Water Resources
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

S. JAY ZIMMERMAN
Director

February 12, 2016

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: NPDES Permit Issuance
Permit No. NC0004961
Riverbend Steam Station
Gaston County

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 April 8, 2015 in Lincolnton seeking comments on the Draft permit. This Final permit incorporates recommendations of the DWR Hearing Officer, EPA, as well as other changes. Listed below are all changes from the Draft permit:

- The Outfall 010 was eliminated and the Special Condition A. (16.) was updated to meet the requirements of The Water Quality Standard Regulatory Revisions Final Rule that has become effective on October 20, 2015.
- Fish tissue monitoring was increased to annually from once every five years to address the EPA comment. Please see Special Condition A. (12.).
- The Additional Conditions and Definitions Special Condition was added to the permit to address the EPA comment. Please see Special Condition A. (20.).
- Measurement frequency was changed from "Episodic" to "Per discharge event" (Outfall 002A) to address the EPA comment.
- The Flow limit was added for Outfall 002 (dewatering phase) to address the EPA comment.
- The automatic pump shutoff requirements for TSS limit exceedance was added for Outfall 002 to address the EPA comment.
- The variance from Monthly Average TSS limit (Outfall 002 and Outfall 011) was eliminated to address the EPA comment.

- Monitoring frequency for all parameters was increased to Weekly for Outfall 002 to address the EPA comment.
- The specific date of December 31, 2019 replaced 4.5 years for Outfall 002. This change was made to address EPA comment. Please see Special Condition A. (2.).
- Clarifying language was added to define the discharge from the ash pond under normal operating conditions to address the Hearing Officer recommendation and the comment from the permittee. Please see Special Condition A. (2.).
- The definition of dewatering was added to Special Condition A. (3.). The definition was added to address the Hearing Office recommendation and the comment from the permittee.
- The effluent concentration for Whole Effluent Toxicity was changed to correct a typo, the correct concentration is 2.7%. Please see footnote to Special Conditions A. (2.) and A. (3.).
- The footnote describing conditions for monitoring Total Copper and Total Iron was removed (Outfall 011) to correct an error.
- Description of the wastewater sources for Outfall 001 and Outfall 002 was updated to reflect the current status of the facility.
- Clarifying language was added to the Outfall 002 to define the conditions under which the limits for Total Copper and Total Iron are applicable. This change was made to address the Hearing Officer recommendation.
- A distinct outfall was created for each seep with the effluent limits equivalent to the water quality standards, Technology-Based limits (TSS and Oil & Grease) were also added in accordance with the 40 CFR 423.
- The monthly seep monitoring was extended to a 12 month period, after which the monitoring will be reduced to quarterly.
- The following requirements were added to the Condition A. (2.). – Outfall 001: flow limit; use of a floating pump station with free water skimmed from the basin surface using an adjustable weir; daily monitoring of flow; continuous monitoring of TSS with auto pump shut-off if TSS concentration (15 minute average) exceeds half the maximum daily TSS limit (pumping will be allowed to continue if interruption might result in a dam failure or damage); real time pH monitoring with an auto shut-off if the 15-minute running average pH falls below 6.1 standard units or rises above 8.9 standard units; drawdown to no less than three feet above the ash; and monitoring for total chromium, total lead, total cadmium, and total dissolved solids.

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 Energy, Mineral, and 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,

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

Hardcopy: Central Files
NPDES Files
Mooresville Regional Office, SWPS

Email: US EPA, Region IV
Aquatic Toxicology Unit
David Merryman, Catawba Riverkeeper, [david@catawbariverkeeper.org]

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

PERMIT

TO DISCHARGE WASTEWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

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

Duke Energy Carolinas, LLC

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

Riverbend Steam Station
Mount Holly
Gaston County

to receiving waters designated as the Catawba River (Mountain Island Lake) in the Catawba River Basin

in accordance with effluent limitations, monitoring requirements, and other applicable conditions set forth in Parts I, II, III, and Appendix A.

This permit shall become effective March 1, 2016.

This permit and authorization to discharge shall expire at midnight on February 29, 2020.

Signed this day February 12, 2016.

