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

Duke Energy Progress LLC

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

Cape Fear Steam Electric Power Plant
500 CP&L Road
Moncure
Chatham County

to receiving waters designated as an unnamed tributary to the Cape Fear River (Outfall 007) and to the Cape Fear River (Outfalls 008, 008A, 008B, 009) in the Cape Fear River Basin in accordance with applicable effluent limitations, monitoring requirements, and other applicable conditions set forth in Parts I, II and III hereof.

This permit modification shall become effective . . . . . .

This permit and authorization to discharge shall expire at midnight on June 30, 2023.

Signed this day . . . . . .

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S. Daniel Smith, 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, and as of this 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. Operate the following modified systems located at the decommissioned **Cape Fear Steam Electric Power Plant** at 500 CP&L Road near Moncure in Chatham County:

   - **1978 Ash Basin (Internal Outfall 001).** This outfall is designated as an emergency discharge only and will consist of ash basin decanting wastewater. This is limited to discharging excess wastewater above the available treatment plant capacity during an eminent threat of 1978 Ash Basin overflow.

   - **1985 Ash Basin (Internal Outfall 005).** This outfall is designated as an emergency discharge only and will consist of ash basin decanting wastewater. This is limited to discharging excess wastewater above the available treatment plant capacity during an eminent threat of 1985 Ash Basin overflow.

   - **Combined Wastewater to an Unnamed Tributary to the Cape Fear River (Outfall 007).** This outfall will discharge collected flows from the effluent channel consisting of ash basin comingled treated decanting wastewater, storm water, constructed seep flows, and episodic emergency flow from Internal Outfalls 001 and 005.

   - **Combined Wastewater to the Cape Fear (Outfall 008)**. This new outfall will discharge combined flows of treated wastewater from the on-site treatment facility, if necessary, to assure state Water Quality Standards are not contravened in the receiving stream.

   - **1963/1970 Ash Basins (Outfall 008A)**. This new outfall is designated as an emergency discharge only and will consist of ash basin decanting wastewater. This is limited to discharging excess wastewater above the available treatment plant capacity during an eminent threat of 1963/1970 Ash Basin overflow.

   - **1963/1970 Ash Basins (Outfall 008B)**. This new outfall is designated as an emergency spillway only and designed to safely pass a design storm event. This Outfall (lat. - $35^0$34’57.37”; long. - $79^0$02’57.50”) discharges to Cape Fear River. Sampling of this spillway is waived due to unsafe conditions associated with sampling during overflow events.

   - **Ash Beneficiation Retention Pond Wastewater (Outfall 009).** This new outfall will discharge episodic wastewater collected from isolated areas of the beneficiation operation consisting of ash storage runoff, truck loading spills, and dust suppression.

   - **Constructed French Drain (Internal Outfall S-05).** This internal outfall [Lat: 35° 35’ 25” N, Long: 79° 2’ 47” W] is for discharge of combined flow from two French Drain sources to effluent channel of Outfall 007.

2. Upon construction and completion of the new proposed Outfall for Outfall 008, notify DWR Raleigh Regional Office and NPDES Complex Permitting Unit, in writing, at least two weeks prior to the commencement of discharge from the newly constructed Outfall 008. Notification can be submitted via email or by mail to the following address:

NC Division of Water Resources
Water Quality Regional Office Operations Section Supervisor
3800 Barrett Drive
Raleigh, NC 27609

And

NC Division of Water Resources
NPDES Complex Permitting Supervisor
1617 Mail Service Center
Raleigh, NC 27699-1617

3. Discharges are to the Cape Fear River and unnamed tributaries to the Cape Fear River, and are classified as WS-IV waters in the Cape Fear River Basin.

Part I

A. (1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Internal Outfall 001
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

a. During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge [1] on **an emergency basis 1978 (West) Ash Basin decanting wastewater in excess of the facility's treatment capacity of 0.72 MGD to mitigate an eminent 1978 Ash Basin overflow**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency [2]	Sample Type	Sample Location
Flow			Daily during Episodic Event	Estimate	Effluent

Footnotes:
1. The Permittee shall notify the Raleigh Regional Office (919) 791- 4200 no later than the end of the next business day of the occurrence of an emergency discharge event including time of occurrence, duration, and cause.
2. During the duration of an emergency discharge event, the flow shall be reported daily.

b. Upon the occurrence of an emergency overflow event, Outfall 007 effluent sampling and reporting shall commence immediately for the limited parameters listed in A. (3.) except for Mercury and Chronic Toxicity, and shall continue once per week for the duration of the emergency discharge event. Results of sampling from this Outfall shall meet the effluent limitations in A. (3.).

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

A. (2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Internal Outfall 005
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

a. During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge [1] on **an emergency basis 1985 (East) Ash Basin decanting wastewater in excess of the facility's treatment capacity of 0.72 MGD to mitigate an eminent 1985 Ash Basin overflow**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency [2]	Sample Type	Sample Location
Flow			Daily during Episodic Event	Estimate	Effluent

Footnotes:
1. The Permittee shall notify the Raleigh Regional Office (919) 791- 4200 no later than the end of the next business day of the occurrence of an emergency discharge event including time of occurrence and cause.
2. During the duration of a discharge event, the flow shall be reported daily.

b. Upon the occurrence of an emergency overflow event, Outfall 007 effluent sampling and reporting shall commence immediately for the limited parameters listed in A. (3.) except for Chronic Toxicity and Mercury, and shall continue once per week for the duration of the emergency discharge event. Results of sampling from this Outfall shall meet the effluent limitations in A. (3.).

