Water Resources
ENVIRONMENTAL QUALITY

PAT MCCRORY
*Governor*

DONALD R. VAN DER VAART
*Secretary*

S. JAY ZIMMERMAN
*Director*

December 3, 2015

Mr. Harry Sideris, Senior Vice President
Environmental, Health and Safety
Duke Energy Carolinas, LLC
Mail Code EC13K
P.O. Box 1006
Charlotte, North Carolina 28201-1006

Subject: Issuance of NPDES
Major Modification
Permit NC0004961
L.V. Sutton Energy Complex
New Hanover County
Facility Class I

Dear Mr. Sideris:

The Division of Water Resources is forwarding herewith the Final NPDES permit for Riverbend Steam Station. This permit renewal is issued pursuant to the requirements of North Carolina General Statute 143-215.1 and the Memorandum of Agreement between North Carolina and the U.S. Environmental Protection Agency dated October 15, 2007 (or as subsequently amended).

A public hearing was held on August 6, 2015 in Wilmington seeking comments on the Draft permit. This Final permit incorporates recommendations of the DWR Hearing Officer and EPA as well as other changes. Listed below are all changes from the draft permit:

1) The limits for Oil and Grease and TSS were added to Outfall 001.
2) The monitoring frequency for all parameters in the effluent was increased to Weekly (Outfall 001 – normal operation), with an exception of Whole Effluent Toxicity.
3) The transfer of wastewater from Old Ash Pond to New Ash Pond and Outfall 001 was authorized.
4) The requirements to minimize fish migration up the Effluent Channel were modified (Outfall 008).
5) The Total Aluminum limits were removed from Outfall 001, Outfall 002, and Outfall 004 since North Carolina does not have Al standard and approximately 89% of the surface water samples in the state exceeds the EPA recommended criteria of 87 µg/L.
6) The requirement to limit drawdown rate to 1 foot/week (unless approved by DEQ) were added to Outfall 001, Outfall 002, and Outfall 004.
7) The groundwater was added to the list of the waste streams discharged through Outfall 001.

8) The following requirement was added to Outfall 002, Outfall 004, and Outfall 008: The facility shall submit EPA Form 2C as soon as practicable, but no later than 180 days from the effective date of this permit.
9) The Technology Based Effluent Limits for Total Arsenic, Total Selenium, and Total Mercury were eliminated (Outfall 001, Outfall 002, and Outfall 004) to meet the updated requirement in 40 CFR 423.

If any parts, measurement frequencies, or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714. Unless such a demand is made, this permit shall be final and binding.

Please take notice that this permit is not transferable except after notice to the Division of Water Resources. The Division may require modification or revocation and reissuance of the permit. This permit does not affect the legal requirements to obtain other permits which may be required by the Division of Water Resources, the Division of Land Resources, the Coastal Area Management Act, or any other federal or local governmental permit.

If you have any questions on this permit, please contact Sergei Chernikov at 919-807-6386.

Sincerely,

*Original signed by S. Jay Zimmerman*

S. Jay Zimmerman, P.G.
Director, Division of Water Resources

Hardcopy: Central Files,
NPDES Files
Wilmington Regional Office, Water Quality
NPDES files

E-copy: US EPA, Region IV
Aquatic Toxicology Unit

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A public hearing was held on August 6, 2015 in Wilmington seeking comments on the Draft permit. This Final permit incorporates recommendations of the DWR Hearing Officer and EPA as well as other changes:

1) The limits for Oil and Grease and TSS were added to Outfall 001.
2) The monitoring frequency for all parameters in the effluent was increased to Weekly (Outfall 001 – normal operation), with an exception of Whole Effluent Toxicity.
3) The transfer of wastewater from Old Ash Pond to New Ash Pond and Outfall 001 was authorized.
4) The requirements to minimize fish migration up the Effluent Channel were modified (Outfall 008).
5) The Total Aluminum limits were removed from Outfall 001, Outfall 002, and Outfall 004 since North Carolina does not have Al standard and approximately 89% of the surface water samples in the state exceeds the EPA recommended criteria of 87 µg/L.
6) The requirement to limit drawdown rate to 1 foot/week (unless approved by DEQ) were added to Outfall 001, Outfall 002, and Outfall 004.
7) The groundwater was added to the list of the waste streams discharged through Outfall 001.

8) The following requirement was added to Outfall 002, Outfall 004, and Outfall 008: The facility shall submit EPA Form 2C as soon as practicable, but no later than 180 days from the effective date of this permit.
9) The Technology Based Effluent Limits for Total Arsenic, Total Selenium, and Total Mercury were eliminated (Outfall 001, Outfall 002, and Outfall 004) to meet the updated requirement in 40 CFR 423.

If any parts, measurement frequencies, or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714. Unless such a demand is made, this permit shall be final and binding.

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If you have any questions on this permit, please contact Sergei Chernikov at 919-807-6386.

Sincerely,

S. Jay Zimmerman, P.G.
Director, Division of Water Resources

Hardcopy: Central Files,
NPDES Files
Wilmington Regional Office, Water Quality
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E-copy: US EPA, Region IV
Aquatic Toxicology Unit

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

# PERMIT

TO DISCHARGE WASTEWATER UNDER THE

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Water Quality 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

**L. V. Sutton Energy Complex**
801 Sutton Steam Plant Road, Wilmington
New Hanover County

to receiving waters designated as the Cape Fear River and Sutton Lake in the Cape Fear River Basin in accordance with the discharge limitations, monitoring requirements, and other applicable conditions set forth in Parts I, II, III, and Appendix A.

This permit modification shall become effective December 7, 2015.

This permit and the authorization to discharge shall expire at midnight on December 31, 2016.

Signed this day December 3, 2015.

S. Jay Zimmerman P.G., Director
Division of Water Resources
By the 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 discharge cooling water, low volume wastes, stormwater, and treated wastewater from internal wastewater outfalls 005, 006, 007, and 009 to the Effluent Channel, and internal stormwater outfalls SW001, SW002, SW003, SW004, SW005, SW006, and SW007 to the Effluent Channel (the Effluent Channel discharges via external Outfall 008 to the Sutton Lake); ash pond discharge, groundwater, treated wastewater, and stormwater runoff (Outfall 001, Outfall 002 and Outfall 004); at a facility located at Sutton Steam Electric Plant, 801 Sutton Steam Plant Road, Wilmington, New Hanover County, and

2. Discharge wastewater (via Outfall 002, Outfall 004, and Outfall 008) from said treatment works at the locations specified on the attached map into the Sutton Lake which is classified C waters in the Cape Fear River Basin.

3. Discharge wastewater and groundwater (via Outfall 001) from said treatment works at the location specified on the attached map into the Cape Fear River, classified C-Swamp waters in the Cape Fear River Basin.

## Part I

### A. (1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001- normal operation)[7] [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 to the Cape Fear River from **Outfall 001** - removing the free water above the settled ash layer that does not involve mechanical disturbance of the ash **(recirculation cooling water, non-contact cooling water, and treated wastewater from outfalls 002, and 004)**. Such discharges shall be limited and monitored[6] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | LIMITS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location[1] |
| Flow, MGD | | | Daily | Estimate or pump logs | Effluent |
| Temperature[1,2], °C | | | Quarterly | Grab | U, D |
| Temperature[2], °C | | | Daily | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | Weekly | Grab | Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | Weekly | Grab | Effluent |
| Total Suspended Solids, mg/L | 30.0 mg/L | 100.0 mg/L | Weekly | Grab | Effluent |
| Total Nitrogen ($NO_2$ + $NO_3$ + TKN), mg/L | | | Weekly | Grab | Effluent |
| Total Phosphorus, mg/L | | | Weekly | Grab | Effluent |
| Dissolved Oxygen, mg/L | | | Weekly | Grab | Effluent |
| Acute Toxicity[3] | | | Monthly | Grab | Effluent |
| Total Mercury[4] | 47.0 ng/L | 47.0 ng/L | Weekly | Grab | Effluent |
| Total Arsenic | 10.0 µg/L | 50.0 µg/L | Weekly | Grab | Effluent |
| Total Selenium | 5.0 µg/L | 56.0 µg/L | Weekly | Grab | Effluent |
| Total Iron | 1.0 mg/L | 1.0 mg/L | Weekly | Grab | Effluent |
| Total Lead | 25.0 µg /L | 33.8 µg /L | Weekly | Grab | Effluent |
| Total Cadmium | 2.0 µg /L | 15.0 µg /L | Weekly | Grab | Effluent |
| Total Aluminum | | | Weekly | Grab | Effluent |
| Total Copper, µg/L | | | Weekly | Grab | Effluent |
| Total Zinc, µg/L | | | Weekly | Grab | Effluent |
| Turbidity[5] | | | Weekly | Grab | Effluent |