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

SUPPLEMENT TO PERMIT COVER SHEET

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

Duke Energy Carolinas, LLC is hereby authorized to:

1. Continue to discharge:
   - Water from the plant chiller system (outfall 001).
   - Ash basin discharge (outfall 002) consisting of consisting of stormwater from roof drains and paving, treated groundwater, track hopper sump (groundwater), coal pile runoff, general plant/trailer sanitary wastewater, turbine and boiler rooms sumps, vehicle rinse water, and stormwater from pond areas, upgradient watershed, and miscellaneous stormwater flows.
   - Yard sump overflow (outfall 002A).
   - 12 potentially contaminated groundwater seeps (outfalls 101-112).
   - Wastewater, stormwater and groundwater (outfall 011).

   From a facility located at Riverbend Steam Station, Mount Holly in Gaston County, and

2. Discharge wastewater from said treatment works at the location specified on the attached map into the Catawba River, which is classified WS-IV and B-CA waters in the Catawba River Basin.

Part I

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

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge plant chiller system from outfall 001. Such discharges 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[1]
Flow, MGD			Monthly	Pump Logs	Influent or Effluent
Temperature (°F)			Monthly	Grab	Effluent
Temperature (°F)[2]		89.6 (32°C)	Monthly	Grab	Downstream

Notes:

1. Downstream sampling point: downstream at Mountain Island Lake. If samples are collected below the water surface, the Permittee will record the sample depth on the DMR form.
2. The ambient temperature shall not exceed 89.6°F (32.0°C) and is defined as the daily average downstream water temperature. When the Riverbend Station effluent temperature is recorded below 89.6°F (32.0°C), as a daily average, then monitoring and reporting of the downstream water temperature is not required. In cases where the Permittee experiences equipment problems and is unable to obtain daily temperatures from the existing temperature monitoring system, the temperature monitoring must be reestablished within five working days.
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. (18.).

Chlorination of the once through condenser cooling water, discharged through outfall 001, is not allowed under this permit. Should Duke Energy wish to chlorinate its condenser cooling water, a Division permission must be requested and received prior to commencing chlorination.

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

A. (2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 002-normal operation) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 002 – Ash Pond Discharge (**removing the free water above the settled ash layer that does not involve mechanical movement of the ash**). 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
Flow	5.74 MGD		Daily	Pump logs or estimate	Influent or Effluent
Total Suspended Solids[8]	23.0 mg/L	75.0 mg/L	Weekly	Grab	Effluent
Oil and Grease	11.0 mg/L	15.0 mg/L	Weekly	Grab	Effluent
Total Copper[1]	1.0 mg/L	1.0 mg/L	Weekly	Grab	Effluent
Total Iron[1]	1.0 mg/L	1.0 mg/L	Weekly	Grab	Effluent
Total Arsenic	52.5 µg/L	72.5 µg/L	Weekly	Grab	Effluent
Total Selenium	68.0 µg/L	127.5 µg/L	Weekly	Grab	Effluent
Nitrate/nitrite as N	0.65 mg/L	0.85 mg/L	Weekly	Grab	Effluent
Total Arsenic	10.5 µg/L[7]	14.5 µg/L[7]	Weekly	Grab	Effluent
Total Selenium	13.6 µg/L[7]	25.5 µg/L[7]	Weekly	Grab	Effluent
Total Mercury	47.0 ng/L[5]	47.0 ng/L[5]	Weekly	Grab	Effluent
Nitrate/nitrite as N	0.13 mg/L[7]	0.17 mg/L[7]	Weekly	Grab	Effluent
Total Phosphorus, mg/L			Weekly	Grab	Effluent
Total Nitrogen (NO_2 + NO_3 + TKN), mg/L			Weekly	Grab	Effluent
pH[2]			Weekly	Grab	Effluent
Chronic Toxicity[3]			Monthly	Grab	Effluent
Turbidity[4], NTU			Weekly	Grab	Effluent
Total Chromium, µg/L			Weekly	Grab	Effluent
Total Cadmium, µg/L			Weekly	Grab	Effluent
Total Lead, µg/L			Weekly	Grab	Effluent
TDS, mg/L			Weekly	Grab	Effluent

Notes:

1. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The facility shall conduct a real time pH monitoring with an auto shut-off if the 15-minute running average pH falls below 6.1 standard units or rises above 8.9 standard units.
3. Whole Effluent Toxicity shall be monitored by chronic toxicity (Ceriodaphnia) P/F at 2.7%. Tests shall be conducted in January, April, July and October (see Part A.(6.) for details).
4. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream.
   NTU - Nephelometric Turbidity Unit.
5. The facility shall use EPA method 1631E.
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. (18.).
7. The TBEL limits shall be met no later than December 31, 2019. This time period is provided in order for the facility to budget, design, and construct the treatment system. Permit might be re-opened to implement the final EPA Effluent Guidelines and more stringent limits might be added.
8. The facility shall continuously monitor TSS concentration and the dewatering pump shall be shutoff automatically when the one half of the Daily Maximum limit (15 minutes average) is

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

The facility is allowed to drawdown the wastewater in the lagoon to no less than three feet above the ash.

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

The metal cleaning waste, coal pile runoff, ash transport water, domestic wastewater, and low volume waste shall be discharged into the ash settling pond.
No chemicals, cleaners, or other additives may be present in the vehicle wash water to be discharged from this outfall.

There shall be no discharge of floating solids or visible foam in other than trace amounts. The level of water in the pond should not be lowered more than 1 ft/week, unless approved by the DEQ Dam Safety Program.

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

During the period beginning on the commencement date of the dewatering operations and lasting until expiration, the Permittee is authorized to discharge from outfall 002 – Ash Pond Discharge **(Dewatering-removing the interstitial water)**. Such discharges shall be limited and monitored[7] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow		1.45 MGD	Weekly	Pump logs or estimate	Influent or Effluent
Total Suspended Solids[1]	23.0 mg/L	75.0 mg/L	Weekly	Grab	Effluent
Oil and Grease	11.0 mg/L	15.0 mg/L	Weekly	Grab	Effluent
Total Copper[2]	1.0 mg/L	1.0 mg/L	Weekly	Grab	Effluent
Total Iron[2]	1.0 mg/L	1.0 mg/L	Weekly	Grab	Effluent
Total Arsenic	10.5 µg/L	14.5 µg/L	Weekly	Grab	Effluent
Total Selenium	13.6 µg/L	25.5 µg/L	Weekly	Grab	Effluent
Total Aluminum	3.18 mg/L	3.18 mg/L	Weekly	Grab	Effluent
Total Mercury	47.0 ng/L[6]	47.0 ng/L[6]	Weekly	Grab	Effluent
Nitrate/nitrate as N	0.13 mg/L	0.17 mg/L	Weekly	Grab	Effluent
Total Phosphorus, mg/L			Weekly	Grab	Effluent
Total Nitrogen (NO_2 + NO_3 + TKN), mg/L			Weekly	Grab	Effluent
pH[3]			Weekly	Grab	Effluent
Chronic Toxicity[4]			Weekly	Grab	Effluent
Turbidity[5], NTU			Weekly	Grab	Effluent

Notes:

1. The facility shall continuously monitor TSS concentration and the dewatering pump shall be shutoff automatically when the limits are exceeded.
2. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. Whole Effluent Toxicity shall be monitored by chronic toxicity (Ceriodaphnia) P/F at 2.7%. Tests shall be conducted in January, April, July and October (see Part A.(6.) for details).
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.
   NTU - Nephelometric Turbidity Unit.
6. The facility shall use EPA method 1631E.
7. 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. (18.).

The metal cleaning waste, coal pile runoff, ash transport water, domestic wastewater, and low volume waste shall be discharged into the ash settling pond.

No chemicals, cleaners, or other additives may be present in the vehicle wash water to be discharged from this outfall. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The level of water in the pond should not be lowered more than 1 ft/week unless approved by the DEQ Dam Safety Program.

A. (4.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 002A) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 002A – Yard Sump Overflows. Such discharges 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[1]
Flow, MGD			Per discharge event	Estimate	Effluent
Total Suspended Solids	23.0 mg/L	75.0 mg/L	Per discharge event	Grab	Effluent
Oil and Grease	11.0 mg/L	15.0 mg/L	Per discharge event	Grab	Effluent
Fecal Coliform, CPU/100 mL			Per discharge event	Grab	Effluent
Total Copper[2]	1.0 mg/L	1.0 mg/L	Per discharge event	Grab	Effluent
Total Iron[2]	1.0 mg/L	1.0 mg/L	Per discharge event	Grab	Effluent
pH[4]			Per discharge event	Grab	Effluent

Notes:

1. Effluent samples shall be collected prior to the discharge to the receiving stream.
2. The limits for total copper and total iron only apply when chemical metal cleaning wastewaters are being discharged.
3. 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. (18.).
4. 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.

