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 Progress, LLC

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

Mayo Steam Electric Generating Plant
off of US Highway 501
northeast of Roxboro
Person County

to receiving waters designated as the Mayo Reservoir and Crutchfield Branch in the Roanoke River Basin in accordance with effluent limitations, monitoring requirements, and other applicable conditions set forth in Parts I, II, and III hereof.

The permit shall become effective

This permit and the 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 Progress, LLC

is hereby authorized to:

1. Continue to operate the following systems located at Mayo Steam Electric Generating Plant, off of US Highway 501, northeast of Roxboro, Person County:

    - Outfall 001. Cooling Tower System. Less than once per year the cooling towers and circulating water system are drained by gravity and discharged directly to Mayo Reservoir.

    - Outfall 002. Ash Pond Treatment System. Outfall 002 discharges directly to Mayo Reservoir. The ash pond receives ash transport water, ash transport water, coal pile runoff, stormwater runoff, cooling tower blowdown, FGD wastewater, and various low volume wastes such as boiler blowdown, oily waste treatment, wastes/backwash from the water treatment processes including Reverse-Osmosis (RO) wastewater, plant area wash down water, landfill leachate, monofill leachate, equipment heat exchanger water, groundwater, yard sump overflows, occasional piping leakage from limestone slurry and FGD system, and treated domestic wastewater.

    - Internal Outfall 008. Cooling tower blowdown is directly discharged to the ash pond. Cooling tower blowdown is usually mixed with ash sluice water prior to discharge to the ash pond. Cooling tower blowdown is indirectly discharged to Mayo Reservoir via the ash pond treatment system (Outfall 002).

    - Internal Outfall 009. Discharge from the FGD blowdown treatment system. FGD blowdown is indirectly discharged to Mayo Reservoir via the ash pond treatment system (Outfall 002).

    - Outfall 002A. Upon completion of construction, discharge from the new lined retention basin. Basin will accept wastes from holding cell (vacuumed sediments and solids), monofill leachate (coal ash), coal pile runoff, stormwater runoff, cooling tower blowdown, FGD wastewater, and various low volume wastes such as boiler blowdown, oily waste treatment, wastes/backwash from the water treatment processes including Reverse-Osmosis (RO) wastewater, plant area wash down water, landfill leachate, equipment heat exchanger water, groundwater, occasional piping leakage from limestone slurry and FGD system, chemical metal cleaning waste, and treated domestic wastewater. The wastewater from this outfall discharges to Mayo reservoir via the Outfall 002.

    - Internal Outfall 002B. Yard sump overflows (contain all wastes routed to the new retention basin). The wastewater from this outfall discharges to Mayo reservoir via the Outfall 002.

    - Toe Drain Outfalls 101 and 102 - 2 potentially contaminated toe drains. These toe drains discharge to effluent channels that flow to Crutchfield Branch.

- Seep Outfalls 101A, 102A, 102B, 108, and 110 - 5 potentially contaminated groundwater seeps. These seeps discharge to effluent channels that flow to Crutchfield Branch.

- Internal outfall 011. Coal ash monofill leachate. The wastewater from this outfall discharges to Mayo Reservoir via Outfall 002.

- Outfalls 004, 005, 006b, 006c, 006d, and 006e. These are former stormwater outfalls, they primarily contain stormwater and groundwater with some additional dust suppression irrigation, and cooling tower drift. These outfalls discharge to Mayo Reservoir.

2. Discharge from said treatment works and/or outfalls at the locations specified on the attached maps into Mayo Reservoir, which is classified as WS-V waters, and Crutchfield Branch, which is classified as C waters in the Roanoke 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 the permit and lasting until expiration, the Permittee is authorized to discharge from Outfall 001 (Cooling Tower System). Monitoring is required only during discharge events to the Mayo reservoir. Such discharges shall be limited and monitored[4] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow			Daily	Pump Logs or similar readings	Effluent
Free Available Chlorine[2]	200 µg/L	500 µg/L	Weekly	Grab	Effluent
Time of Chlorine Addition[2]		2 hours	Weekly	Logs	
Total Chromium[3]	0.2 mg/L	0.2 mg/L	2 / Month	Grab	Effluent
Total Zinc[3]	1.0 mg/L	1.0 mg/L	2 / Month	Grab	Effluent
Priority Pollutants [3]	No Detectable Amount		Annual	Grab	Effluent
Temperature, ^{0}C			Daily	Grab	Effluent
pH	≥ 6.0 and ≤ 9.0 standard units		Weekly	Grab	Effluent