**Notes:**

1. U: Upstream, 2700 feet above outfall. D: Downstream, 1.25 miles below outfall.
2. The receiving water's temperature shall not be increased by more than 2.8°C above ambient water temperature and in no case exceed 32°C, except in the mixing zone described as follows: Extending from the eastern shore to the centerline of the river and extending not more than 1.25 miles downstream nor more than 2700 feet from the point of discharge. The cross-sectional area of the mixing zone shall not exceed 9% of the total cross sectional area of the river at the point of discharge nor 2.5% at the mouth of Toomer's Creek.
3. Acute Toxicity Limit (Fathead Minnow, 24 hour at 90%); Part I, Condition A. (10.).
4. The facility shall use EPA method 1631E.
5. 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.
6. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).
7. The drawdown rate shall not exceed 1 foot/week to maintain the integrity of the dams, unless approved by the DEQ Dam Safety Program.

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

## A. (2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001-dewatering phase)[8] [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the commencement date of the dewatering operation and lasting until expiration, the Permittee is authorized to discharge to the Cape Fear River from **Outfall 001** ***Dewatering-removing the interstitial water/ash pore water*** **(recirculation cooling water, non-contact cooling water, and treated wastewater from outfalls 002, and 004)**. Such discharges shall be limited and monitored[6] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | LIMITS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location[1] |
| Flow | | 2.1 MGD (applies only to ash pond discharge) | Daily | Estimate or pump logs | Effluent |
| Temperature[1,2], °C | | | Quarterly | Grab | U, D |
| Temperature[2], °C | | | Daily | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | Daily | Daily | Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | Weekly | Grab | Effluent |
| Total Suspended Solids mg/L[7] | 30.0 mg/L | 100.0 mg/L | Weekly | Grab | Effluent |
| Total Nitrogen ($NO_2$ + $NO_3$ + TKN), mg/L | | | Weekly | Grab | Effluent |
| Total Phosphorus, mg/L | | | Weekly | Grab | Effluent |
| Dissolved Oxygen, mg/L | | | Weekly | Grab | Effluent |
| Acute Toxicity[3] | | | Monthly | Grab | Effluent |
| Total Iron | 1.0 mg/L | 1.0 mg/L | Weekly | Grab | Effluent |
| Total Cadmium | 2.0 µg /L | 15.0 µg /L | Weekly | Grab | Effluent |
| Total Aluminum | | | Weekly | Grab | Effluent |
| Total Lead | 25.0 µg /L | 33.8 µg /L | Weekly | Grab | Effluent |
| Total Arsenic | 10.0 µg/L | 50.0 µg/L | Weekly | Grab | Effluent |
| Total Selenium | 5.0 µg/L | 56.0 µg/L | Weekly | Grab | Effluent |
| Total Mercury[4] | 47.0 ng/L | 47.0 ng/L | Weekly | Grab | Effluent |
| Total Copper, µg/L | | | Weekly | Grab | Effluent |
| Total Zinc, µg/L | | | Weekly | Grab | Effluent |
| Turbidity[5] | | | Weekly | Grab | Effluent |

**Notes:**

1. U: Upstream, 2700 feet above outfall. D: Downstream, 1.25 miles below outfall.
2. The receiving water's temperature shall not be increased by more than 2.8°C above ambient water temperature and in no case exceed 32°C, except in the mixing zone described as follows: Extending from the eastern shore to the centerline of the river and extending not more than 1.25 miles downstream nor more than 2700 feet from the point of discharge. The cross-sectional area of the mixing zone shall not exceed 9% of the total cross sectional area of the river at the point of discharge nor 2.5% at the mouth of Toomer's Creek.
3. Acute Toxicity Limit (Fathead Minnow, 24 hour at 90%); Part I, Condition A. (10.).
4. The facility shall use EPA method 1631E.
5. 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.
6. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).
7. The facility shall continuously monitor TSS concentration and the dewatering pump shall be shutoff automatically when the limits are exceeded.
8. The drawdown rate shall not exceed 1 foot/week to maintain the integrity of the dams, unless approved by the DEQ Dam Safety Program.

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

## A. (3.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 002-normal operation)[4, 5]

[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 to Sutton Lake and/or to the 1971 ash pond from **Outfall 002** - removing of free water above the settled ash layer that does not involve mechanical disturbance of the ash **(Old Ash Pond – coal pile runoff, low volume wastes, ash sluice water, and stormwater runoff)**. Such discharges to Sutton Lake shall be limited and monitored[3] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | LIMITS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location |
| Flow, MGD | | | Weekly | Pump Logs or similar | Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | Weekly | Grab | Effluent |
| Total Suspended Solids | 30.0 mg/L | 100.0 mg/L | Weekly | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | Weekly | Grab | Effluent |
| Total Copper, µg/L | | | Weekly | Grab | Effluent |
| Total Zinc, µg/L | | | Weekly | Grab | Effluent |
| Total Arsenic | 10.0 µg/L | 50.0 µg/L | Weekly | Grab | Effluent |
| Total Selenium | 5.0 µg/L | 56.0 µg/L | Weekly | Grab | Effluent |
| Total Mercury[1] | 47.0 ng/L | 47.0 ng/L | Weekly | Grab | Effluent |
| Total Iron | 1.0 mg/L | 1.0 mg/L | Weekly | Grab | Effluent |
| Total Aluminum | | | Weekly | Grab | Effluent |
| Chronic Toxicity [2] | | | Quarterly | Grab | Effluent |

**Notes:**

1. The facility shall use EPA method 1631E.
2. Chronic Toxicity Limit (*Ceriodaphnia dubia* at 90%); Part I, Condition A. (21.).
3. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).
4. The facility shall submit EPA Form 2C for Outfall 002 as soon as practicable, but no later than 180 days from the effective date of this permit.
5. The drawdown rate shall not exceed 1 foot/week to maintain the integrity of the dams, unless approved by the DEQ Dam Safety Program.

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

## A. (4.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 004-normal operation)[4, 5]

[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 to Sutton Lake and/or to Outfall 001 from **Outfall 004** - removing of free water above the settled ash layer that does not involve mechanical disturbance of the ash **(New Ash Pond – ash sluice water, coal pile runoff, low volume wastes, and stormwater runoff)**. Such discharges to Sutton Lake shall be limited and monitored[3] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | LIMITS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location |
| Flow, MGD | | | Weekly | Pump Logs or similar | Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | Weekly | Grab | Effluent |
| Total Suspended Solids | 30.0 mg/L | 100.0 mg/L | Weekly | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | Weekly | Grab | Effluent |
| Total Copper, µg/L | | | Weekly | Grab | Effluent |
| Total Zinc, µg/L | | | Weekly | Grab | Effluent |
| Total Arsenic | 10.0 µg/L | 50.0 µg/L | Weekly | Grab | Effluent |
| Total Selenium | 5.0 µg/L | 56.0 µg/L | Weekly | Grab | Effluent |
| Total Mercury[1] | 47.0 ng/L | 47.0 ng/L | Weekly | Grab | Effluent |
| Total Iron | 1.0 mg/L | 1.0 mg/L | Weekly | Grab | Effluent |
| Total Aluminum | | | Weekly | Grab | Effluent |
| Chronic Toxicity [2] | | | Quarterly | Grab | Effluent |

**Notes:**

1. The facility shall use EPA method 1631E.
2. Chronic Toxicity Limit (*Ceriodaphnia dubia* at 90%); Part I, Condition A. (21).
3. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).
4. The facility shall submit EPA Form 2C for Outfall 004 as soon as practicable, but no later than 180 days from the effective date of this permit.
5. The drawdown rate shall not exceed 1 foot/week to maintain the integrity of the dams, unless approved by the DEQ Dam Safety Program.

