

#31

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

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,

Progress Energy Carolinas, Inc.

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

**Roxboro Steam Electric Generating Plant
NCSR 1377 near Roxboro
Person County**

to receiving waters designated as Hyco Lake in the Roanoke River Basin in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III and IV hereof.

This permit shall become effective September 1, 2005.

This permit and the authorization to discharge shall expire at midnight on March 31, 2007.

Signed this day August 10, 2005.

**ORIGINAL SIGNED BY
Tom Belnick**

Alan W. Klimek, P.E.
Director,
Division of Water Quality
By Authority of the Environmental Management Commission

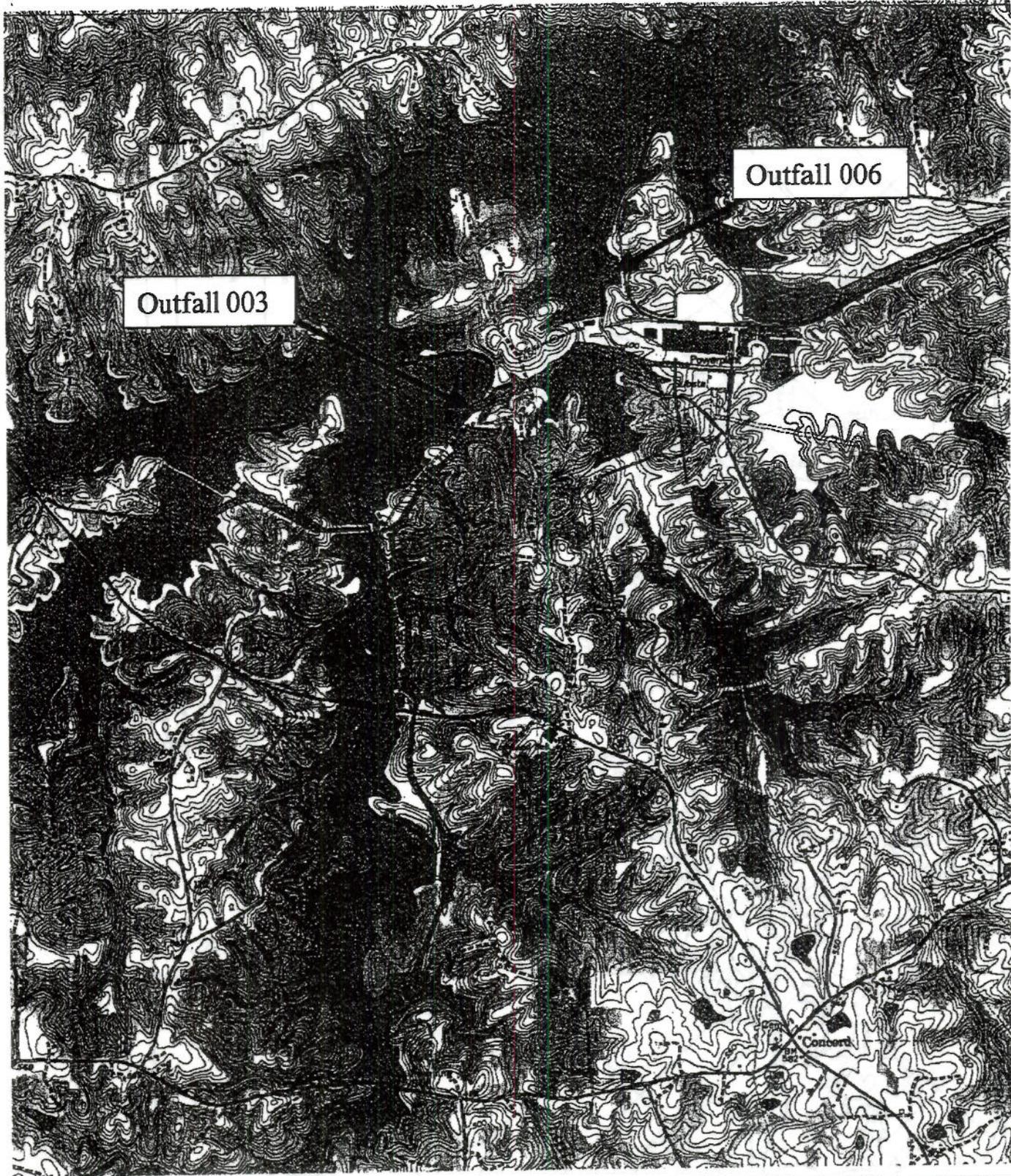
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SUPPLEMENT TO PERMIT COVER SHEET

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.