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

A. (3.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 007 (decanting) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]
Grade I Physical Chemical WPCS [15A NCAC 08G .0302]

a. During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from **Outfall 007 comingled treated ash basin decanting wastewater (decanting the free water above the settled ash layer that does not involve mechanical disturbance of the ash), stormwater, emergency episodic discharge from Internal Outfalls 001 & 005, and Constructed French Drain wastewater from S-05.** Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow		0.73 MGD	Daily	Estimate [1]	Effluent
pH [2]	6.0 ≤ pH ≤ 9.0 S.U.		Monthly	Grab	Effluent
Total Suspended Solids [3]	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
Total Antimony	5.6 µg/L	5.6 µg/L	Monthly	Grab	Effluent
Total Arsenic	10.0 µg/L	340.0 µg/L	Weekly	Grab	Effluent
Total Molybdenum	160 µg/L	160 µg/L	Monthly	Grab	Effluent
Total Nickel	25.0 µg/L	335.2 µg/L	Monthly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Weekly	Grab	Effluent
Total Zinc	125.7 µg/L	125.7 µg/L	Monthly	Grab	Effluent
Turbidity [4]			Monthly	Grab	Effluent
Total Mercury [5]	12 ng/L, annual average		Weekly	Grab	Effluent
Total Cadmium, µg/L [6]			Monthly	Grab	Effluent
Total Copper, µg/L			Monthly	Grab	Effluent
Total Lead, µg/L			Monthly	Grab	Effluent
Fluoride, mg/L			Monthly	Grab	Effluent
Sulfates, mg/L			Monthly	Grab	Effluent
Total Dissolved Solids, mg/L			Monthly	Grab	Effluent
Thallium, µg/L			Monthly	Grab	Effluent
Chronic Toxicity [7]			Quarterly	Grab	Effluent
Total Hardness, mg/L			Quarterly	Grab	Effluent
Nitrate/Nitrite as N, mg/L			Quarterly	Grab	Effluent
Total Kjeldahl Nitrogen, mg/L			Quarterly	Grab	Effluent
Total Nitrogen, mg/L[8]			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Quarterly	Grab	Effluent

Footnotes:

1. Flow estimate can be based on pumping log if pumps are in service at time of flow. If flow is occurring with no pumps operating then flow measurement is required by using a V-notch weir, stop watch and calibrated cylinder, or other methods approved by the Division (such as flow sensor devices).
2. The facility shall continuously monitor pH when the decanting process commences and the pump shall be shutoff automatically when the 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standards 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. In the event of a shut-off of the decanting pumps, due to continuous monitoring of pH, decanting may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for pH.

3. The facility shall continuously monitor TSS concentration when the decanting process commences and the pump shall be shutoff automatically when the 15 minutes running average exceeds 50 mg/L. 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. In the event of a shut-off of the decanting pumps, due to continuous monitoring of TSS, decanting may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for TSS.
4. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream. Therefore, if the effluent measurement exceeds 50 NTU, the Permittee shall sample upstream and downstream turbidity in the receiving waterbody, within 24 hours, to demonstrate the existing turbidity level in the receiving waterbody was not increased. All data shall be reported on the DMRs. (See 15A NCAC 2B .0211 (21)).
5. The facility shall use EPA method 1631E. Annual average shall be the calendar average.
6. Total Cadmium shall be measured to a Practical Quantitation Level of 0.5 µg/L.
7. Chronic Toxicity (*Ceriodaphnia dubia*) at 90% in *February, May, August, and November*; See Special Condition A. (10.).
8. Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate/Nitrite as N.

b. When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds using physical-chemical treatment, if necessary, to assure state Water Quality Standards are not contravened in the receiving stream. Duke Energy shall notify DWR NPDES Permitting and DWR Raleigh Regional Office, in writing, within seven calendar days of installing additional physical-chemical treatment at this Outfall.

c. If any one of these pollutants (As, Se, Sb, Hg, Mo, Ni, Pb and Zn) reaches 85% of the allowable level during the decanting/dewatering, the facility shall immediately discontinue discharge of the wastewater and report it to the Regional Office and Complex NPDES Permitting Branch via telephone and e-mail.

d. The facility is allowed to drawdown the wastewater in the ash pond to no less than three feet above the ash. The rate for lowering the liquid level in a coal ash pond shall not exceed one (1) foot per day unless a higher rate is supported to the satisfaction of DEMLR and in accordance with NCAC, Title 15 A, Subchapter 2K.

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

f. If no discharge occurs during the reporting period the Permittee shall submit its DMR eDMR), as required, and indicate "No Flow" (15A NCAC 02B .0506(a)(1)(E)).