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

## A. (5.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 005)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]
Beginning with the commencement of this discharge and lasting until expiration, the Permittee is authorized to discharge from ***Internal Outfall 005*** **(Combined Cycle Plant – ultrafilter water treatment system filter backwash, closed cooling water cooler blowdown, Reverse Osmosis/Electrodeionization system reject wastewater, and other low volume wastewater)** to the Effluent Channel. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | EFFLUENT LIMITATIONS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location |
| Flow, MGD | | | Daily | Pump Logs or similar | Influent or Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | 2/Month | Grab | Effluent |
| Total Suspended Solids | 30.0 mg/L | 100.0 mg/L | 2/Month | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | 2/Month | Grab | Effluent |

**Notes:**

1. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).

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

## A. (6.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 006)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]
Beginning with the commencement of this discharge and lasting until expiration, the Permittee is authorized to discharge from ***Internal Outfall 006*** **(Combined Cycle Plant – low volume wastewater including the Heat Recovery Steam generator blowdown and auxiliary boiler blowdown)** to the Effluent Channel. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | EFFLUENT LIMITATIONS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location |
| Flow, MGD | | | Daily | Pump Logs or similar | Influent or Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | 2/Month | Grab | Effluent |
| Total Suspended Solids | 30.0 mg/L | 100.0 mg/L | 2/Month | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | 2/Month | Grab | Effluent |

**Notes:**

1. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).

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

## A. (7.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 007)

[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 007*** **(stormwater flows from the closure activities for coal-fired units, separate from stormwater outfalls SW001 through SW007)** to the Effluent Channel. Such discharges shall be limited and monitored[2] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | LIMITS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location |
| Flow, MGD | | | Weekly | Pump Logs or similar | Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | Monthly | Grab | Effluent |
| Total Suspended Solids | 30.0 mg/L | 100.0 mg/L | Monthly | Grab | Effluent |
| Total Arsenic, µg/L | | | Quarterly | Grab | Effluent |
| Total Selenium, µg/L | | | Quarterly | Grab | Effluent |
| Nitrate/nitrite as N, mg/L | | | Quarterly | Grab | Effluent |
| Total Mercury[1], ng/L | | | Quarterly | Grab | Effluent |

**Notes:**

1. The facility shall use EPA method 1631E.
2. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).

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

## A. (8.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (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*** **(low volume wastes from a new simple cycle combustion turbine)** to the Effluent Channel. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | LIMITS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location |
| Flow, MGD | | | Weekly | Pump Logs or similar | Effluent |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | Monthly | Grab | Effluent |
| Total Suspended Solids | 30.0 mg/L | 100.0 mg/L | Monthly | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | 2/Month | Grab | Effluent |

**Notes:**

1. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).

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

## A. (9.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 008)[5, 7]

[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 to Sutton Lake from **Outfall 008 (from internal wastewater outfalls 005, 006, 007, and 009, and internal stormwater outfalls SW001 through SW007).** Such discharges shall be limited and monitored[6] by the Permittee as specified below:

| EFFLUENT CHARACTERISTICS | LIMITS | | MONITORING REQUIREMENTS | | |
|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type | Sample Location[1] |
| Flow, MGD | | | Daily | Estimate or pump logs | Effluent |
| Temperature $^0$C | | | Daily | Grab | Effluent |
| Temperature [1,2], $^0$C | | | Daily/Weekly | Grab | Instream |
| Oil and Grease | 15.0 mg/L | 20.0 mg/L | Monthly | Grab | Effluent |
| Total Suspended Solids | 30.0 mg/L | 100.0 mg/L | Monthly | Grab | Effluent |
| Total Nitrogen ($NO_2$ + $NO_3$ + TKN), mg/L | | | Monthly | Grab | Effluent |
| Dissolved Oxygen, mg/L | | | Monthly | Grab | Effluent |
| pH | 6.0 ≤ pH ≤ 9.0 | | Daily | Grab | Effluent |
| Total Phosphorus, mg/L | | | Monthly | Grab | Effluent |
| Chronic Toxicity[3] | | | Quarterly | Grab | Effluent |
| Total Mercury[4], ng/L | | | Quarterly | Grab | Effluent |
| Total Arsenic, µg/L | | | Quarterly | Grab | Effluent |
| Total Selenium, µg/L | | | Quarterly | Grab | Effluent |
| Total Copper, µg/L | | | Quarterly | Grab | Effluent |
| Total Zinc, µg/L | | | Quarterly | Grab | Effluent |

**Notes:**

1. Instream: 1000 feet from outfall. The facility is allowed 12 months from the effective date of the permit to begin daily instream temperature monitoring. The time is allowed for the facility to budget, design, and install the automatic monitoring station. In the interim, the instream temperature monitoring shall be conducted on a weekly basis.
2. The receiving water's temperature shall not be increased by more than 2.8°C above ambient water temperature and in no case exceed 32°C. The limit is not being implemented until further notice (Please see A. (26.)).
3. Chronic Toxicity Limit (*Ceriodaphnia dubia* at 90%); Part I, Condition A. (21.).
4. The facility shall use EPA method 1631E.
5. The facility shall install a screen or a barrier at the end of the Effluent Channel to minimize fish migration into the Channel. The design of the screen/barrier shall be submitted to the Division for approval no later than 6 month from the effective date of the permit. The screen/barrier shall be installed no later than 6 months after Division approval.
6. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (23.).
7. The facility shall submit EPA Form 2C for Outfall 008 as soon as practicable, but no later than 180 days from the effective date of this permit.

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

## A. (10.) ACUTE TOXICITY LIMIT (QUARTERLY)- OUTFALL 001

[15A NCAC 02B .0200 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/Aquatic Toxicology Branch
1623 Mail Service Center
Raleigh, North Carolina 27699-1623

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental 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 Environmental 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. (11.) 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.

## A. (12.) STRUCTURAL INTEGRITY INSPECTIONS OF ASH POND DAMS

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

## A. (13.) BEST MANAGEMENT PRACTICES PLAN

The Permittee shall continue to implement a Best Management Practices (BMP) Plan to control the discharge of oils and the hazardous and toxic substances listed in 40 CFR, Part 117 and Tables II

and III of Appendix D to 40 CFR, Part 122, and shall maintain the Plan at the plant site and shall be available for inspection by EPA and DWR personnel.

## A. (14.) INTAKE SCREEN BACKWASH

Continued intake screen backwash discharge is permitted without limitations or monitoring requirements.

## A. (15.) NO DISCHARGE OF PCBs

As specified by 40 CFR 423.13 (a), there shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

## A. (16.) 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 a Biocide Worksheet 101 is not necessary for the introduction of a new biocide into an outfall currently being tested for toxicity.

## A. (17.) FISH TISSUE MONITORING NEAR ASH POND DISCHARGE – OUTFALL 001, and OUTFALLS 002/004

The facility shall conduct fish tissue monitoring at two locations (Sutton Lake and Cape Fear River) 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. After the plan is approved by the Division, it will become an enforceable part of the permit.

## A. (18.) 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. (19.) ASH POND CLOSURE

The facility shall prepare an Ash Ponds Closure Plan in anticipation of the ash pond closure. This Plan shall be submitted to the Division one month prior to the closure of the ash ponds.

## A. (20.) LOWER CAPE FEAR MODELING

The permittee may elect to conduct a water quality model of the dilution factor for Outfall 001. Contingent upon EPA approval of the Lower Cape Fear Modeling and its results, the Reasonable Potential Analysis will be conducted again and the permit limits will be based on the new flow numbers established by the model.

## A. (21.) CHRONIC TOXICITY PASS/FAIL PERMIT LIMIT (QUARTERLY) – OUTFALLS 002, 004, 008

[15A NCAC 02B .0200 et seq.]

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to ***Ceriodaphnia dubia*** at an effluent concentration of 90.0%.