Progress Energy Carolinas, Inc. is hereby authorized to:

1. Continue to operate the following systems located at **Roxboro Steam Electric Generating Plant** off NCSR 1377 near Roxboro in Person County:
 - **Ash Pond Treatment System (Internal Outfall 002).** To treat ash transport water, low volume wastewater, runoff from the ash landfill, dry flyash handling system wash water, coal pile runoff, silo wash water, storm water runoff, cooling tower blowdown from unit number 4, and domestic sewage treatment plant effluent. Effluent from the ash pond discharges into the heated water discharge canal, and is ultimately released into Hyco Lake through Outfall 003.
 - **Heated Water Discharge Canal System (Outfall 003).** At the point that the discharge canal enters Hyco Lake, it contains flow from several waste streams including; once-through cooling water, stormwater runoff, and the effluent from the ash pond (Outfall 002).
 - **Cooling Tower Blowdown System (Internal Outfall 005).** Cooling tower blowdown from unit number 4 discharges into the ash transport system, and ultimately flows into the ash pond (Outfall 002).
 - **Coal Pile Runoff Treatment System (Outfall 006).** This system handles runoff from the coal pile and other coal handling areas. These waters are routed to a retention pond for treatment by neutralization, sedimentation, and equalization prior to being discharged directly into Hyco Lake.
 - **Domestic Wastewater Treatment System (Internal Outfall 008).** Effluent from the treatment system flows into the ash pond. Effluent from the ash pond discharges into the heated water discharge canal.
 - **Chemical Metal Cleaning Treatment System (Internal Outfall 009).** This wastestream may occasionally be discharged to the ash pond treatment system. It contains chemical metal cleaning wastes. Effluent from the ash pond discharges into the heated water discharge canal.
 - **Flue Gas Desulfurization Treatment System (Internal Outfall 010).** This wastestream is generated from blowdown from the FGD unit. After treatment in bioreactors, effluent will be discharged into the heated water discharge canal downstream from outfall 002 and before the sampling point for outfall 002.
2. After receiving an Authorization to Construct from the Division, construct and operate a Flue Gas Desulfurization (FGD) wastewater treatment system discharging to the ash pond discharge canal through internal outfall 010.
3. Discharge from said treatment works and/or outfalls at the locations specified on the attached map into the Hyco Lake, classified as WS-V & B waters in the Roanoke River Basin.



C P & L Roxboro Facility

State Grid/Quad: Olive Hill
B 22 NE

Outfall 003 **Latitude:** 36° 28' 48" N
Longitude: 79° 05' 11" W

Outfall 006 **Latitude:** 36° 19' 13" N
Longitude: 79° 04' 41" W

Receiving Stream: Hyco Lake
Stream Class: B

Drainage Basin: Roanoke River
Sub-Basin: 03-02-05



NPDES Permit No. NC0003425
Person County

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)

A. (1) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (002)

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **Internal Outfall 002 (Ash Pond Treatment System to the Heated Water Discharge Canal)**. 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			Daily	Continuous	Effluent
Total Selenium	15.0 mg/L	20.0 mg/L	2/month	Grab	Effluent
Oil and Grease	30.0 mg/L	100 mg/L	2/Month	Grab	Effluent
Total Suspended Solids			2/Month	Grab	Effluent

Notes:

1. Samples taken in compliance with the monitoring requirements listed above shall be taken at the ash pond discharge prior to mixing with other sources of wastewater.

The low volume waste shall be discharged to the ash pond treatment system.