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

A. (4.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 008 (decanting) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]
Grade I Physical Chemical WPCS [15A NCAC 08G .0302]

a. During the period beginning on the effective date of this permit, and lasting until the commencement of **ash basin dewatering, or the addition of groundwater remediation** treated wastewater, or permit expiration, the Permittee is authorized to discharge from **Outfall 008 comingled treated ash basin decanting wastewater (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 by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location [1]
Flow		0.72 MGD	Daily	Estimate [2]	Effluent
pH [3]	6.0 ≤ pH ≤ 9.0 S.U.		Monthly	Grab	Effluent
Total Suspended Solids [4]	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
Total Mercury [5]	47 ng/L, annual average [5]		Weekly	Grab	Effluent
Turbidity [6]			Monthly	Grab	Effluent
Total Arsenic, µg/L			Weekly	Grab	Effluent
Total Selenium, µg/L			Weekly	Grab	Effluent
Total Nickel, µg/L			Monthly	Grab	Effluent
Total Lead, µg/L			Monthly	Grab	Effluent
Chronic Toxicity [7]			Quarterly	Grab	Effluent
Total Hardness, mg/L			Quarterly	Grab	Effluent
Nitrite/Nitrate as N, mg/L			Quarterly	Grab	Effluent
Total Kjeldahl Nitrogen, mg/L			Quarterly	Grab	Effluent
Total Nitrogen, mg/L [8]			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Quarterly	Grab	Effluent

Footnotes:

1. Effluent = comingled sample of the treatment facility's wastewater.
2. Flow estimate can be based on pumping log if pumps are in service at time of flow. If flow is occurring with no pumps operating then flow measurement is required by using a V-notch weir, stop watch and calibrated cylinder, or other methods approved by the Division (such as flow sensor devices).
3. The facility shall continuously monitor pH when the decanting process commences and the pump shall be shutoff automatically when the 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standards 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. In the event of a shut-off of the decanting pumps, due to continuous monitoring of pH, decanting may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for pH.
4. The facility shall continuously monitor TSS concentration when the decanting process commences and the pump shall be shutoff automatically when the 15 minutes running average exceeds 50 mg/L. 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. In the event of a shut-off of the decanting pumps, due to continuous monitoring of TSS, decanting may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for TSS.

5. The facility shall use EPA method 1631E. Annual average shall be the calendar year.
6. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream. Therefore, if the effluent measurement exceeds 50 NTU, the Permittee shall sample upstream and downstream turbidity in the receiving waterbody, within 24 hours, to demonstrate the existing turbidity level in the receiving waterbody was not increased. All data shall be reported on the DMRs. (See 15A NCAC 2B .0211 (21)).
7. Chronic Toxicity (*Ceriodaphnia dubia*) at 1.7% in *February, May, August, and November*; See Special Condition A. (10.).
8. Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate/Nitrite as N.

b. When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds using physical-chemical treatment, if necessary, to assure state Water Quality Standards are not contravened in the receiving stream. Duke Energy shall notify DWR NPDES Permitting and DWR Raleigh Regional Office, in writing, within seven calendar days of installing additional physical-chemical treatment at this Outfall.

c. If any one of these pollutants (As, Se, Hg, Ni, and Pb) reaches 85% of the allowable level during the decanting/dewatering, the facility shall immediately discontinue discharge of the wastewater and report it to the Regional Office and Complex NPDES Permitting Branch via telephone and e-mail.

d. The facility is allowed to drawdown the wastewater in the ash pond to no less than three feet above the ash. The rate for lowering the liquid level in a coal ash pond shall not exceed one (1) foot per day unless a higher rate is supported to the satisfaction of DEMLR and in accordance with NCAC, Title 15 A, Subchapter 2K.

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

f. If no discharge occurs during the reporting period the Permittee shall submit its DMR (eDMR), as required, and indicate "No Flow" (15A NCAC 02B .0506(a)(1)(E)).

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

A. (5.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 008 (dewatering) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]
Grade I Physical Chemical WPCS [15A NCAC 08G .0302]

a. During the period beginning with the start of **ash pond dewatering**, and lasting until the **addition of groundwater remediation** treated wastewater, or permit expiration, the Permittee is authorized to discharge from **Outfall 008 comingled treated ash basin dewatering wastewater.** Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location [1]
Flow		0.72 MGD	Daily	Estimate [2]	Effluent
pH [3]	6.0 ≤ pH ≤ 9.0 S.U.		Weekly	Grab	Effluent
Total Suspended Solids [4]	30.0 mg/L	100.0 mg/L	Weekly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Weekly	Grab	Effluent
Total Selenium	0.30 mg/L	2.73 mg/L	Weekly	Grab	Effluent
Total Mercury [5]	47 ng/L, annual average		Weekly	Grab	Effluent
Turbidity [6]			Weekly	Grab	Effluent
Total Aluminum, mg/L			Weekly	Grab	Effluent
Total Arsenic, µg/L			Weekly	Grab	Effluent
Total Cadmium, µg/L [7]			Weekly	Grab	Effluent
Total Copper, µg/L			Weekly	Grab	Effluent
Total Nickel, µg/L			Weekly	Grab	Effluent
Total Lead, µg/L			Weekly	Grab	Effluent
Chronic Toxicity [8]			Monthly	Grab	Effluent
Total Hardness, mg/L			Quarterly	Grab	Effluent
Nitrite/Nitrate as N, mg/L			Quarterly	Grab	Effluent
Total Kjeldahl Nitrogen, mg/L			Quarterly	Grab	Effluent
Total Nitrogen, mg/L [9]			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Quarterly	Grab	Effluent