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
1623 Mail Service Center
Raleigh, North Carolina 27699-1623

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

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

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

Should 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. (22.) INSTREAM MONITORING

The facility shall conduct semiannual instream monitoring (1000 ft. upstream and 1000 ft. downstream of the Outfall 001, and 1000 ft from Outfall 004) for total arsenic, total selenium, total mercury (method 1631E), total chromium, total lead, total cadmium, total copper, and total zinc. The monitoring results shall be submitted with the NPDES permit renewal application.

## A. (23.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS (STATE ENFORCEABLE ONLY) [G.S. 143-215.1(b)]

Proposed federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and specify that, if a state does not establish a system to receive such submittals, then permittees

must submit DMRs electronically to the Environmental Protection Agency (EPA). The Division anticipates that these regulations will be adopted and is beginning implementation in late 2013.

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 [Supersedes Section D. (2.) and Section E. (5.) (a)]**

Beginning no later than 270 days from the effective date of this permit, the permittee shall begin reporting 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 / DWR / Information Processing Unit
ATTENTION: Central Files / eDMR
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.

Requests for temporary waivers from the NPDES electronic reporting requirements 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 using eDMR. Temporary waivers shall be valid for twelve (12) months and shall thereupon expire. At such time, DMRs shall be submitted electronically to the Division unless the permittee re-applies for and is granted a new temporary waiver by the Division.

Information on eDMR and application for a temporary waiver from the NPDES electronic reporting requirements is found on the following web page:

http://portal.ncdenr.org/web/wq/admin/bog/ipu/edmr

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.

2. **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://portal.ncdenr.org/web/wq/admin/bog/ipu/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."*

3. **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. (24.) APPLICABLE STATE LAW (STATE ENFORCEABLE ONLY) [G.S. 143-215.1(b)]

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

## A. (25.) STORMWATER POLLUTION PREVENTION PLAN

The permittee shall **develop and implement** a Stormwater Pollution Prevention Plan (SPPP). The SPPP shall be maintained on site unless exempted from this requirement by the Division. The SPPP is public information. The SPPP should also specifically and separately address deconstruction, demolition, coal, and/or coal ash hauling or disposal activities. The SPPP shall include, at a minimum, the following items:

1. **Site Overview**. The Site Overview shall provide a description of the physical facility and the potential pollutant sources that may be expected to contribute to contamination of stormwater discharges. The Site Overview shall contain the following:

   (a) A general **location map** (USGS quadrangle map or appropriately drafted equivalent map), showing the facility's location in relation to transportation routes and surface waters; the name of the receiving waters to which the stormwater outfalls discharge, or if the discharge is to a municipal separate storm sewer system, the name of the municipality and the ultimate receiving waters; and accurate latitude and longitude of the points of stormwater discharge associated with industrial activity. The general location map (or alternatively the site map) shall identify whether any receiving waters are **impaired** (on the state's 303(d) list

of impaired waters) or if the site is located in a **watershed for which a TMDL has been established**, and what the parameters of concern are.

(b) A **narrative description** of storage practices, loading and unloading activities, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices. A **narrative description** of the potential pollutants that could be expected to be present in the stormwater discharge from each outfall. The narrative should also reference deconstruction, demolition, coal, and/or coal ash hauling or disposal activities where applicable.

(c) A **site map** drawn at a scale sufficient to clearly depict: the site property boundary; the stormwater discharge outfalls; all on-site and adjacent surface waters and wetlands; industrial activity areas (including storage of materials, disposal areas, process areas, loading and unloading areas, and haul roads); site topography and finished grade; all drainage features and structures; drainage area boundaries and total contributing area for each outfall; direction of flow in each drainage area; industrial activities occurring in each drainage area; buildings; stormwater Best Management Practices (BMPs); and impervious surfaces. The site map must indicate the percentage of each drainage area that is impervious, and the site map must include a graphic scale indication and north arrow.

(d) A **list of significant spills or leaks** of pollutants during the previous three (3) years and any corrective actions taken to mitigate spill impacts.

(e) Certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. **The permittee shall submit the first certification no later than 90 days after the effective date of this permit to the Stormwater Permitting Program Central Office and shall re-certify annually that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges.** For any non-stormwater discharge identified, the permittee shall indicate how that discharge is permitted or otherwise authorized. The certification statement will be signed in accordance with the requirements found in Part II, Standard Conditions, Section B, Paragraph 11.

2. **Stormwater Management Strategy**. The Stormwater Management Strategy shall contain a narrative description of the materials management practices employed which control or minimize the stormwater exposure of significant materials, including structural and nonstructural measures. This strategy should also address deconstruction, demolition, coal, and/or coal ash hauling or disposal activities where applicable. The Stormwater Management Strategy, at a minimum, shall incorporate the following:

(a) **Feasibility Study**. A review of the technical and economic feasibility of changing the methods of operations and/or storage practices to eliminate or reduce exposure of materials and processes to rainfall and run-on flows. Wherever practical, the permittee shall prevent exposure of all storage areas, material handling operations, and manufacturing or fueling operations. In areas where elimination of exposure is not practical, this review shall document the feasibility of diverting the stormwater run-on away from areas of potential contamination.

(b) **Secondary Containment Requirements and Records**. Secondary containment is required for: bulk storage of liquid materials; storage in any amount of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals; and storage in any amount of hazardous substances, in order to prevent leaks and spills from contaminating stormwater runoff. A table or summary of all such tanks and stored materials and their associated secondary containment areas shall be maintained. If the secondary containment devices are connected to stormwater conveyance systems, the connection shall be controlled by manually activated valves or other similar devices (which shall be secured closed with a locking mechanism). Any stormwater that accumulates in the containment area shall be observed for color, foam, outfall staining, visible sheens and

dry weather flow, prior to release of the accumulated stormwater. Accumulated stormwater shall be released if found to be uncontaminated by any material. Records documenting the individual making the observation, the description of the accumulated stormwater, and the date and time of the release shall be kept for a period of five (5) years. For facilities subject to a federal oil Spill Prevention, Control, and Countermeasure Plan (SPCC), any portion of the SPCC Plan fully compliant with the requirements of this permit may be used to demonstrate compliance with this permit.

In addition to secondary containment for tankage, the permittee shall provide drip pans or other similar protection measures for truck or rail car liquid loading and unloading stations.

(c) **BMP Summary**. A listing of site structural and non-structural Best Management Practices (BMPs) shall be provided. The installation and implementation of BMPs shall be based on the assessment of the potential for sources to contribute significant quantities of pollutants to stormwater discharges and on data collected through monitoring of stormwater discharges. The BMP Summary shall include a written record of the specific rationale for installation and implementation of the selected site BMPs. The BMP Summary should also address deconstruction, demolition, coal, and/or coal ash hauling or disposal activities where applicable. The permittee shall refer to the BMPs described in EPA's Multi-Sector Permit (MSGP) and Industrial Stormwater Fact Sheet for Steam Electric Power Generating Facilities (EPA-833-F-06-030) for guidance on BMPs that may be appropriate for this site. The BMP Summary shall be reviewed and updated annually.

3. **Spill Prevention and Response Procedures**. The Spill Prevention and Response Procedures (SPRP) shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel responsible for implementing the SPRP shall be identified in a written list incorporated into the SPRP and signed and dated by each individual acknowledging their responsibilities for the plan. A responsible person shall be on-site at all times during facility operations that have increased potential to contaminate stormwater runoff through spills or exposure of materials associated with the facility operations. The SPRP must be site stormwater specific. Therefore, an oil Spill Prevention Control and Countermeasure plan (SPCC) may be a component of the SPRP, but may not be sufficient to completely address the stormwater aspects of the SPRP. The common elements of the SPCC with the SPRP may be incorporated by reference into the SPRP.

4. **Preventative Maintenance and Good Housekeeping Program**. A preventative maintenance and good housekeeping program shall be developed and implemented. The program shall address all stormwater control systems (if applicable), stormwater discharge outfalls, all on-site and adjacent surface waters and wetlands, industrial activity areas (including material storage areas, material handling areas, disposal areas, process areas, loading and unloading areas, and haul roads), all drainage features and structures, and existing structural BMPs.