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)

A. (2) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (003)

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **Outfall 003 (Heated Water Discharge Canal System to the Hyco Reservoir)**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Instantaneous Maximum	Measurement Frequency	Sample Type	Sample Location ¹
Flow			Continuous	Pump Logs or similar reading	Plant Intake
Total Residual Chlorine ²		200 µg/L	2/Month	Multiple Grabs	Effluent
Total Phosphorus			Monthly	Grab	Effluent
Total Nitrogen			Monthly	Grab	Effluent
Temperature ³			Continuous	Recorder	Effluent, 4C ³ , 4D ³
Total Arsenic			Monthly	Grab	Effluent
pH ⁴			Weekly	Grab	Effluent
Acute Toxicity ⁵			Quarterly	Composite	Effluent

Notes:

- Effluent sampling shall be performed on the discharge canal at the point of discharge into Hyco Lake. Samples taken in compliance with the monitoring requirements listed above shall be taken prior to mixing with other sources of wastewater.
- Total residual chlorine shall not be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division of Water Quality that discharge for more than two hours is required for macroinvertebrate control. The 200 µg/L limitation is an instantaneous maximum effluent limitation defined as the value which shall not be exceeded at any time, and is to be measured during the chlorine release period. Simultaneous multi-unit chlorination is permitted. In order to meet the two-hour limitation, the chlorination shall be automatically controlled or a log kept of manual system operation times.
- The Permittee shall operate so as to remain in compliance with the conditions outlined in the mixing zone defined in Special Condition A. (12) of this permit. The temperature of Hyco Lake at no time shall exceed the thermal water quality standard outside the mixing zone defined in Special Condition A. (12). Continuous monitoring in the mixing zone shall be between 4C and 4D as shown on the Fishery and Temperature Survey Map (attached). These thermal limitations may be deleted or revised, as appropriate, based upon evaluation of the results of the thermal studies.
- The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- Acute Toxicity (*Pimephales promelas*) P/F @ 90%, March, June, September and December. See Special Condition A. (8) of this permit. In lieu of the requirement in Part II, Section A, Condition 8a, composite samples for this effluent characteristic shall consist of 24 or more grab samples of equal volumes collected at equal intervals over a 24-hour period.

The Permittee is allowed to operate Unit 3 in a once-through cooling mode from October 15 through April 30.

There shall be no discharge of floating solids or visible foam in other than trace amounts outside a distance five (5) meters from the discharge pipe.

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)

A. (3) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (005)

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **Internal Outfall 005 (Cooling Tower Blowdown to the ash pond)**. 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			Continuous during discharge	Pump Logs	Effluent
Free Available Chlorine ²	200 µg/L	500 µg/L	2/month	Multiple Grabs	Effluent
Total Residual Chlorine ²	200 µg/L	200 µg/L	Monthly	Multiple Grabs	Effluent
Total Chromium ³	1.0 mg/L	1.0 mg/L	2/Month	Composite	Effluent
Total Zinc ³	No Detectable Amount		Annual	Grab	Effluent
The 126 Priority Pollutants (40 CFR Part 423, Appendix A) Exclusive of Zinc and Chromium ³					

Notes:

- Effluent sampling shall be conducted at the discharge from the cooling tower prior to mixing with other waste streams. Samples taken in compliance with the monitoring requirements listed above shall be taken prior to mixing with other sources of wastewater
- Neither free available chlorine nor total residual chlorine may be discharged from any single generating unit for more than two hours per day, unless the Permittee demonstrates to the Division of Water Quality that discharge for more than two hours is required for macroinvertebrate control. The 500 µg/L is a daily maximum limitation and is to be measured during the chlorine release period. The 200 µg/L limitation is an average during the chlorine release period. Total Residual Chlorine monitoring is only required if chlorine is used or discharged.
- These limitations and monitoring requirements apply if these substances are added by the Permittee for cooling tower maintenance. There shall be no detectable amounts of the 126 priority pollutants (40 CFR 423 Appendix A) contained in chemicals added for cooling tower except for total chromium and total zinc. Compliance with the limitations for the 126 priority pollutants in 40 CFR Section 423.13(d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136.