Footnotes:

1. Effluent = comingled sample of the treatment facility's treated wastewater.
2. Flow estimate can be based on pumping log if pumps are in service at time of flow. If flow is occurring with no pumps operating then flow measurement is required by using a V-notch weir, stop watch and calibrated cylinder, or other methods approved by the Division (such as flow sensor devices).
3. The facility shall continuously monitor pH when the dewatering process commences and the pump shall be shutoff automatically when the 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standards 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. In the event of a shut-off of the dewatering pumps, due to continuous monitoring of pH, dewatering may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for pH.
4. The facility shall continuously monitor TSS concentration when the dewatering process commences and the pump shall be shutoff automatically when the 15 minutes running average exceeds 50 mg/L. 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. In the event of a shut-off of the dewatering pumps, due to continuous monitoring of TSS, dewatering may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for TSS.

5. The facility shall use EPA method 1631E. Annual average shall be the calendar year.
6. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream. Therefore, if the effluent measurement exceeds 50 NTU, the Permittee shall sample upstream and downstream turbidity in the receiving waterbody, within 24 hours, to demonstrate the existing turbidity level in the receiving waterbody was not increased. All data shall be reported on the DMRs. (See 15A NCAC 2B .0211 (21)).
7. Total Cadmium shall be measured to a Practical Quantitation Level of 0.5 µg/L.
8. Chronic Toxicity (*Ceriodaphnia dubia*) at 1.7%; See Special Condition A. (11.).
9. Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate/Nitrite as N.

b. When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds using physical-chemical treatment, if necessary, to assure state Water Quality Standards are not contravened in the receiving stream. Duke Energy shall notify DWR NPDES Permitting and DWR Raleigh Regional Office, in writing, within seven calendar days of installing additional physical-chemical treatment at this Outfall.

c. Dewatering is the removal of interstitial water starting when the free water level in the settled ash basin is less than 3 feet, or if the water level is more than 3 feet above the ash starting when mechanical disturbance of the ash occurs. The limits and conditions in A. (5.) shall remain enforced until the groundwater remediation treated discharge has commenced.

d. If any one of these pollutants (As, Se, Hg, Ni, and Pb) reaches 85% of the allowable level during the decanting/dewatering, the facility shall immediately discontinue discharge of the wastewater and report it to the Regional Office and Complex NPDES Permitting Branch via telephone and e-mail.

e. The facility shall submit written notification to the DWR Complex NPDES Permitting Unit and the DWR Raleigh Regional Office of the intent to begin the initial ash basin dewatering activity seven calendar days prior to commencing the dewatering.

f. The rate for lowering the liquid level in a coal ash pond shall not exceed one (1) foot per day unless a higher rate is supported to the satisfaction of DEMLR and in accordance with NCAC, Title 15A, Subchapter 2K.

g. If no discharge occurs during the reporting period the Permittee shall submit its DMR (eDMR), as required, and indicate "No Flow" (15A NCAC 02B .0506(a)(1)(E)).

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

A. (6.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 008 (dewatering and ground water remediation) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.] **Grade I Physical Chemical WPCS** [15A NCAC 08G .0302]

a. During the period beginning with the start of **groundwater remediation**, and lasting until **completion/termination of all ash basin dewatering activities,** or permit expiration, the Permittee is authorized to discharge from **Outfall 008 comingled treated ash pond dewatering wastewater and groundwater remediation wastewater**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location [1]
Flow		0.72 MGD	Daily	Estimate [2]	Effluent
pH [3]	6.0 ≤ pH ≤ 9.0 S.U.		Weekly	Grab	Effluent
Temperature, °C			Weekly	Grab	Effluent
Total Suspended Solids [4]	30.0 mg/L	100.0 mg/L	Weekly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Weekly	Grab	Effluent
Total Aluminum	385.1 mg/L	385.1 mg/L	Weekly	Grab	Effluent
Total Nickel	1.48 mg/L	16.3 mg/L	Weekly	Grab	Effluent
Total Selenium	0.30 mg/L	2.73 mg/L	Weekly	Grab	Effluent
Total Mercury [5]	47 ng/L, annual average [5]		Weekly	Grab	Effluent
Turbidity [6]			Weekly	Grab	Effluent
Total Arsenic, µg/L			Weekly	Grab	Effluent
Total Beryllium, µg/L			Weekly	Grab	Effluent
Total Copper, µg/L			Weekly	Grab	Effluent
Total Lead, µg/L			Weekly	Grab	Effluent
Total Silver, µg/L [7]			Weekly	Garb	Effluent
Total Zinc, µg/L			Weekly	Grab	Effluent
Sulfates, mg/L			Weekly	Grab	Effluent
Total Dissolved Solids, mg/L			Weekly	Grab	Effluent
Chronic Toxicity [8]			Monthly	Grab	Effluent
Total Hardness, mg/L			Quarterly	Grab	Effluent
Conductivity, µmhos/cm			Quarterly	Grab	Effluent
Nitrite/Nitrate as N, mg/L			Quarterly	Grab	Effluent
Total Kjeldahl Nitrogen, mg/L			Quarterly	Grab	Effluent
Total Nitrogen, mg/L [9]			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Quarterly	Grab	Effluent