   The program shall establish schedules of inspections, maintenance, and housekeeping activities of stormwater control systems, as well as facility equipment, facility areas, and facility systems that present a potential for stormwater exposure or stormwater pollution where not already addressed under another element of the SPPP. Inspection of material handling areas and regular cleaning schedules of these areas shall be incorporated into the program. Compliance with the established schedules for inspections, maintenance, and housekeeping shall be recorded and maintained in the SPPP. The program should also address deconstruction, demolition, coal, and/or coal ash hauling or disposal activities where applicable. The Good Housekeeping Program shall also include, but not be limited to, BMPs to accomplish the following:

   (a) Minimize contamination of stormwater runoff from oil-bearing equipment in switchyard areas;
   (b) Minimize contamination of stormwater runoff from delivery vehicles and rail cars arriving and departing the plant site;

(c) Inspect all residue-hauling vehicles for proper covering over the load, adequate gate-sealing, and overall integrity of the container body. Repair vehicles as necessary; and

(d) Reduce or control the tracking of ash and residue from ash loading and storage areas;

5. **Facility Inspections.** Inspections of the facility (including tanks, pipes, and equipment) and all stormwater *systems* shall occur as part of the Preventative Maintenance and Good Housekeeping Program at a minimum on a semi-annual schedule, once during the first half of the year (January to June), and once during the second half (July to December), with at least 60 days separating inspection dates (unless performed more frequently than semi-annually).

6. **Employee Training**. Training programs shall be developed and training provided at a minimum on an annual basis for facility personnel with responsibilities for: spill response and cleanup, preventative maintenance activities, and for any of the facility's operations that have the potential to contaminate stormwater runoff. The facility personnel responsible for implementing the training shall be identified, and their annual training shall be documented by the signature of each employee trained.

7. **Responsible Party**. The SPPP shall identify a specific position or positions responsible for the overall coordination, development, implementation, and revision of the SPPP. Responsibilities for all components of the SPPP shall be documented and position assignments provided.

8. **SPPP Amendment and Annual Update**. The permittee shall amend the SPPP whenever there is a change in design, construction, operation, site drainage, maintenance, or configuration of the physical features which may have a significant effect on the potential for the discharge of pollutants to surface waters. **All aspects of the SPPP shall be reviewed and updated on an annual basis**. The annual update shall include:

   (a) an *updated list of significant spills or leaks* of pollutants for the previous three (3) years, or the notation that no spills have occurred (element of the **Site Overview**);

   (b) a written *re-certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges* (element of the **Site Overview**);

   (c) a documented re-evaluation of the effectiveness of the on-site stormwater BMPs (*BMP Summary* element of the **Stormwater Management Strategy**).

   (d) a *review and comparison of stormwater sample analytical data* to any applicable limits or benchmark values (if applicable) over the past year.

   If the Director notifies the permittee that the SPPP does not meet one or more of the minimum requirements of the permit, the permittee shall have 30 days to respond. Within 30 days of such notice, the permittee shall submit a time schedule to the Director for modifying the SPPP to meet minimum requirements. The permittee shall provide certification in writing to the Director that the changes have been made.

9. **SPPP Implementation**. The permittee shall implement the Stormwater Pollution Prevention Plan and all appropriate BMPs consistent with the provisions of this permit, in order to control contaminants entering surface waters via stormwater. Implementation of the SPPP shall include documentation of all monitoring, measurements, inspections, maintenance activities, and training provided to employees, including the log of the sampling data and of actions taken to implement BMPs associated with the industrial activities, including vehicle maintenance activities. Such documentation shall be kept on-site for a period of five (5) years and made available to the Director or the Director's authorized representative immediately upon request.

## A. (26.) TEMPERATURE LIMIT COMPLIANCE SCHEDULE- OUTFALL 008

The facility shall develop the plan for compliance with the State temperature standard and submit the plan to the Division within 1 year from the effective date of the permit. The plan shall contain

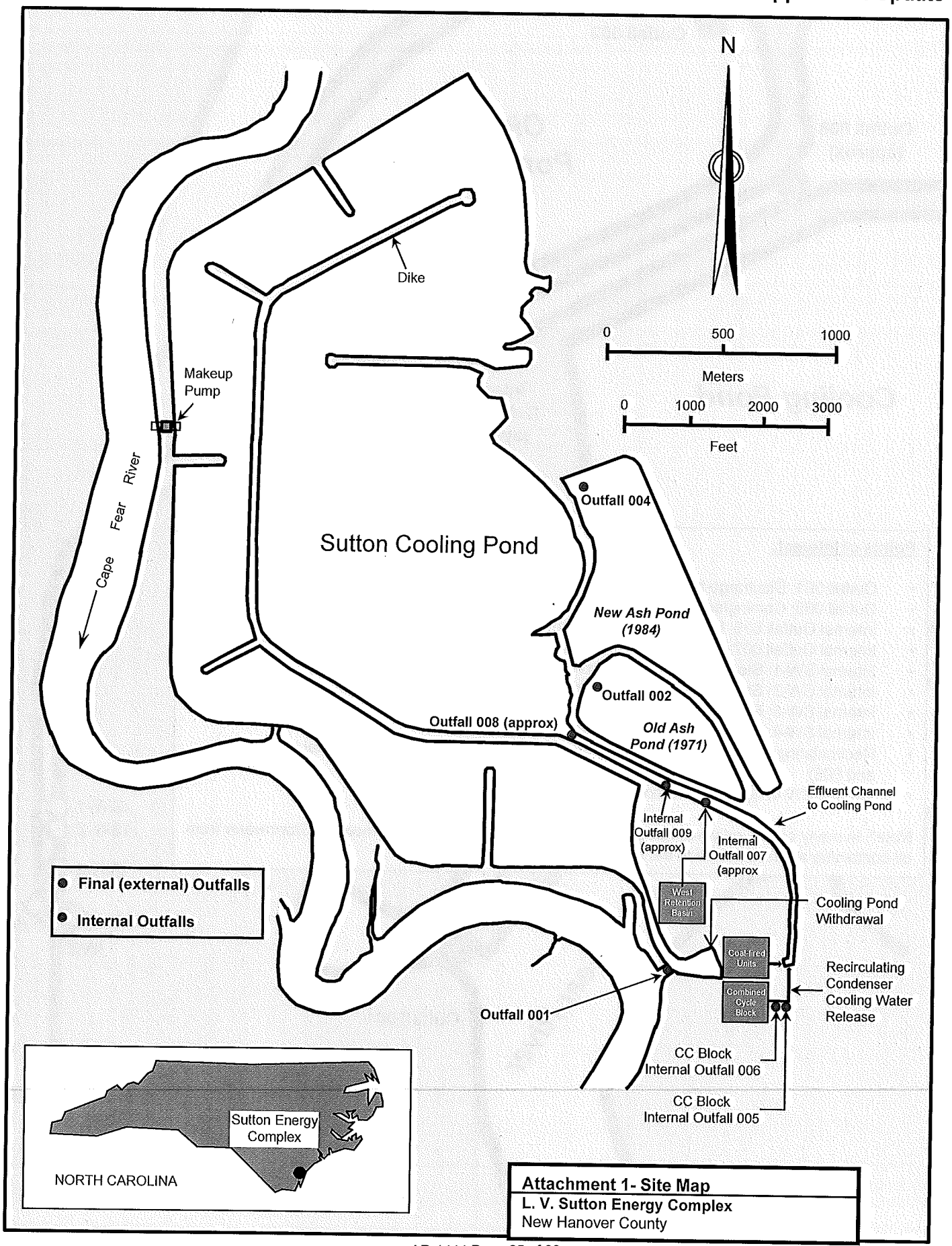
milestones and the specific action items. After the plan is approved by the Division, it will become an enforceable part of the permit.