ALL FLOWS SHALL BE REPORTED ON MONTHLY DMRS. SHOULD NO FLOW OCCUR DURING A GIVEN MONTH, THE WORDS "NO FLOW" SHOULD BE CLEARLY WRITEN ON THE FRONT OF THE DMR. ALL SAMPLES SHALL BE OF A REPRESENTATIVE DISCHARGE.

A. (5.) CHRONIC TOXICITY PASS/FAIL PERMIT LIMIT (QUARTERLY) (Outfall 002) [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 2.7%.

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

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

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

A. (6.) 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. (7.) SPECIAL CONDITIONS

The following special conditions are applicable to all outfalls regulated by NC0004961:

- There shall be no discharge of polychlorinated biphenyl compounds.
- Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to lakes, rivers, streams or other waters of the United States is prohibited unless specifically authorized elsewhere in this permit. Discharge of chlorine from the use of chlorine gas, sodium hypochlorite, or other similar chlorination compounds for disinfection in the plant potable and service water systems and in sewage treatment is authorized. Use of restricted use pesticides for lake management purposes by applicators licensed by the N.C. Pesticide Board is allowed.
- The Permittee shall report all visible discharges of floating materials, such as an oil sheen, to the Director when submitting DMRs

A. (8.) PERMIT TERMS

The following are applicable to all outfalls regulated by NC0004961:

- It has been determined from information submitted that the plans and procedures in place at Riverbend Steam Station are equivalent to that of a BMP.

A. (9.) ASH SETTLING BASIN

Beginning on the effective date of this permit and lasting until expiration, there shall be no discharge of plant wastewater to the ash pond unless the Permittee provides and maintains at all times a minimum free water volume (between the top of the sediment level and the minimum discharge elevation) equivalent to the sum of the maximum 24-hour plant discharges plus all direct rainfall and all runoff flows to the pond resulting from a 10-year, 24-hour rainfall event, when using a runoff coefficient of 1.0. During the term of the permit, the Permittee shall remove settled material from the ponds or otherwise enlarge the available storage capacities in order to maintain the required minimum volumes at all times. The Permittee shall determine and report to the permit issuing authority the following on an annual basis:

1) the actual free water volume of the ash pond,
2) physical measurements of the dimensions of the free water volume in sufficient detail to allow validation of the calculated volume, and
3) a certification that the required volume is available with adequate safety factor to include all solids expected to be deposited in the pond for the following year.

Present information indicates a needed volume of 86.2 acre-feet in addition to solids that will be deposited to the ash pond; any change to plant operations affecting such certification shall be reported to the Director within five days.

NOTE: In the event that adequate volume has been certified to exist for the term of the permit, periodic certification is not needed.

A.(10.) 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.(11.) STRUCTURAL INTEGRITY INSPECTIONS OF ASH POND DAM

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

A.(12.) FISH TISSUE MONITORING NEAR ASH POND DISCHARGE

The facility shall conduct fish tissue monitoring annually and submit the results with the NPDES permit renewal application. The objective of 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.

A.(13.) INSTREAM MONITORING

The facility shall conduct semiannual instream monitoring (one upstream and one downstream of the ash pond discharge) for arsenic, selenium, mercury (method 1631E), chromium, lead, cadmium, copper, zinc, total hardness, and total dissolved solids (TDS). Instream monitoring should be conducted at the stations that have already been established through the BIP monitoring program: B (upstream of the Outfall 002) and C (downstream of the Outfall 002). The monitoring results shall be submitted with the NPDES permit renewal application.

A.(14.) ASH POND CLOSURE

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

A.(15.) PRIORITY POLLUTANT ANALYSIS

The Permittee shall conduct a priority pollutant analysis (in accordance with 40 CFR Part 136) once per permit cycle at outfall 002 and submit the results with the application for permit renewal.