Footnotes:

1. Effluent = comingled sample of the treatment facility's treated wastewater.
2. Flow estimate can be based on pumping log if pumps are in service at time of flow. If flow is occurring with no pumps operating then flow measurement is required by using a V-notch weir, stop watch and calibrated cylinder, or other methods approved by the Division (such as flow sensor devices).
3. The facility shall continuously monitor pH when dewatering process commences and the pump shall be shutoff automatically when the 15 minutes running average pH falls below 6.1 standard units or rises above 8.9 standards 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. In the event of a shut-off of the dewatering pumps, due to continuous monitoring of pH, dewatering may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for pH.

4. The facility shall continuously monitor TSS concentration when the dewatering process commences and the pump shall be shutoff automatically when the 15 minutes running average exceeds 50 mg/L. 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. In the event of a shut-off of the dewatering pumps, due to continuous monitoring of TSS, dewatering may continue once the results of operational samples show the wastewater is back to within the allowable range of the 15 minutes running average for TSS.
5. The facility shall use EPA method 1631E. Annual average shall be the calendar year.
6. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream. Therefore, if the effluent measurement exceeds 50 NTU, the Permittee shall sample upstream and downstream turbidity in the receiving waterbody, within 24 hours, to demonstrate the existing turbidity level in the receiving waterbody was not increased. All data shall be reported on the DMRs. (See 15A NCAC 2B .0211 (21)).
7. Total Silver shall be measured to a Practical Quantitation Level of 1.0 µg/L.
8. Chronic Toxicity (*Ceriodaphnia dubia*) at 1.7%; See Special Condition A. (11.).
9. Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate/Nitrite as N.

b. When the facility commences the ash pond/ponds decanting/dewatering, the facility shall treat the wastewater discharged from the ash pond/ponds using physical-chemical treatment, if necessary, to assure state Water Quality Standards are not contravened in the receiving stream. Duke Energy shall notify DWR NPDES Permitting and DWR Raleigh Regional Office, in writing, within seven calendar days of installing additional physical-chemical treatment at this Outfall.

c. Dewatering is the removal of interstitial water starting when the free water level in the settled ash basin is less than 3 feet, or if the water level is more than 3 feet above the ash starting when mechanical disturbance of the ash occurs. The limits and conditions in A. (6.) shall remain enforced until all ash basins dewatering is completed.

d. If any one of these pollutants (As, Al, Se, Hg, Ni, and Pb) reaches 85% of the allowable level during the decanting/dewatering, the facility shall immediately discontinue discharge of the wastewater and report it to the Regional Office and Complex NPDES Permitting Branch via telephone and e-mail.

e. The facility shall submit written notification to the DWR Complex NPDES Permitting Unit and the DWR Raleigh Regional Office of the intent to begin the addition of groundwater remediation wastewater to the ash basins treatment facility's influent in conjunction with ash basin dewatering wastewater, seven calendar days prior to commencing the addition. See Special Condition A. (18.) for further requirements.

f. The rate for lowering the liquid level in a coal ash pond shall not exceed one (1) foot per day unless a higher rate is supported to the satisfaction of DEMLR and in accordance with NCAC, Title 15A, Subchapter 2K.

g. If no discharge occurs during the reporting period the Permittee shall submit its DMR (eDMR), as required, and indicate "No Flow" (15A NCAC 02B .0506(a)(1)(E)).

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

A. (7.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 008 (ground water remediation) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]
Grade I Physical Chemical WPCS [15A NCAC 08G .0302]

a. During the period beginning with the **completion/termination of all ash pond dewatering activities,** and lasting until permit expiration, the Permittee is authorized to discharge **from Outfall 008 treated groundwater remediation wastewater**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow		0.72 MGD	Weekly	Continuous [1]	Effluent
pH	6.0 ≤ pH ≤ 9.0 S.U.		Weekly	Grab	Effluent
Temperature, °C			Weekly	Grab	Effluent
Total Suspended Solids	30.0 mg/L	45.0 mg/L	Weekly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Weekly	Grab	Effluent
Total Aluminum	385.1 mg/L	385.1 mg/L	2/Month	Grab	Effluent
Total Nickel	1.48 mg/L	16.3 mg/L	2/Month	Grab	Effluent
Sulfates	14,811 mg/L	14,811 mg/L	2/Month	Grab	Effluent
Turbidity [2]			2/Month	Grab	Effluent
Total Mercury, ng/L [3]			2/Month	Grab	Effluent
Total Arsenic, µg/L			2/Month	Grab	Effluent
Total Beryllium, µg/L			2/Month	Grab	Effluent
Total Lead, µg/L			2/Month	Grab	Effluent
Total Selenium, µg/L			2/Month	Grab	Effluent
Total Silver, µg/L [4]			2/Month	Grab	Effluent
Total Zinc, µg/L			2/Month	Grab	Effluent
Total Dissolved Solids, mg/L			2/Month	Grab	Effluent
Total Hardness, mg/L			Quarterly	Grab	Effluent
Chronic Toxicity [5]			Quarterly	Grab	Effluent
Conductivity, µmhos/cm			Quarterly	Grab	Effluent
Nitrite/Nitrate as N, mg/L			Quarterly	Grab	Effluent
Total Kjeldahl Nitrogen, mg/L			Quarterly	Grab	Effluent
Total Nitrogen, mg/L [6]			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Quarterly	Grab	Effluent