Notes:

1. Samples taken in compliance with the monitoring requirements listed above shall consist of cooling tower effluent prior to its discharge to Mayo Reservoir.
2. Monitoring is required only if chlorine-based compounds is added to the system. Neither free available chlorine nor total residual chlorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division of Water Resources that discharge for more than two hours is required for macroinvertebrate control. The 500 µg/L limitation is an instantaneous maximum and is to be measured during the chlorine release period. The 200 µg/L limitation is an average during the chlorine release period. Simultaneous multi-unit chlorination is permitted.
3. Limitations and monitoring requirements for the 126 Priority Pollutants (per 40 CFR Part 423, Appendix A, exclusive of zinc and chromium) apply only if these substances are added by the permittee for cooling tower maintenance. Compliance with the limitations for the 126 priority pollutants in 40 CFR 423.13 (d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136. All primary industries are required to submit a priority pollutant analysis in accordance with 40 CFR Part 122 with their application for permit renewal.
4. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
5. The facility shall submit EPA Form 2C for this Outfall as soon as practicable, but no later than 180 days from the effective date of this permit.

The above listed effluent limitations shall be sampled prior to draining the cooling tower(s), at a location prior to discharge to Mayo Reservoir. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

A. (2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Internal Outfall 008) [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 008 (Internal outfall, Cooling Tower System). Such discharges shall be limited and monitored[4] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow			Daily	Pump Logs or similar readings	Effluent
Free Available Chlorine[2]	200 µg/L	500 µg/L	Weekly	Grab	Effluent
Time of Chlorine Addition[2]		2 hours	Weekly	Logs	
Total Chromium[3]	0.2 mg/L	0.2 mg/L	2 / Month	Grab	Effluent
Total Zinc[3]	1.0 mg/L	1.0 mg/L	2 / Month	Grab	Effluent
Priority Pollutants [3]	No Detectable Amount		Annual	Grab	Effluent
pH	≥ 6.0 and ≤ 9.0 standard units		Weekly	Grab	Effluent

Notes:

1. Samples taken in compliance with the monitoring requirements listed above shall consist of cooling tower blowdown.
2. Monitoring is required only if chlorine-based compound is added to the system. Neither free available chlorine nor total residual chlorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division of Water Resources that discharge for more than two hours is required for macroinvertebrate control. The 500 µg/L limitation is an instantaneous maximum and is to be measured during the chlorine release period. The 200 µg/L limitation is an average during the chlorine release period. Simultaneous multi-unit chlorination is permitted.
3. Limitations and monitoring requirements for the 126 Priority Pollutants (per 40 CFR Part 423, Appendix A, exclusive of zinc and chromium) apply only if these substances are added by the permittee for cooling tower maintenance. Compliance with the limitations for the 126 priority pollutants in 40 CFR 423.13 (d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136. All primary industries are required to submit a priority pollutant analysis in accordance with 40 CFR Part 122 with their application for permit renewal.
4. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).

This outfall is not authorized to discharge directly to the Mayo Reservoir.

A. (3.) 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 the permit and lasting until expiration, the Permittee is authorized to discharge from *Outfall 002* (**decanting the free water above the settled ash layer that does not involve mechanical disturbance of the ash**). **These requirements shall remain in effect during the term of the permit.** Such discharges shall be limited and monitored[4] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow			Weekly	Pump Logs or similar readings	Effluent
BOD, 5-day, 20º C	30.0 mg/L	45.0 mg/L	Monthly	Grab	Effluent
Fecal Coliform (geo. mean)	200/100 mL	400/100 mL	Monthly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly	Grab	Effluent
Total Suspended Solids[6]	30.0 mg/L	50.0 mg/L	Monthly	Grab	Effluent
Turbidity[5], NTU			Monthly	Grab	Effluent
Total Selenium	12.0 µg/L[8]	23.0 µg/L[8]	Weekly	Grab	Effluent
Total Chromium, µg/L			Monthly	Grab	Effluent
Total Copper, µg/L			Monthly	Grab	Effluent
Total Zinc, µg/L			Monthly	Grab	Effluent
Acute Toxicity[1]			Monthly	Grab	Effluent
Total Mercury[2]	356.0 ng/L[8]	788.0 ng/L[8]	Weekly	Grab	Effluent
Total Arsenic	8.0 µg/L[8]	11.0 µg/L[8]	Weekly	Grab	Effluent
Total Beryllium	6.5 µg/L	65.0 µg/L	Weekly	Grab	Effluent
Total Chlorides[3]	672.0 mg/L	860.0 mg/L	Weekly	Grab	Effluent
Total Fluoride	1,800.0 µg/L	1,800.0 µg/L	Weekly	Grab	Effluent
Total Barium, mg/L			Monthly	Grab	Effluent
Total Thallium	0.24 µg/L	0.24 µg/L	Weekly	Grab	Effluent
Total Antimony, µg/L			Monthly	Grab	Effluent
Total Boron, mg/L			Monthly	Grab	Effluent
Nitrate/nitrite as N	4.4 mg/L[8]	17.0 mg/L[8]	Monthly	Grab	Effluent
Temperature, ^{0}C			Daily	Grab	Effluent
pH[7]	≥ 6.0 and ≤ 9.0 standard units		2 / Month	Grab	Effluent