Discharge of blowdown from the cooling tower is defined as the minimum discharge of recirculation water necessary for the purpose of discharging materials contained in the process, the further build-up of which would cause concentration in amounts exceeding limitations established by best engineering practice.

The Permittee is authorized to discharge Maintenance Drain wastewater from the Cooling Tower for Unit 4 directly to the discharge canal. Grab samples of the following parameters are to be collected prior to mixing with other waste streams and the results shall be submitted to DWQ: pH (SU), flow (MGD) and total residual chlorine (mg/L). The Permittee shall notify the Division of Water Quality, Raleigh Regional Office (919/571-4700), prior to draining the cooling tower, except during non-office hour emergencies when notification must be made the next working day.

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)

A. (4) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (006)

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **Outfall 006 (Coal Pile Runoff Treatment System to the Hyco Reservoir)**. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Instantaneous Maximum	Measurement Frequency	Sample Type	Sample Location
Flow			2/Month	Estimate	Effluent
Total Suspended Solids		50 mg/L	2/Month	Grab	Effluent
Acute Toxicity ²			Annually	Grab	Effluent
pH ³			Weekly	Grab	Effluent

Notes:

1. Effluent sampling shall be conducted at the point of discharge into Hyco Lake. Samples taken in compliance with the monitoring requirements listed above shall be taken prior to mixing with other sources of wastewater.
2. Acute Toxicity (*Pimephales promelas*, 24-hour) monitoring shall be performed in accordance with Special Condition A. (9) of this permit.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

There shall be no discharge of floating solids or visible foam in other than trace amounts outside a distance five (5) meters from the discharge pipe.

Material storage runoff shall include rainfall to navigable waters through any discernable, confined and/or discrete conveyance from, or through, coal.

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)

A. (5) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (008)

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **Internal Outfall 008 (Domestic Wastewater Treatment System to the ash pond)**. 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	0.015 MGD		Annual	Pump Logs	Effluent
Biochemical Oxygen Demand (5-day @ 20°C)	30.0 mg/L	45.0 mg/L	Annual	Composite	Effluent
Total Suspended Solids	30.0 mg/L	45.0 mg/L	Annual	Composite	Effluent
Total Ammonia (as N)			Annual	Grab	Effluent
pH ²			Annual	Grab	Effluent

Notes:

1. Samples taken in compliance with the monitoring requirements listed above shall be taken after treatment and prior to mixing with other sources of wastewater.
2. The pH shall not be less than 6.0 standard units, nor greater than 9.0 standard units.

See Special Condition A (17).

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)

A. (6) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (009)

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 (Metal Cleaning Wastes to the ash pond). Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Averages	Daily Maximum	Measurement Frequency	Sample Type	Sample Location 1
Flow			Once per Discharge Event	Pump Logs or similar reading	Outfall 002
Total Suspended Solids	30.0 mg/L	100 mg/L	Once per Discharge Event	Grab	Outfall 002
Oil and Grease	15.0 mg/L	20.0 mg/L	Once per Discharge Event	Grab	Outfall 002
Total Copper	1.0 mg/L	1.0 mg/L	Once per Discharge Event	Grab	Outfall 002
Total Iron	1.0 mg/L	1.0 mg/L	Once per Discharge Event	Grab	Outfall 002

Notes:

1. Samples taken in compliance with the monitoring requirements listed above shall be taken after ash pond treatment and prior to mixing with other sources of wastewater.

For the purposes of this permit, the term "Once per Discharge Event" shall mean the discharge from Outfall 002 that occurs within 30 minutes from the time the fly and bottom ash containing metal cleaning waste is discharged into the ash pond plus the calculated detention time of the ash pond.