Footnotes:

1. Continuous flow measurement is required by using a calibrated V-notch weir, meter, or other methods approved by the Division (such as flow sensor devices).
2. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream. Therefore, if the effluent measurement exceeds 50 NTU, the Permittee shall sample upstream and downstream turbidity in the receiving waterbody, within 24 hours, to demonstrate the existing turbidity level in the receiving waterbody was not increased. All data shall be reported on the DMRs. (See 15A NCAC 2B .0211 (21)).
3. The facility shall use EPA method 1631E.
4. Total Silver shall be measured to a Practical Quantitation Level of 1.0 µg/L.

5. Chronic Toxicity (*Ceriodaphnia dubia*) at 1.7% in *February, May, August, and November*; See Special Condition A. (10.).
6. Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate/Nitrite as N.

b. The facility shall submit written notification to the DWR Complex NPDES Permitting Unit and the DWR Raleigh Regional Office of the intent to continue groundwater wastewater addition to the treatment facility's influent after the completion/termination of all ash basins dewatering activities, seven calendar days prior to completion and termination of all ash basin dewatering. See Special Condition A. (18.) for further requirements.

c. If no discharge occurs during the reporting period the Permittee shall submit its DMR (eDMR), as required, and indicate "No Flow" (15A NCAC 02B .0506(a)(1)(E)).

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

A. (8.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS –Outfall 008A
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

a. During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge[1] from Outfall 008A on **an emergency basis 1963/1970 Ash Basin decanting wastewater in excess of the facility's treatment capacity (> 0.72 MGD) to mitigate an eminent 1963/1970 Ash Basin overflow**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency [2]	Sample Type	Sample Location
Flow			Daily during Episodic Event	Estimate	Effluent
pH	6.0 ≤ pH ≤ 9.0 S.U.		Daily during Episodic Event	Grab	Effluent
Total Suspended Solids	30.0 mg/L	100.0 mg/L	Daily during Episodic Event	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Daily during Episodic Event	Grab	Effluent

Footnotes
1. The Permittee shall notify the Raleigh Regional Office (919) 791- 4200 no later than the end of the next business day of the occurrence of an emergency discharge event including time of occurrence, duration, and cause.
2. During the duration of an emergency discharge event, the flow shall be reported daily.

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

A. (9.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 009 (Beneficiation miscellaneous wastewater) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.] **Grade I Physical Chemical WPCS** [15A NCAC 08G .0302]

a. During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge **episodic beneficiation process area miscellaneous wastewater (ash pile run off, wash water, captured dust spills) from Outfall 009.** Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location [1]
Flow		0.005 MGD	Monthly	Estimate [2]	Effluent
Temperature, °C			Monthly	Grab	Effluent
pH	6.0 ≤ pH ≤ 9.0 S.U.		Monthly	Grab	Effluent
Total Suspended Solids	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
Turbidity [3]			Monthly	Grab	Effluent
Total Mercury [4]	47 ng/L, annual average		Monthly	Grab	Effluent
Total Arsenic, µg/L			Monthly	Grab	Effluent
Total Selenium, µg/L			Monthly	Grab	Effluent

Footnotes:

1. Effluent = comingled sample of facility treated wastewater.
2. Flow estimate can be based on pumping log if pumps are in service at time of flow. If flow is occurring with no pumps operating then flow measurement is required by using a V-notch weir, stop watch and calibrated cylinder, or other methods approved by the Division (such as flow sensor devices).
3. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream. Therefore, if the effluent measurement exceeds 50 NTU, the Permittee shall sample upstream and downstream turbidity in the receiving waterbody, within 24 hours, to demonstrate the existing turbidity level in the receiving waterbody was not increased. All data shall be reported on the DMRs. (See 15A NCAC 2B .0211 (21)).
4. The facility shall use EPA method 1631E. Annual average shall be the calendar year.

b. If no discharge occurs during the reporting period the Permittee shall submit its DMR (eDMR), as required, and indicate "No Flow" (15A NCAC 02B .0506(a)(1)(E)).

c. The Permittee shall submit to the Division a completed EPA Form 2C for the addition of beneficiation wastewaters no later than 180 days after the introduction of the beneficiation wastewaters to the treatment system. The Division may re-open this permit and assign additional effluent limits or conditions after review of the EPA 2C data.