Notes:
Samples taken in compliance with the monitoring requirements listed above shall be taken prior to mixing with other waste streams.

1. Acute Toxicity (Fathead Minnow 24-hr) No significant mortality at 90%. Please See Special Condition A. (24.).
2. The facility shall use EPA method 1631E.
3. See Special Condition A. (23).
4. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).

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 decanting process commences and the pump shall be shutoff automatically when the one half of the Daily Maximum limit (15 minutes average) is exceeded. Pumping will be allowed to continue if interruption might result in a dam failure or damage. The continuous TSS monitoring is only required when the pumps are employed.
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. The continuous pH monitoring is only required when the pumps are employed.
8. The TBEL limits shall become effective on November 1, 2018. This time period is provided in order for the facility to budget, design, and construct the treatment system. The limits are enforced only when the overflow from the FGD basin is routed to Outfall 002. The FGD TBEL limits must be met for 14 days after the emergency overflow has discontinued. During the emergency overflow these parameters should be sampled on a daily basis. The emergency overflow is defined as a discharge event under Part II M. (3) of the permit.

There shall be no discharge of floating solids or visible foam in other than trace amounts outside an area five (5) meters from the discharge pipe. No chemical metal cleaning waste may be discharged to the ash pond. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

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.

The limits and conditions in Section A. (4.) 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 November 1, 2018 there shall be no discharge of pollutants in bottom ash transport water. This requirement only applies to bottom ash transport water generated after November 1, 2018.

The facility shall notify DWR Complex NPDES Permitting Unit and DWR Raleigh 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 002- dewatering)
[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* (**dewatering-removing the interstitial water**). Such discharges shall be limited and monitored[4] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow		2.0 MGD[10]	Weekly	Pump Logs or similar readings	Effluent
BOD, 5-day, 20º C	30.0 mg/L	45.0 mg/L	Weekly	Grab	Effluent
Fecal Coliform (geo. mean)	200/100 mL	400/100 mL	Weekly	Grab	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
Turbidity[5], NTU			Weekly	Grab	Effluent
Total Selenium	12.0 µg/L[9]	23.0 µg/L[9]	Weekly	Grab	Effluent
Acute Toxicity[1]			Monthly	Grab	Effluent
Total Mercury[2]	356.0 ng/L[9]	788.0 ng/L[9]	Weekly	Grab	Effluent
Total Arsenic	10.0 µg/L	340.0 µg/L	Weekly	Grab	Effluent
Total Arsenic	8.0 µg/L[9]	11.0 µg/L[9]	Weekly	Grab	Effluent
Total Cadmium	0.59 µg/L	3.24 µg/L	Weekly	Grab	Effluent
Total Chlorides[3]	672.0 mg/L	860.0 mg/L	Weekly	Grab	Effluent
Chromium (III) [7]	117.7 µg/L	905.1 µg/L	Weekly	Grab	Effluent
Chromium (VI)	11.0 µg/L	16.0 µg/L	Weekly	Grab	Effluent
Total Chromium, µg/L			Weekly	Grab	Effluent
Total Copper	7.88 µg/L	10.47 µg/L	Weekly	Grab	Effluent
Total Fluoride, µg/L			Weekly	Grab	Effluent
Total Lead	2.94 µg/L	75.5 µg/L	Weekly	Grab	Effluent
Total Nickel	25.0 µg/L	335.2 µg/L	Weekly	Grab	Effluent
Total Zinc	126.7 µg/L	125.7 µg/L	Weekly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Weekly	Grab	Effluent
Total Thallium	0.24 µg/L	0.24 µg/L	Weekly	Grab	Effluent
Total Antimony, µg/L			Weekly	Grab	Effluent
Total Boron, mg/L			Weekly	Grab	Effluent
Nitrate/nitrite as N	4.4 mg/L[9]	17.0 mg/L[9]	Weekly	Grab	Effluent
Temperature, ^{0}C			Daily	Grab	Effluent
pH[8]	$\geq$ 6.0 and $\leq$ 9.0 standard units		Weekly	Grab	Effluent

Notes:
Samples taken in compliance with the monitoring requirements listed above shall be taken prior to mixing with other waste streams.