A. (7) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (010)

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from **Internal Outfall 010 (Flue Gas Desulfurization Blowdown)**. 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			Monthly	Pump Logs or similar readings	Effluent
Total Beryllium ³			Weekly	Grab	Effluent
Total Mercury ³			Weekly	Grab	Effluent
Total Antimony ³			Quarterly	Grab	Effluent
Total Selenium ³			Quarterly	Grab	Effluent
Total Silver ³			Quarterly	Grab	Effluent
Total Vanadium ³			Quarterly	Grab	Effluent

Notes:

1. Samples taken in compliance with the monitoring requirements listed above shall be taken after bioreactor treatment and prior to mixing with other sources of wastewater.
2. DMRs for this outfall shall be submitted only after discharge commences from the FGD system.
3. Permittee may request reduction of monitoring frequency if data (of at least 12 data samples and covering at least one year) indicate no detection of pollutant.

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SPECIAL CONDITIONS

A (8). ACUTE TOXICITY TESTING PASS/FAIL PERMIT LIMIT (Quarterly)

The permittee shall conduct acute toxicity tests on a *quarterly* 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. The tests will be performed during the months of March, June, September and December.

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, DWQ Form AT-2 (original) is to be sent to the following address:

Attention: NC DENR / DWQ / Environmental Sciences Branch / Aquatic Toxicology Unit
1621 Mail Service Center
Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental Sciences Branch 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 Branch at the address cited above.

Should any single quarterly monitoring indicate a failure to meet specified limits, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above.

Should the permittee fail to monitor during a month in which toxicity monitoring is required, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Quality 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.

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A. (9) Acute Toxicity Monitoring (ANNUAL)

The permittee shall conduct annual toxicity tests using protocols defined as definitive in E.P.A. Document EPA/600/4-90/027 entitled "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms." The monitoring shall be performed as a Fathead Minnow (*Pimephales promelas*) 24 hour static test. Effluent samples for self-monitoring purposes must be obtained below all waste treatment. The permittee will conduct one test annually, with the annual period beginning in January of the calendar year of the effective date of the permit. The annual test requirement must be performed and reported by June 30. If no discharge occurs by June 30, notification will be made to the Division by this date. Toxicity testing will be performed on the next discharge event for the annual test requirement.

The parameter code for this test is TAE6C. All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Form (MR-1) for the month in which it was performed, using the appropriate parameter code. Additionally, DWQ Form AT-1 (original) is to be sent to the following address:

Attention: NC DENR / DWQ / Environmental Sciences Branch / Aquatic Toxicology Unit
1621 Mail Service Center
Raleigh, North Carolina 27699-1621

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Quality 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.

Should there be no discharge of flow from the facility during any month, 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 Branch at the address cited above.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Quality 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 PART I: immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.

A. (10) Intake Screen Backwash Condition

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

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)
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A. (11) 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. The plan shall include a listing of all potential sources of spills or leaks of these materials, a method for containment, a description of training, inspection and security procedures, and emergency response measures to be taken in the event of a discharge to surface waters. Sources of such discharges may include, but are not limited to, materials storage area, in-plant site runoff, and sludge and waste disposal areas. The BMP Plan shall continue to be maintained at the plant site and shall be available for inspection by EPA and DWQ personnel.

A. (12) Temperature Requirements

- a. Water quality standards for temperature will not apply within a mixing zone, which shall include the North Hyco arm downstream of NC Highway 57, the main body of Hyco Lake downstream of the confluence of the Cobbs Creek Arm and the North Hyco Arm, and the entire afterbay lake. The area described does not include the South Hyco Arm or the first finger arms on the west side of the lake lying upstream of the dam.
- b. All water discharged from the afterbay to Hyco River shall comply with all applicable standards including temperature standards.
- c. Water within the main lake and the afterbay lake to Hyco River shall comply with water quality standards except the temperature standards in the areas of the lake defined herein as a mixing zone.
- d. Temperature measurements made to monitor compliance with this provision shall be made at least six inches, but not more than one foot, below the surface of the lake. A monthly average temperature shall consist of at least five determinations conducted on five separate days.
- e. Temperature increases shall be determined as the increase in temperature above the temperature measured at the confluence of the two southern finger arms on the north side of the lake (NC Grid coordinates North 1,005,000 – East 1,981,000).