## A. (27.) ADDITIONAL CONDITIONS AND DEFINITIONS

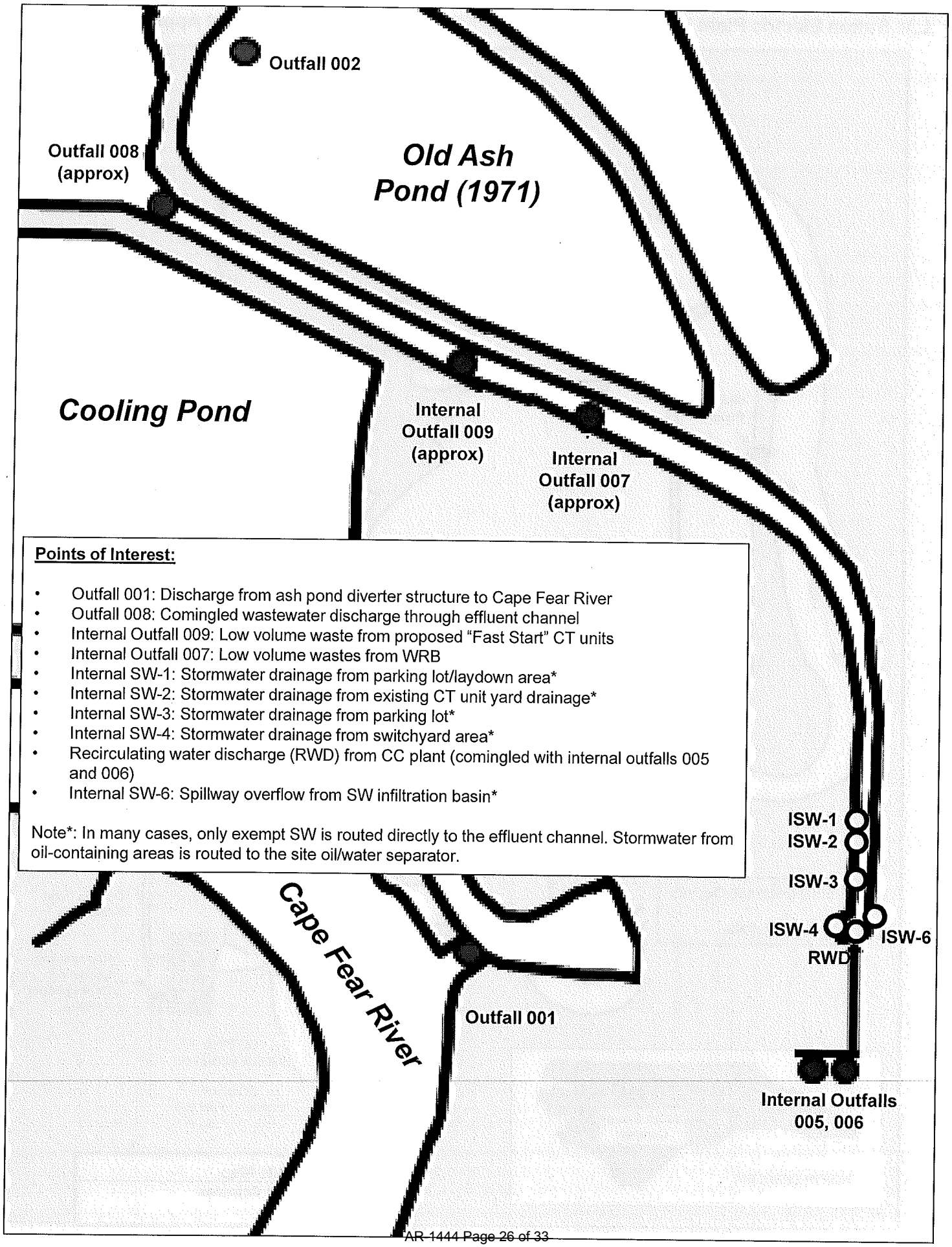
1. EPA methods 200.7 or 200.8 (or the most current versions) shall be used for analyses of all metals except for total mercury.
2. All effluent samples for all external outfalls shall be taken at the most accessible location after the final treatment but prior to discharge to waters of the U.S. (40 CFR 122.41(j)).
3. The term *low volume waste sources* means wastewater from all sources except thouse 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. During normal operations removing of the free water above the settled wet ash layer shall not involve mechanical disturbance of the ash.

Appendix A.

Plan for Identification of New Discharges (attached).




**Attachment 1- Site Map**
**L. V. Sutton Energy Complex**
New Hanover County


Outfall 002
Outfall 008
(approx)
Old Ash
Pond (1971)
Cooling Pond
Internal
Outfall 009
(approx)
Internal
Outfall 007
(approx)
Points of Interest:
• Outfall 001: Discharge from ash pond diverter structure to Cape Fear River
• Outfall 008: Comingled wastewater discharge through effluent channel
• Internal Outfall 009: Low volume waste from proposed "Fast Start" CT units
• Internal Outfall 007: Low volume wastes from WRB
• Internal SW-1: Stormwater drainage from parking lot/laydown area*
• Internal SW-2: Stormwater drainage from existing CT unit yard drainage*
• Internal SW-3: Stormwater drainage from parking lot*
• Internal SW-4: Stormwater drainage from switchyard area*
• Recirculating water discharge (RWD) from CC plant (comingled with internal outfalls 005 and 006)
• Internal SW-6: Spillway overflow from SW infiltration basin*
Note*: In many cases, only exempt SW is routed directly to the effluent channel. Stormwater from oil-containing areas is routed to the site oil/water separator.
ISW-1
ISW-2
ISW-3
ISW-4
ISW-6
RWD
Cape Fear River
Outfall 001
Internal Outfalls
005, 006

**DENR/DWR**
**FACT SHEET FOR NPDES PERMIT DEVELOPMENT**
**Major Modification**
NPDES No. NC0001422

| Facility Information | | | |
|---|---|---|---|
| Applicant/Facility Name: | Duke Energy Progress, LLC/ L.V. Sutton Energy Complex | | |
| Applicant Address: | 801 Sutton Steam Plant Road, Wilmington, NC 28401 | | |
| Facility Address: | (same) | | |
| Permitted Flow | N/A | | |
| Type of Waste: | 100 % Industrial | | |
| Facility/Permit Status: | Major Modification (WWTP Class I) | | |
| County: | New Hanover | | |
| **Miscellaneous** | | | |
| Receiving Stream: | Cape Fear River (001), Sutton Lake (002, 004, 008) | Regional Office: | WiRO |
| Stream Classification: | C Sw (001)<br>C (002, 004, 008)<br>SI: 18-(63) | Quad | J27SW<br>Castle Hayne |
| 303(d) Listed?: | Yes<br>Impaired for D.O. (Cape Fear River) | Permit Writer: | Sergei Chernikov, Ph.D. |
| Subbasin: | 030617 (CPF) | Date: | February 18, 2015 |
| Drainage Area (mi2): | |  | |
| Summer 7Q10 (cfs) | Tidally influenced (Outfall 001); Lake (Outfalls 002, 004, and 008) | | |
| 30Q2 (cfs): | See above | | |
| Average Flow (cfs): | See above | | |
| IWC (%): | 100 (all outfalls) | | |
| Primary SIC Code: | | | |

PROPOSED PERMITTING ACTION

This is a request for a Major Modification to the NPDES wastewater permit. On November 5, 2014 the Duke Energy Progress was notified of the DENR decision to reclassify Sutton Lake (1100 acres) to the "waters of the State". The reclassification necessitates the need to make modifications to the existing NPDES permit. This Major Modification is being made to incorporate the required changes to the permit. This modification also includes addition of the groundwater to the permit, the groundwater is being withdrawn from the interceptor wells to prevent spread of the contaminated plume outside of the compliance boundary. The facility will install 12 wells, each yielding approximately 75 gpm, for an anticipated maximum flow rate of 900 gpm (1.3 MGD). All water pumped from the extraction wells will be processed through a treatment system that precipitates pollutants of concern, followed by solids removal. The treated wastewater will be discharged through existing outfall 001.

SUMMARY

Duke Energy Progress Sutton Plant is a natural gas-fired 620 MW combined cycle generation facility. The power block consists of two combustion turbine generators (each with a HRSG – heat recovery steam generator) and one steam turbine generator. Historically, the facility operated 3 coal-fired units. The coal-fired units were shut-down in the fourth quarter of 2013

The facility is regulated by federal effluent guidelines (40 CFR Part 423 – Steam Electric Power Generating Point Source Category) – BPT/BAT.