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

A. (10.) CHRONIC TOXICITY LIMIT - Outfalls 007 and 008 (Quarterly)
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to ***Ceriodaphnia dubia*** at an effluent concentration of **90% for Outfall 007 and 1.7% for Outfall 008.**

The permit holder shall perform, at a minimum, *quarterly* monitoring using test procedures outlined in the "North Carolina *Ceriodaphnia* Chronic Effluent Bioassay Procedure," Revised December 2010, or subsequent versions or "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised- December 2010) or subsequent versions. The tests will be performed **during the months of February, May, August, and November**. These months signify the first month of each three-month toxicity testing quarter assigned to the facility. Effluent sampling for this testing must be obtained during representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

If the test procedure performed as the first test of any single quarter results in a 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
1621 Mail Service Center
Raleigh, NC 27699-1621

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

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

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

Should the Permittee fail to monitor during a month in which toxicity monitoring is required, monitoring will be required during the following month. Assessment of toxicity compliance is based on the toxicity testing quarter, which is the three month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third month.

Should any test data from this monitoring requirement or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, this permit may be 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. **(11.) CHRONIC TOXICITY LIMIT - Outfall 008 (Monthly)**
[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to ***Ceriodaphnia dubia*** at an effluent concentration of **1.7% for Outfall 008**.

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

If the test procedure performed as the first test of any month results in a 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
1621 Mail Service Center
Raleigh, NC 27699-1621

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

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

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

Assessment of toxicity compliance is based on the toxicity testing month.

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

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

A. (12.) ADDITIONAL CONDITIONS AND DEFINITIONS

[NCGS 143-213.3 (a) (2) and NCGS 143-213.66]

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 mean 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 methods approved by the Division (such as flow sensor devices).
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 on the DMRs in the comment section.
10. 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. (13.) INSTREAM MONITORING

[G.S. 143-215.3 (a) (2), G.S. 143-215.66]

The facility shall conduct monthly in-stream monitoring for total arsenic, total selenium, total mercury, total chromium, dissolved lead, dissolved cadmium, dissolved copper, dissolved zinc, total bromide, total hardness (as $CaCO_3$), temperature, turbidity, and total dissolved solids (TDS). The monitoring results shall be reported on the facility’s Discharge Monitoring Reports and included with the NPDES permit renewal application.

Instream Sample Description	Location
Upstream Outfall 008	0.9 miles upstream from Outfall 008A in Cape Fear River
Downstream Outfall 008	Approximately 250 meters downstream from Outfall 008 in Cape Fear River

Instream monitoring is provisionally waived considering the permittee’s participation in the Middle Cape Fear River Basin Association provided the Association agrees to sample for all the parameters listed in this condition and at the specified locations. Instream monitoring shall be conducted as stated in this permit should the permittee end its participation in the Association.

A. (14.) STRUCTURAL INTEGRITY INSPECTIONS OF ASH BASIN DAM
[15A NCAC 02K .0208]

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

A. (15.) FISH TISSUE MONITORING NEAR ASH BASIN DISCHARGE OUTFALL 008
[NCGS 143-215.3(a)(2)]

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 include arsenic, selenium, and mercury. The monitoring shall be conducted in accordance with the sampling plan approved by the Division. The plan should be submitted to the Division within 180 days from the effective date of the permit. Upon approval, the plan becomes an 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
   1623 Mail Service Center
   Raleigh, NC 27699-1623

A. (16.) COMPLIANCE BOUNDARY
[15A NCAC 02L.0107]

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), (d), or (e) as well as enforcement actions in accordance with North Carolina General Statute 143-215.6A through 143-215.6C.

The compliance boundary map for this facility is incorporated herein and attached hereto as Attachment A.

A. (17.) APPLICABLE STATE LAW (State Enforceable Only)
[NCGS 143-215.1(b)]

This facility shall meet the General Statute requirements under NCGS § 130A-309.200 et seq. This permit may be reopened to include new requirements imposed under these Statutes.

A. (18.) ADDITION OF OTHER WASTEWATERS TO ASH BASIN TREATMENT SYSTEM
[G.S. 143-214.1 (a)]

The Permittee may introduce on-site groundwater remediation wastewater as an additional influent to the 0.72 MGD capacity treatment system discharging only to Outfall 008 provided it does not result in violation of NC water quality standards or EPA criteria. If necessary the Permittee shall determine what additional treatment is required and then have operational prior to the addition of ground water wastewater.

The Permittee shall submit to the Division EPA Form 2C for the ground water wastewater addition no later than 180 days after the introduction of the ground water wastewater to the treatment systems. The Division may open upon further evaluation the permit and assign additional effluent limits or conditions.

A. (19.) 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. <u>Reporting Requirements [Supersedes Section D. (2.) and Section E. (5.) (a)]</u>

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].