A.(16.) SEEP POLLUTANT ANALYSIS

The facility identified 12 unpermitted seeps (all non-engineered) from the ash settling basin, of which 10 of the seeps have been classified as "jurisdictional waters" by the United States Army Corps of Engineers.

Jurisdictional Water Seeps.

For the jurisdictional water seeps, the facility shall determine within 90 days from the effective date of the permit if a seep meets the state water quality standards established in 15A NCAC 2B .0200 and submit the results of this determination to the Division. If the standards are not contravened, the facility shall conduct monitoring for the parameters specified in A. (21.), A. (22.), A. (23.), A. (24.), A. (25.), A. (26.), A. (27.), A. (28.), A. (29.), A. (30.), A. (31.), and A. (32.).

If any of the water quality standards are exceeded (with the exception of the Action Level standards), the facility shall be considered in violation of the Clean Water Act until one of the options below is fully implemented. The facility shall:

1) Submit a complete application for 404 Permit (within 30 days after determining that a water quality standards exceeded) to pump the seep discharge to one of the existing outfalls, install a pipe to discharge the seep to the Catawba River, or install an *in-situ* treatment system. After the 404 Permit is obtained, the facility shall complete the installation of the pump, pipe, or treatment system within 180 days from the date of the 404 permit receipt and begin pumping/discharging or treatment.
2) Demonstrate through modeling that the decanting and dewatering of the ash basin will result in the elimination of the seep and submit the modeling results to the Division within 120 days from the effective date of the permit. Within 180 days from the completion of the dewatering

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

3) Demonstrate that the seep is discharging through the designated "Effluent Channel" and the water quality standards in the receiving stream are not contravened. This demonstration should be submitted to the Division no later than 180 days from the effective date of the permit. The "Effluent Channel" designation should be established by the DEQ Regional Office personnel prior to the issuance of the permit and appropriate 404 permit shall be obtained.

All effluent limits, including water quality-based effluent limits, remain applicable notwithstanding any action by the Permittee to address the violation through one of the identified options, so that any discharge in exceedance of an applicable effluent limit is a violation of the Permit as long as the seep remains flowing.

If jurisdictional water seeps contravene Action Level Standard, the facility shall conduct a Whole Effluent Toxicity Test (WET test). If the WET result passes, the facility shall be considered in compliance with the state water quality standards. If the WET test fails and the Toxicity Identification Evaluation determines that the parameter contravening the water quality standard is responsible for the failure the facility shall be considered in violation and, shall implement one of the 3 options identified above.

Non-Jurisdictional Water Seeps

For the non-jurisdictional water seeps the facility shall demonstrate that they will not violate water quality standards in the receiving stream or that the seep does not discharge to jurisdictional waters or that the seep does not carry pollutants indicating ash characteristics and submit this demonstration to the Division within 90 days from the effective date of the permit. If such demonstration is not possible or not approved by the Division, the facility shall choose one of the 3 options identified above.

New Identified Seeps

If new seeps are identified, the facility shall follow the procedures outlined above for either jurisdictional waters or non-jurisdictional waters. The deadlines for new seeps shall be calculated from the date of the seep discovery.

Table 1. List of Identified Seeps

The permittee has identified 12 potentially contaminated seeps in the areas adjacent to the Mountain Island Lake. The locations of the seeps are identified on the map attached to the permit.

Seep Coordinates and Assigned Outfall Numbers

Seep ID	Latitude	Longitude	Outfall number
S-1	35.365	-80.967	101
S-2	35.365	-80.966	102
S-3	36.369	-80.965	103
S-4	35.371	-80.963	104
S-5*	35.370	-80.963	105
S-6	35.367	-80.958	106
S-7	35.367	-80.957	107
S-8*	35.365	-80.956	108
S-9	35.371	-80.963	109
S-10	35.369	-80.960	110
S-11	35.369	-80.960	111
S-12	35.368	-80.959	112

