination of the seep. The modeling results shall be submitted to the Division within 120 days from the date of the seep discovery. Within 180 days from the completion of the dewatering the facility shall confirm

that the seep flow ceased. If the seep flow continues, the facility shall choose one of the other options in this Special Condition.

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 is not permitted until the permit is modified and the new seep included in the permit and the new outfall established for the seep.

A. (31.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS

[G.S. 143-215.1(b)]

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

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

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

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

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

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

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

If a permittee is unable to use the eDMR system due to a demonstrated hardship or due to the facility being physically located in an area where less than 10 percent of the households have broadband access, then a temporary waiver from the NPDES electronic reporting requirements may be granted and discharge monitoring

data may be submitted on paper DMR forms (MR 1, 1.1, 2, 3) or alternative forms approved by the Director. Duplicate signed copies shall be submitted to the mailing address above. See "How to Request a Waiver from Electronic Reporting" section below.

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

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

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

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

2. Electronic Submissions

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

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

EPA plans to establish a website that will also link to the appropriate electronic reporting tool for each type of electronic submission and for each state. Instructions on how to access and use the appropriate electronic reporting tool will be available as well. Information on EPA's NPDES Electronic Reporting Rule is found at: 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. (32.) APPLICABLE STATE LAW (State Enforceable Only)

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

Attachment 1

GROUNDWATER MONITORING PLAN

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

1. WELL CONSTRUCTION
   a. Monitoring wells shall be constructed in accordance with 15A NCAC 02C .0108 (Standards of Construction for Wells Other than Water Supply) and any other jurisdictional laws and regulations pertaining to well construction.
   b. Monitoring wells must be constructed by a North Carolina Certified Well Contractor, the property owner, or the property lessee according to General Statutes 87-98.4. If the construction is not performed by a certified well contractor, the property owner or lessee, provided they are a natural person, must physically perform the actual well construction activities.
   c. Within 30 days of completion of well construction, a completed Well Construction Record (Form GW-1) must be submitted for each compliance monitoring well to Division of Water Resources, Water Quality Regional Operations Section (WQROS), 1636 Mail Service Center, Raleigh, NC 27699-1636.
   d. The Mooresville Regional Office, telephone number (704) 663-1699, shall approve the location of new compliance monitoring wells prior to installation. The regional office shall be notified at least 48 hours prior to the construction of any compliance monitoring well and such notification to the WQROS regional supervisor shall be made from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays.
   e. All monitoring wells shall be regularly maintained. Such maintenance shall include ensuring that the well caps are rust-free and locked at all times, the outer casing is upright and undamaged, and the well does not serve as a conduit for contamination.
   f. If the Permittee intends to abandon a compliance monitoring well either temporarily or permanently, the Permittee shall justify the abandonment and request approval from the WQROS Regional Office within 30 business days prior to initiating abandonment procedures.
   g. Monitoring wells shall be abandoned in accordance with 15A NCAC 02C .0113 (Abandonment of Wells). Within 30 days of completion of well abandonment, a completed Well Abandonment Record (Form GW-30) must be submitted for each monitoring well to WQROS, 1636 Mail Service Center, Raleigh, NC 27699-1636.
   h. A map shall be provided within 60 days when compliance wells are added or deleted from the plan. The map shall be of appropriate scale to easily identify all features overlaid on the most recent aerial photograph. At a minimum, the map shall include the following information:
      i. The location and identity of each monitoring well.
      ii. The date the map is prepared and/or revised.
      iii. Topographic contours in no more than ten (10) foot intervals. For areas of high relief, 20 foot intervals shall be acceptable.
   i. The map and any supporting documentation shall be sent to the WQROS, 1636 Mail Service Center, Raleigh, NC 27699-1636.
2. GROUNDWATER SAMPLING AND COMPLIANCE.
   a. The compliance boundary for the disposal system shall be specified in accordance with 15A NCAC 02L .0107(a) or (b) dependent upon the date permitted. An exceedance of groundwater standards at or beyond the compliance boundary is subject to remediation action according to 15A NCAC 02L .0106(c) or (d) as well as enforcement actions in accordance with North Carolina General Statute 143-215.6A through 143-215.6C.
   b. Monitoring wells shall be sampled after construction and thereafter at the frequencies and for the parameters as specified in this plan. All maps, well construction forms, well

abandonment forms and monitoring data shall refer to the permit number and the well nomenclature.