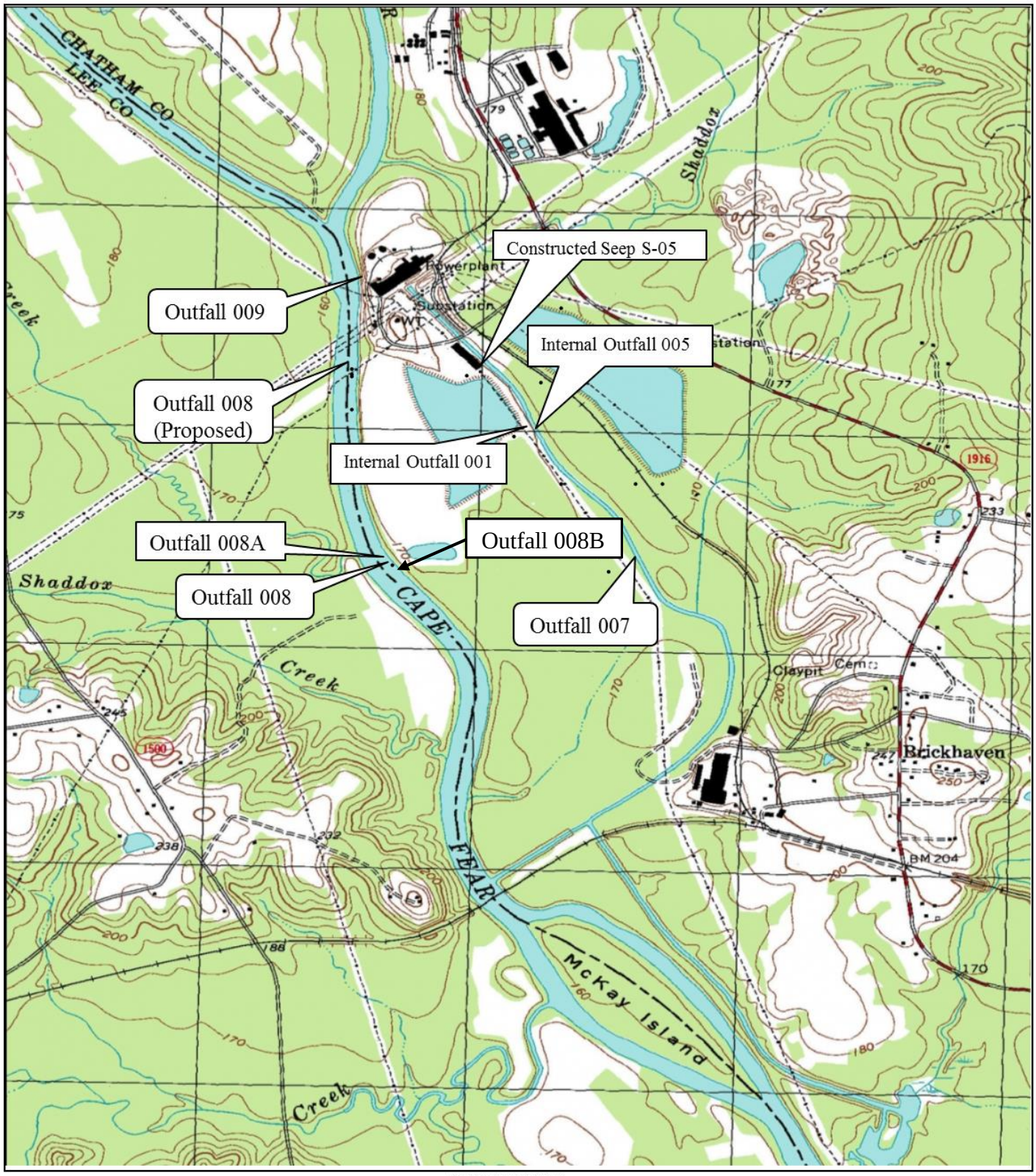
A. (20.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Outfall 008B [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge on **an emergency basis from Outfall 008B (emergency spillway).** Such discharges shall be limited and monitored by the Permittee as specified below:

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

Sampling of this spillway is waived due to unsafe conditions associated with sampling during an overflow event.

The Permittee shall notify the Raleigh Regional Office (919) 791- 4200 no later than the end of the next business day of the occurrence of an emergency discharge event including time of occurrence, duration, and cause.



SCALE: 1:24000

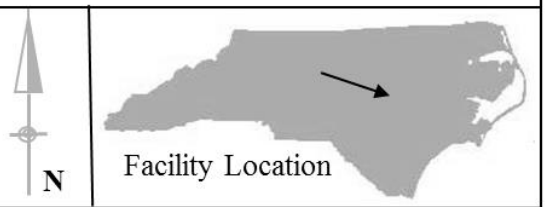
USGS Quad: E22SE Moncure, NC

	Outfall 007	Outfall 008	Outfall 008(Proposed)	Outfall 009
Latitude:	35°35'3" N	35°35'37.7" N	35°35'29.54" N	35°35'37.9" N
Longitude:	79°2'27" W	79°3'4.6" W	79°3'3.85" W	79°3'4.1" W

Stream Class: WS-IV

Subbasin: 03-06-07 HUC: 03030002

Receiving Stream: Cape Fear River



Cape Fear Steam Electric Plant NC0003433
Chatham County