On February 11, 2015 the Wilmington Regional Office delineated the Effluent Channel at the Sutton Energy Complex in accordance with the requirements of 15A NCAC 02B .0228. The new Outfall 008 was established to accommodate discharge from this outfall.

Wastewater outfalls:
Outfall 001 – cooling pond discharge, recirculated cooling water, non-contact cooling water, groundwater, and treated wastewater from Outfall 004 (new ash pond). The new ash pond can discharge directly to Sutton Lake through Outfall 004 or to Cape Fear River through Outfall 001. The Outfall 001 is discharging through the mixing box that was set-up to concurrently discharge ash pond wastewater and water from Sutton Lake.

Outfall 002 – wastewater associated with the old ash pond. May consist of low volume waste, yard drains, oily waste treatment, ash sluice, and coal pile runoff. Wastewater can be discharged to Sutton Lake or to Cape Fear River through Outfall 001.

Outfall 004 – wastewater associated with the new ash pond. May consist of low volume waste, yard drains, oily waste treatment, ash sluice, and coal pile runoff. Wastewater can be discharged to Sutton Lake or to Cape Fear River through Outfall 001.

Outfall 008- Primarily consists of recirculating cooling water from the Combined Cycle generation unit, contains flows from internal outfalls 005, 006, 007, 009, and stormwater outfalls.

Internal Outfall 005 – wastewater from the Combined Cycle generation unit.

Internal Outfall 006 - wastewater from the Combined Cycle generation unit.

Internal Outfall 007 – stormwater/wastewater flows from the closure activities for coal-fired units.

Internal Outfall 009 – low volume wastes from a new simple cycle combustion turbine expected to be online in 2017.

Stormwater outfalls discharging to the effluent channel and then to Sutton Lake via Outfall 008:
Internal Outfall SW001 – Runoff from the temporary laydown area and the parking lot.

Internal Outfall SW002 – Runoff from the parking lot and Peaker Combustion Turbine area.

Internal Outfall SW003 – Runoff from the parking lot.

Internal Outfall SW004 – Pumped stormwater from the 115 Electrical Switchyard area.

Internal Outfall SW005 – Discharge from the south wet detention basin.

Internal Outfall SW006 – Discharge from the rip rap armored emergency spillway for the north infiltration basin that treats stormwater from a parking lot and surrounding areas.

Internal Outfall SW007 – Runoff from the potential rail loading yard, rail spur, and truck roads installed to transport coal ash from the site.

ASH POND DAMS

Seepage through earthen dams is common and is an expected consequence of impounding water with an earthen embankment. Even the tightest, best-compacted clays cannot prevent some water from seeping through them. Seepage is not necessarily an indication that a dam has structural problems, but should be kept in check through various engineering controls and regularly monitored for changes in quantity or quality which, over time, may result in dam failure.
Currently, no seeps have been detected at the site.

REASONABLE POTENTIAL ANALYSIS(RPA)-OUTFALL 001, OUTFALL 002, OUTFALL 004, OUTFALL 008

The Division conducted EPA-recommended analyses to determine the reasonable potential for toxicants to be discharged at levels exceeding water quality standards/EPA criteria by this facility from outfalls 001, 002, 004 (Ash Ponds discharges). For the purposes of the RPA, the background concentrations for all parameters were assumed to be below detections level. The RPA uses 95% probability level and 95% confidence basis in accordance with the EPA Guidance entitled "Technical Support Document for Water Quality-based Toxics Control."

The long term discharge data on the EPA Form 2C was used, it was supplemented by the analysis of the free standing water in both ash ponds and groundwater sampling results. Since the highest available values for each parameter was used, it is assumed that this RPA is applicable to all discharges that represent coal ash contaminated water (outfalls 001, 002, 004). Calculations included: As, Be, Cd, Chlorides, F, Total Phenolic Compounds, Cr, Cu, CN, Pb, Hg, Mo, Ni, Se, Ag, Zn, Fe, Al, Ba, Sb and Tl (please see attached). The historic flow of 12.84 MGD was used in the analysis, the groundwater pumping volume of 1.3 MGD was added to the historic flow. Although the RPA for Al exceeds the allowable amount, the limit will not be added to the permit since North Carolina does not have Al standard and approximately 89% of the surface water samples in the state exceeds the EPA recommended criteria of 87 μg/L.

The RPA analysis for Outfall 008 (effluent channel discharge) was not conducted due to the absence of the monitoring data. Most of the water in the effluent channel is cooling water and low volume wastewater from the combined cycle facility.

The proposed permit requires that EPA methods 200.7 or 200.8 (or the most current versions) shall be used for analyses of all metals except for total mercury.

MERCURY EVALUATION

The State of North Carolina has a state-wide mercury impairment. The TMDL has been developed to address this issue in 2012. The TMDL included the implementation strategy, both documents were approved by EPA in 2012.

The mercury evaluation was conducted in accordance with the Permitting Guidelines for Statewide Mercury TMDL.

| Year | 2012 | 2013 | 2015 |
|---|---|---|---|
| Annual average concentration (ng/L) | 2.11 | 1.79 | <50.0 |
| Maximum sampling result (ng/L) | 3.72 | 2.52 | <50.0 |

Allowable mercury concentration for this facility is 12.0 ng/L. Based on the EPA guidance, the Division assumes that the annual average concentration for 2015 equals 25.0 ng/L. This concentration exceeds allowable concentration of 12.0 ng/L. Therefore, based on the Permitting Guidelines for Statewide Mercury TMDL, the effluent limits will be added to the permit.

DEWATERING – OUTFALL 001

To meet the requirements of the Coal Ash Management Act of 2014, the facility needs to dewater two ash ponds by removing the interstitial water and excavate the ash to deposit it in landfills. The facility's highest discharge rate from the dewatering process will be 2.1 MGD. The facility submitted data for the standing surface water in the ash ponds, interstitial water in the ash, and interstitial ash water that was treated by filters of various sizes. To evaluate the impact of the dewatering on the receiving stream the RPA was conducted for the wastewater that will be generated by the dewatering process. To introduce a margin of safety, the highest measured concentration for a particular parameter was used. The RPA was conducted for As, Cd, Chlorides, Cr, Cu, F, Pb, Mo, Hg, Ni, Se, Zn, Ba, Fe, Al, B, Sb, and Tl (please see attached).

TEMPERATURE LIMIT – OUTFALL 008

Since the Sutton Lake has been reclassified to the "waters of the State" on November 5, 2014, the facility has to develop a strategy to meet the state temperature standard in Sutton Lake. Potential solutions include but are not limited to: construction of a cooling tower, re-routing of the discharge to the Cape Fear River, or securing a 316(a) variance.

CWA SECTION 316(b)

The permittee shall comply with the Cooling Water Intake Structure Rule per 40 CFR 125.95. The Division approved the facility request for an alternative schedule in accordance with 40 CFR 125.95(a)(2). The permittee shall submit all the materials required by the Rule with the next renewal application.

TOXICITY TESTING-OUTFALL 001, OUTFALL 002, OUTFALL 004, AND OUTFALL 008

Current Requirement: Outfall 001 – Acute P/F @ 90% using *Pimephales promelas*
Recommended Requirement: Outfall 001 – Acute P/F @ 90% using *Pimephales promelas*

This facility has passed all toxicity tests during the previous permit cycle, please see attached.

New Requirement: Outfall 002/004/008 – Chronic P/F @ 90% using *Ceriodaphnia dubia*

For the purposes of the permitting, the long term average flow was used in conjunction with the 7Q10 summer flow to calculate the percent effluent concentrations to be used for WET.

COMPLIANCE SUMMARY

During the last 5 years, the facility has exceeded limit 1 time, please see attached. The limit violation was for pH (Outfall 001).

PERMIT LIMITS DEVELOPMENT

- The temperature limits (Outfall 001 and Outfall 008) are based on the North Carolina water quality standards (15A NCAC 2B .0200).