A. (13) Biological Monitoring

In accordance with the previously submitted biological monitoring program (as approved by the Director of the Division of Water Quality, and as it may be amended), the Permittee shall submit results of biological studies and monitoring programs in a manner and under schedule to be approved by the Director of the Division of Water Quality.

A. (14) Cooling Tower Blowdown Discharge

Unit number 4 Cooling Tower Blowdown shall not be discharged through the maintenance drain directly to the heated water discharge canal. Blowdown may only be discharged through the ash transport system to the ash pond.

A. (15) PCB Prohibition

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

PART I: WASTEWATER MONITORING, CONTROLS AND LIMITATIONS (effective February 1, 2003)
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A. (16) Limitations Reopener

The permit shall be modified, or revoked and reissued, to comply with any applicable effluent guideline or water quality standard issued or approved under sections 302(b)(2)(c) and (d), 304(b)(2) and 307(a) of the Clean Water Act, if the effluent guideline or water quality standard so issued or approved:

- a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b. Controls a pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements in the Act then applicable.

A. (17) Domestic Wastewater Treatment Plant

The permittee shall at all times properly operate and maintain the domestic wastewater treatment plant to meet secondary standards as specified in Part A (5).

A. (18) Bioreactor Condition

An operation and maintenance plan, including a monitoring regimen for the bioreactor units and an emergency response plan in the event of an upset, shall be maintained and available for inspection by Division personnel.



2

Michael F. Easley
Governor

William G. Ross, Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director
Division of Water Quality

August 10, 2005

Mr. Cecil Rowland
Plant Manager
Roxboro Steam Electric Generating Plant
1700 Dunnaway Road
Semora, North Carolina 27343

Subject: Modification of NPDES Permit NCO003425
Roxboro Steam Electric Plant
Person County

Dear Mr. Rowland:

The Division has reviewed your request to modify permit NCO003425 based upon the addition of a wastestream from a proposed Flue Gas Desulfurization (FGD) System. **This final permit includes the following changes from the revised draft permit sent to you on June 22, 2005:**

- Outfall 010: Monitoring for total manganese has been removed.
- Outfall 010: Monitoring frequency for total selenium has been changed to quarterly.
- Outfall 010: Quarterly monitoring has been added for antimony, silver, and vanadium.
- Special Condition A.(18) has been added requiring an emergency response plan and operation and maintenance plan for the bioreactors.

In accordance with your permit modification request and our review, the Division is forwarding herewith a modification to the subject permit. Enclosed please find the modified permit pages. These pages should be inserted into your permit and the old ones discarded. This permit modification 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 May 9, 1994 (or as subsequently amended).

If any parts, measurement frequencies or sampling requirements contained in this permit modification 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 a written petition conforming to Chapter 150B of the North Carolina General Statutes, filed with the Office of Administrative Hearings (6714 Mail Service Center, Raleigh, North Carolina 27699-6714). Unless such demand is made, this decision shall be final and binding. If you have any questions concerning this permit modification, please contact Dawn Jeffries of the NPDES Unit at (919) 733-5083, extension 595.

Sincerely,
ORIGINAL SIGNED BY
Tom Belnick

Alan W. Klimek, P.E.

cc: Central Files
Raleigh Regional Office, Water Quality Section
NPDES Unit
EPA Region IV

DISCLAIMER

The full text of certain NPDES permits and the associated fact sheets has been made available to provide online access to this public information. EPA is making permits and fact sheets available electronically to provide convenient access for interested public parties and as a reference for permit writers. The ownership of these documents lies with the permitting authority, typically a State with an authorized NPDES program.

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Please contact the appropriate permitting authority (either a State or EPA Regional office) prior to acting on this information to ensure you have the most up-to-date permit and/or fact sheet. EPA recognizes the official version of a permit or fact sheet to be the version designated as such and appropriately stored by the respective permitting authority.

The documents are gathered from all permitting authorities, and all documents thus obtained are made available electronically, with no screening for completeness or quality. Thus, availability on the website does not constitute endorsement by EPA.