1. Acute Toxicity (Fathead Minnow 24-hr) No significant mortality at 90%; Please see Special Condition A. (21).

2. The facility shall use EPA method 1631E.
3. See Special Condition A. (23)**.**
4. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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 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. The continuous TSS monitoring only required when the pumps are employed.
7. Cr(III)=Total Chromium-Chromium(VI).
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. The continuous pH monitoring only required when the pumps are employed.
9. The TBEL limits shall become effective on November 1, 2018. This time period is provided in order for the facility to budget, design, and construct the treatment system. The limits are enforced only when the overflow from the FGD basin is routed to Outfall 002. The FGD TBEL limits must be met for 14 days after the emergency overflow has discontinued. During the emergency overflow these parameters should be sampled on a daily basis. The emergency overflow is defined as a discharge event under Part II M. (3) of the permit.
10. The flow limit applies only to the water removed from the interstitial pore space.

There shall be no discharge of floating solids or visible foam in other than trace amounts outside an area five (5) meters from the discharge pipe. No chemical metal cleaning waste may be discharged to the ash pond. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

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.

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

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

During the period beginning upon the commencement of operations of the new Retention Basin and lasting until expiration, the Permittee is authorized to discharge from Internal Outfall 002A (new retention basin). Such discharges shall be limited and monitored[2] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Weekly	Instantaneous	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Quarterly	Grab	Effluent
Total Suspended Solids	30.0 mg/L	50.0 mg/L	Quarterly	Grab	Effluent
BOD, 5-day, 20º C	30.0 mg/L	45.0 mg/L	Weekly	Grab	Effluent
Fecal Coliform (geo. mean)	200/100 mL	400/100 mL	Weekly	Grab	Effluent
Temperature, ^{0}C			Daily	Grab	Effluent
Total Arsenic	8.0 µg/L[3]	11.0 µg/L[3]	Quarterly	Grab	Effluent
Total Mercury[1]	356.0 ng/L[3]	788.0 ng/L[3]	Quarterly	Grab	Effluent
Total Selenium	12.0 µg/L[3]	23.0 µg/L[3]	Quarterly	Grab	Effluent
Nitrate/nitrite as N	4.4 mg/L[3]	17.0 mg/L[3]	Quarterly	Grab	Effluent
Chloride, mg/L			Quarterly	Grab	Effluent
Total Nickel, µg/L			Quarterly	Grab	Effluent
Sulfate, mg/L			Quarterly	Grab	Effluent
Fluoride, µg/L			Quarterly	Grab	Effluent
Total Barium, mg/L			Quarterly	Grab	Effluent
Total Chromium, µg/L			Quarterly	Grab	Effluent

Notes:

1. The facility shall use EPA method 1631E.
2. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
3. The TBEL limits shall become effective on November 1, 2018. This time period is provided in order for the facility to budget, design, and construct the treatment system. The limits are enforced only when the overflow from the FGD basin is routed to Outfall 002A. The FGD TBEL limits must be met for 14 days after the emergency overflow has discontinued. During the emergency overflow these parameters should be sampled on a daily basis. The emergency overflow is defined as a discharge event under Part II M. (3) of the permit.

There shall be no discharge of floating solids or visible foam in other than trace amounts outside an area five (5) meters from the discharge pipe. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

A. (6.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Internal Outfall 002B) [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 002B (yard sump overflow). Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Per discharge event	Pump logs or estimate	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
pH, standard units			Per discharge event	Grab	Effluent

Notes:

1. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).

A. (7.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Internal Outfall 009) [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 009 (treated FGD wet scrubber wastewater). Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Weekly	Instantaneous	Effluent
Total Arsenic	8.0 µg/L[2]	11.0 µg/L[2]	Quarterly	Grab	Effluent
Total Mercury[3]	356.0 ng/L[2]	788.0 ng/L[2]	Quarterly	Grab	Effluent
Total Selenium	12.0 µg/L[2]	23.0 µg/L[2]	Quarterly	Grab	Effluent
Nitrate/nitrite as N	4.4 mg/L[2]	17.0 mg/L[2]	Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Quarterly	Grab	Effluent
Total Suspended Solids	30.0 mg/L	50.0 mg/L	Quarterly	Grab	Effluent

Notes:

1. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
2. The TBEL limits shall become effective on November 1, 2018. This time period is provided in order for the facility to budget, design, and construct the treatment system.
3. The facility shall use EPA method 1631E.