c. Per 15A NCAC 02H .0800, a Division certified laboratory shall conduct all laboratory analyses for the required effluent, groundwater or surface water parameters.

d. The measurement of water levels shall be made prior to purging the wells. The depth to water in each well shall be measured from the surveyed point on the top of the casing.

e. The measuring points (top of well casing) of all monitoring wells shall be surveyed to provide the relative elevation of the measuring point for each monitoring well. The measuring points (top of casing) of all monitoring wells shall be surveyed relative to a common datum.

f. Two copies of the monitoring well sampling shall be submitted on a Compliance Monitoring Form (GW-59CCR), and received no later than 60 days from the sampling date. Copies of the laboratory analyses shall be kept on site, and made available upon request. The Compliance Monitoring Form (GW-59CCR) shall include this permit number and the appropriate well identification number. The Compliance Monitoring Forms (GW-59CCR) shall be submitted to the Division of Water Resources Information Processing Unit, 1617 Mail Service Center, Raleigh, North Carolina 27699-1617

g. For groundwater samples that exceed the ground water quality standards in 15A NCAC 02L .0202, the Regional Office shall be contacted within 30 days after submission of the groundwater monitoring form; an evaluation may be required to determine the impact of the waste disposal activities. Failure to do so may subject the permittee to a Notice of Violation, fines, and/or penalties.

h. The provisions of sections 3(f) and 3(g) apply only to the sampling events described in 3(b) above. The reporting requirements for any sampling events other than those described in 3(b) above shall be in accordance with the general provisions of 15A NCAC 02L.

3. MONITORING WELLS, PARAMETERS, AND SAMPLING FREQUENCY.

a. Laboratory methods shall be EPA approved and sufficient to detect constituent quantities at or below their individual 15A NCAC 02L groundwater standards.

b. The following chart contains the compliance monitoring wells to be sampled, the parameters to be sampled, and the frequency in which the samples shall be collected.

MONITORING WELLS[1]	PARAMETERS				FREQUENCY
AB-1R, AB-4S, AB-4D, *AB-9S, *AB-9D, *AB-10S, *AB-10D, AB-11D, AB-12S, AB-12D, AB-13S, AB-13D, AB-14D	**Laboratory Parameters**				**March, July, November**
	Aluminum	Antimony	Arsenic	Barium	
	Beryllium	Boron	Cadmium	Calcium	
	Cobalt	Chromium	Copper	Iron	
	Lead	Magnesium	Manganese	Molybdenum	
	Mercury	Nickel	Potassium	Selenium	
	Sodium	Strontium	Thallium	Vanadium	
	Zinc	Chloride	Sulfate	Alkalinity	
	Bicarbonate	Carbonate	Total Dissolved Solids	Total Suspended Solids	
	Field Parameters				
	Turbidity	pH	Temperature	Specific Conductance	
	Dissolved Oxygen	Oxidation Reduction Potential	Water level		

Note 1: Groundwater modeling for monitoring wells AB-9S, AB-9D, AB-10S and AB-10D has been removed from the groundwater monitoring plan as this information would be best suited for inclusion in a comprehensive site assessment plan. Duke is still required to submit ground water quality data for these wells.

Attachment 2

Plan for Identification of New Discharges (State Enforceable Only)

https://ncdenr.s3.amazonaws.com/s3fs-public/Water%20Quality/NPDES%20Coal%20Ash/Allen%20-%20Plan%20for%20Identification%20of%20New%20Discharges%20-%20Sept%2020%202014.pdf