- The limits for Oil and Grease and Total Suspended Solids (Outfall 001, Outfall 002, Outfall 004, Outfall 005, Outfall 006, Outfall 007, Outfall 008, and Outfall 009) are based on the requirements in 40 CFR 423.
- The pH limits (Outfall 001, Outfall 002, Outfall 004, Outfall 005, Outfall 006, Outfall 008, and Outfall 009) are based on the North Carolina water quality standards (15A NCAC 2B .0200).
- The Whole Effluent Toxicity limit (Outfall 001, Outfall 002, Outfall 004 and Outfall 008) is based on the requirements of 15A NCAC 2B .0500.
- The Water Quality Based Effluent Limits for Total Iron, Total Arsenic, and Total Selenium (Outfall 001, Outfall 002, and Outfall 004) are based on the results of the Reasonable Potential Analysis.

  The Total Iron Limits are based on the water quality standard/EPA criteria of 1.0 mg/L for Freshwater Aquatic Life. The Total Arsenic Limits are based on the water quality standard/EPA criteria of 50.0 µg/L for Freshwater Aquatic Life and on the water quality standard/EPA criteria of 10.0 µg/L for Human Health. The Total Selenium Limits are based on the water quality standard/EPA criteria of 5.0 µg/L for Freshwater Aquatic Life (chronic) and on the water quality standard/EPA criteria of 56.0 µg/L for Freshwater Aquatic Life (acute).

  The calculations are conducted in accordance with the EPA Guidance entitled "Technical Support Document for Water Quality-based Toxics Control." Please see attached RPA for details.

- The Water Quality Based Effluent Limits for Total Cadmium and Total Lead (Outfall 001) are based on the results of the Reasonable Potential Analysis.

  The Total Cadmium Limits are based on the water quality standard/EPA criteria of 2.0 µg/L for Freshwater Aquatic Life (chronic) and on the water quality standard/EPA criteria of 15.0 µg/L for Freshwater Aquatic Life (acute). The Total Lead Limits are based on the water quality standard/EPA criteria of 25.0 µg/L for Freshwater Aquatic Life (chronic) and on the water quality standard/EPA criteria of 33.5 µg/L for Freshwater Aquatic Life (acute).

  The calculations are conducted in accordance with the EPA Guidance entitled "Technical Support Document for Water Quality-based Toxics Control." Please see attached RPA for details.
- The turbidity limit (Outfall 001) is based on North Carolina water quality standards (15A NCAC 2B .0200).
- Mercury limit in the permit is based on the Permitting Guidelines for Statewide Mercury TMDL.

PROPOSED CHANGES

- The Clean Water Act Section 316(B) Special Condition was updated to reflect the new regulations.
- The turbidity limit was added to the permit (Outfall 001) to meet the state turbidity standard per 15A NCAC 2B .0211(3) (k).
- The TRC limit was removed from the permit due to shut-down of the coal-fired generation units (Outfall 001).
- The Ash Pond Closure Special Condition was updated (please see A. (19.)).

- The Outfall 003 (Chemical Metal Cleaning) was eliminated from the permit due to shut-down of the coal-fired generation units.
- The new Outfall 008 (discharge from the effluent channel) was added to the permit. This outfall includes discharge from 4 internal wastewater outfalls, and 7 internal stormwater outfalls.
- The monitoring for ammonia nitrogen was eliminated from the permit due to the discontinuation of the coal ash sluicing (Outfall 002 and Outfall 004).
- An internal Outfall 007 was added to the permit to accommodate discharge from the West Retention Basin. This discharge includes the wastewater from closure activities associated with the coal-fired units.
- An internal Outfall 009 was added to the permit to accommodate low level wastewater discharge from simple cycle turbine expected to be on line in 2017.
- The Limits for Total Arsenic and Total Selenium were added to the permit (Outfall 002 and Outfall 004) based on the results of Reasonable Potential Analysis.
- The Limits for Total Lead and Total Cadmium were added to the permit (Outfall 001) based on the results of Reasonable Potential Analysis.
- The Daily Maximum Water Quality Based Effluent Limit for Total Arsenic was corrected (Outfall 001).
- A separate effluent page for the dewatering of the ash ponds (Outfall 001) was added to the permit (Please see Special Condition A. (2.)).
- The limits for Total Iron were added to the permit based on the results of Reasonable Potential Analysis (Outfall 001, Outfall 002, and Outfall 004).
- The limits for Total Mercury were added to the permit based on the Permitting Guidelines for Statewide Mercury TMDL (Outfall 001, Outfall 002, and Outfall 004).
- Monitoring for Total Zinc was added to Outfall 001 based on the results of Reasonable Potential Analysis.
- Monitoring for Total Copper and Total Zinc was added to the permit (Outfall 002 and Outfall 004) based on the results of Reasonable Potential Analysis.
- The Chronic Toxicity Limit was added to the permit (Outfall 002 and Outfall 004) due to the re-classification of the Sutton Lake.
- New internal outfalls for stormwater were added to the permit (SW001 through SW007).
- The Special Condition Fish Tissue Monitoring near Ash Pond Discharge has been updated (please see A. (17.)).
- The Special Condition Instream Monitoring was added to the permit (please see A. (22.)).
- Proposed federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and specify that, if a state does not establish a system to receive such submittals, then permittees must submit DMRs electronically to the Environmental Protection Agency (EPA). The Division anticipates that these regulations will be adopted and is beginning implementation.

  The requirement to begin reporting discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application has been added to the permit. (Please see Special Condition A. (23.)).
- The Applicable State Law Special Condition was added to the permit to meet the requirements of Senate Bill 729 (Coal Ash Management Act, Please see Special Condition A. (24.)).
- The Stormwater Pollution Prevention Plan Special Condition was added to the permit to accommodate the new internal stormwater outfalls (Please see Special Condition A. (25.)).

- The Temperature Limit Compliance Schedule Special Condition was added to the permit to meet the temperature requirements at the new Outfall 008 (Please see Special Condition A. (26.)).
- The Additional Conditions and Definitions Special Condition was added to the permit. Please see Special Condition A. (27.).
- The following requirement was added to Outfall 002, Outfall 004, and Outfall 008: No later than 180 days from the effective date of this permit, the facility shall submit EPA Form 2C.

CHANGES IN THE DRAFT PERMIT

The following modifications to the July Draft Permit were implemented based on public comments received during public hearing process, Division's staff recommendations included in the Hearing Officer Report (October 6, 2015), EPA comments, and Duke Energy comments:

1) The limits for Oil and Grease and TSS were added to Outfall 001.
2) The monitoring frequency for all parameters in the effluent was increased to Weekly (Outfall 001 – normal operation), with an exception of Whole Effluent Toxicity.
3) The transfer of wastewater from Old Ash Pond to New Ash Pond and Outfall 001 was authorized.
4) The requirements to minimize fish migration up the Effluent Channel were modified (Outfall 008).
5) The Total Aluminum limits were removed from Outfall 001, Outfall 002, and Outfall 004 since North Carolina does not have Al standard and approximately 89% of the surface water samples in the state exceeds the EPA recommended criteria of 87 μg/L.
6) The requirement to limit drawdown rate to 1 foot/week (unless approved by DEQ) were added to Outfall 001, Outfall 002, and Outfall 004.
7) The groundwater was added to the list of the waste streams discharged through Outfall 001.
8) The following requirement was added to Outfall 002, Outfall 004, and Outfall 008: The following requirement was added to Outfall 002, Outfall 004, and Outfall 008: The facility shall submit EPA Form 2C as soon as practicable, but no later than 180 days from the effective date of this permit.
9) The Technology Based Effluent Limits for Total Arsenic, Total Selenium, and Total Mercury were eliminated (Outfall 001, Outfall 002, and Outfall 004) to meet the updated requirement in 40 CFR 423.

PROPOSED SCHEDULE

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|---|---|
| Draft Permit to Public Notice: | October 14, 2015 (est.) |
| Permit Scheduled to Issue: | December 11, 2015 (est.) |

STATE CONTACT

If you have any questions on any of the above information or on the attached permit, please contact Sergei Chernikov at (919) 807-6386 or sergei.chernikov@ncdenr.gov.