A. (8.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 101)
[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 101 – Toe Drain Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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 Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Boron, 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	2.94 µg/L	75.5 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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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 no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (9.) 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 – Toe Drain Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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 Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Boron, 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	2.94 µg/L	75.5 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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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 no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (10.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 101A)
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]
During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 101A – Seep Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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 Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Boron, 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	2.94 µg/L	75.5 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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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 no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (11.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 102A)
[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 102A – Seep Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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 Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Boron, 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	2.94 µg/L	75.5 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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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.
4. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
5. The facility shall use EPA method 1631E.

If no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (12.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 102B)
[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 102B – Seep Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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 Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Boron, 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	2.94 µg/L	75.5 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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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 no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (13.) 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:

PARAMETER	LIMITS		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 Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Boron, 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	2.94 µg/L	75.5 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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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 no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (14.) 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:

PARAMETER	LIMITS		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 Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Boron, 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	2.94 µg/L	75.5 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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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 no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

The facility shall install a screen or a barrier downstream of the location identified as S-3 on the attached map to minimize fish migration into the effluent channels that are combining at S-3. The design of the screen/barrier shall be submitted to the Division for approval no later than 6 months from the effective date of the permit. The screen/barrier shall be installed no later than 6 months after Division approval.

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

A. (15.) 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 – Former stormwater outfall. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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. The facility shall submit EPA Form 2C for this Outfall as soon as practicable, but no later than 180 days from the effective date of this permit.

If no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (16.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (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 expiration, the Permittee is authorized to discharge from outfall 005 – Former stormwater outfall. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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. The facility shall submit EPA Form 2C for this Outfall as soon as practicable, but no later than 180 days from the effective date of this permit.

If no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (17.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 006b)
[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 006b – Former stormwater outfall. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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. The facility shall submit EPA Form 2C for this Outfall as soon as practicable, but no later than 180 days from the effective date of this permit.

If no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (18.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 006c)
[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 006c – Former stormwater outfall. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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. The facility shall submit EPA Form 2C for this Outfall as soon as practicable, but no later than 180 days from the effective date of this permit.

If no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (19.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 006d)
[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 006d – Former stormwater outfall. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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. The facility shall submit EPA Form 2C for this Outfall as soon as practicable, but no later than 180 days from the effective date of this permit.

If no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (20.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 006e)
[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 006e – Former stormwater outfall. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		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
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic, µg/L			Monthly/Quarterly	Grab	Effluent
Total Chromium, µg/L			Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Selenium, µg/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. The permittee shall submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition A. (25.).
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. The facility shall submit EPA Form 2C for this Outfall as soon as practicable, but no later than 180 days from the effective date of this permit.

If no discharge occurs during the reporting period or the Permittee is unable to obtain a representative sample due to low-flow conditions at the seep, the Permittee shall submit its DMR, as required, and indicate "No Flow" for the seep (15A NCAC 02B .0506(a)(1)(E)).

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

A. (21.) ACUTE TOXICITY PASS/FAIL PERMIT LIMIT (Monthly) (Outfall 002)
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

The permittee shall conduct acute toxicity tests on a ***monthly*** basis using protocols defined in the North Carolina Procedure Document entitled "Pass/Fail Methodology for Determining Acute Toxicity In A Single Effluent Concentration" (Revised-July, 1992 or subsequent versions). The monitoring shall be performed as a Fathead Minnow (*Pimephales promelas*) 24 hour static test. The effluent concentration at which there may be at no time significant acute mortality is 90% (defined as treatment two in the procedure document). Effluent samples for self-monitoring purposes must be obtained during representative effluent discharge below all waste treatment.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the month in which it was performed, using the parameter code TGE6C. Additionally, DWR Form AT-2 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Resources
Water Sciences Section
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 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 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 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. (22.) DOMESTIC WASTEWATER TREATMENT PLANT
The domestic wastewater treatment plant shall be properly operated and maintained to ensure treatment of domestic wastewater to secondary levels.

A. (23.) MIXING ZONE SAMPLING

PARAMETER	LIMITS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Total Chlorides				Weekly	Grab	Mixing Zone

Instream sampling for chlorides is required at the edge of the mixing zone, 200 meters linear distance from the discharge point. The boat dock on Mayo Lake near the discharge point has been approved by DWR as an acceptable monitoring point for the mixing zone.

A. (24.) 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. (25.) 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. 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)]

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. (26.) 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. (27.) STRUCTURAL INTEGRITY INSPECTIONS OF ASH POND DAM
The facility shall meet the dam design and dam safety requirements per 15A NCAC 2K.

A. (28.) 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.

A. (29.) FISH TISSUE MONITORING NEAR ASH POND DISCHARGE – OUTFALL 002
The facility shall conduct fish tissue monitoring annually 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. Upon approval, the monitoring plan shall become the enforceable part of the permit.

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
   1621 Mail Service Center
   Raleigh, NC 27699-1621

A. (30.) INSTREAM MONITORING
The facility shall conduct semiannual instream monitoring (1000 ft. from Outfall 002) for total arsenic, total selenium, total mercury (method 1631E), total chromium, total lead, total cadmium, total copper, total zinc, bromide, total hardness, temperature, and total dissolved solids (TDS). The monitoring results shall be

reported in the monthly DMRs and submitted with the NPDES permit renewal application. The monitoring shall be conducted in accordance with the Sampling Plan approved by the Division. Upon approval, the monitoring plan shall become the enforceable part of the permit.

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
   1621 Mail Service Center
   Raleigh, NC 27699-1621

A. (31.) DISCHARGE FROM SEEPAGE

Existing Discharges from Seepage

The facility identified 10 unpermitted seeps (all non-engineered) from the ash settling basin and 2 toe drains. However, 5 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. Seeps that have not been covered by the permit shall be sampled once during the next permit cycle and the results shall be submitted with the next renewal application. The samples shall be analyzed for all the parameters listed in the permit for seep outfalls.

The locations of the seeps covered by the permit 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-1 (west toe drain)	36.53890	-78.89351	101
S-2 (east toe drain)	36.53890	-78.89341	102
S-1A	36.538903	-78.89351	101A
S-2A	36.53801	-78.89161	102A
S-2B	36.53800	-78.89137	102B
S-8	36.53750	-78.89040	108
S-10	36.538422	-78.890395	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. (31.), 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. (8.).

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 Mayo Lake/Crutchfield Branch, 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.

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. (32.) 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. (33.) 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. (34.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Internal Outfall 011) [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 009 (coal ash monofill leachate). Such discharges shall be limited and monitored[1] by the Permittee as specified below:

PARAMETER	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD			Monthly	Instantaneous	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

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. (25.).

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 Raleigh Regional Office, telephone number (919) 791-4200, 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.

<table>
<tr><th>MONITORING WELLS</th><th colspan="4">PARAMETERS</th><th>FREQUENCY</th></tr>
<tr><td rowspan="11">CW-1, CW-1D, CW-2, CW-2D, CW-3, CW-4, CW-5, CW-6, BG-1, BG-2</td><td colspan="4">LABORATORY PARAMETERS</td><td rowspan="11">April, July, November</td></tr>
<tr><td>Aluminum</td><td>Antimony</td><td>Arsenic</td><td>Barium</td></tr>
<tr><td>Beryllium</td><td>Boron</td><td>Cadmium</td><td>Calcium</td></tr>
<tr><td>Cobalt</td><td>Chromium</td><td>Copper</td><td>Iron</td></tr>
<tr><td>Lead</td><td>Magnesium</td><td>Manganese</td><td>Molybdenum</td></tr>
<tr><td>Mercury</td><td>Nickel</td><td>Potassium</td><td>Selenium</td></tr>
<tr><td>Sodium</td><td>Strontium</td><td>Thallium</td><td>Vanadium</td></tr>
<tr><td>Zinc</td><td>Chloride</td><td>Sulfate</td><td>Alkalinity</td></tr>
<tr><td>Bicarbonate</td><td>Carbonate</td><td>Total Dissolved Solids</td><td>Total Suspended Solids</td></tr>
<tr><td colspan="4">Field Parameters</td></tr>
<tr><td>Turbidity</td><td>pH</td><td>Temperature</td><td>Specific Conductance</td></tr>
<tr><td>Dissolved Oxygen</td><td>Oxidation Reduction Potential</td><td>Water level</td><td></td></tr>
</table>

Attachment 2

Plan for Identification of New Discharges, and subsequent amendments (State Enforceable Only)

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