*Non-jurisdictional seeps

A. (17.) 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. (18.) APPLICABLE STATE LAW (State Enforceable Only)

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

A. (19.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 011) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 011 – Former Stormwater Outfall 1. Such discharges 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			Monthly	Pump logs or estimate	Influent or Effluent
Total Suspended Solids	23.0 mg/L	75.0 mg/L	Monthly	Grab	Effluent
Oil and Grease	11.0 mg/L	15.0 mg/L	Annually	Grab	Effluent
Total Arsenic, µg/L			Quarterly	Grab	Effluent
Total Selenium, µg/L			Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Quarterly	Grab	Effluent
Nitrate/nitrate as N, mg/L			Quarterly	Grab	Effluent
Total Phosphorus, mg/L			Semi-annually	Grab	Effluent
Total Nitrogen (NO_2 + NO_3 + TKN), mg/L			Semi-annually	Grab	Effluent
pH[1]			Monthly	Grab	Effluent
Turbidity[2], NTU			Monthly	Grab	Effluent

Notes:

1. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
2. The discharge from this facility shall not cause turbidity in the receiving stream to exceed 50 NTU. If the instream turbidity exceeds 50 NTU due to natural background conditions, the discharge cannot cause turbidity to increase in the receiving stream.
   NTU - Nephelometric Turbidity Unit.
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. (18.).
4. The facility shall use EPA method 1631E.

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

A. (20.) 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 those for which specific limitations are otherwise established in this part (40 CFR 423.11 (b)).
4. The term *chemical metal cleaning waste* means any wastewater resulting from cleaning any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning (40 CFR 423.11 (c)).
5. The term *metal cleaning waste* means any wastewater resulting from cleaning [with or without chemical cleaning compounds] any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning (40 CFR 423.11 (d)).
6. For all outfalls where the flow measurement is to be "estimated" the estimate can be done by using calibrated V-notch weir, stop-watch and graduated cylinder, or other method approved by the Division.

A. (21.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 101) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 101 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (22.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 102) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 102 – Seep Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (23.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 103) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 103 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (24.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 104) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 104 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (25.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 105) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 105 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (26.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 106) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 106 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (27.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 107) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 107 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (28.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 108) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 108 – Seep Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (29.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 109) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 109 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (30.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 110) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 110 – Seep Discharge. Such discharges shall be limited and monitored[1] by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (31.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 111) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 111 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	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. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

A. (32.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 112) [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from outfall 112 – Seep Discharge. 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[2]	Sample Type	Sample Location
Flow, MGD			Monthly/Quarterly	Estimate	Effluent
pH[3]			Monthly/Quarterly	Grab	Effluent
Fluoride	1.8 mg/L	1.8 mg/L	Monthly/Quarterly	Grab	Effluent
Total Mercury[4], ng/L			Monthly/Quarterly	Grab	Effluent
Total Barium	1.0 mg/L	1.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Iron, mg/L			Monthly/Quarterly	Grab	Effluent
Total Manganese, µg/L			Monthly/Quarterly	Grab	Effluent
Total Zinc, µg/L			Monthly/Quarterly	Grab	Effluent
Total Arsenic	10.0 µg/L	50.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Cadmium	2.0 µg/L	15.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Chromium	50.0 µg/L	1,022.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Copper, µg/L			Monthly/Quarterly	Grab	Effluent
Total Lead, µg/L	25.0µg/L	33.8 µg/L	Monthly/Quarterly	Grab	Effluent
Total Nickel	25.0 µg/L	25.0 µg/L	Monthly/Quarterly	Grab	Effluent
Total Selenium	5.0 µg/L	56.0 µg/L	Monthly/Quarterly	Grab	Effluent
Nitrate as N	10.0 mg/L	10.0 mg/L	Monthly/Quarterly	Grab	Effluent
Sulfates	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
Chlorides	250.0 mg/L	250.0 mg/L	Monthly/Quarterly	Grab	Effluent
TDS	500.0 mg/L	500.0 mg/L	Monthly/Quarterly	Grab	Effluent
Total Hardness, mg/L	100.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
TSS, mg/L	30.0 mg/L	100.0 mg/L	Monthly/Quarterly	Grab	Effluent
Oil and Grease	15.0 mg/L	20.0 mg/L	Monthly/Quarterly	Grab	Effluent
Temperature, ^{0}C			Monthly/Quarterly	Grab	Effluent
Specific Conductance, µmho/cm			Monthly/Quarterly	Grab	Effluent

Notes:

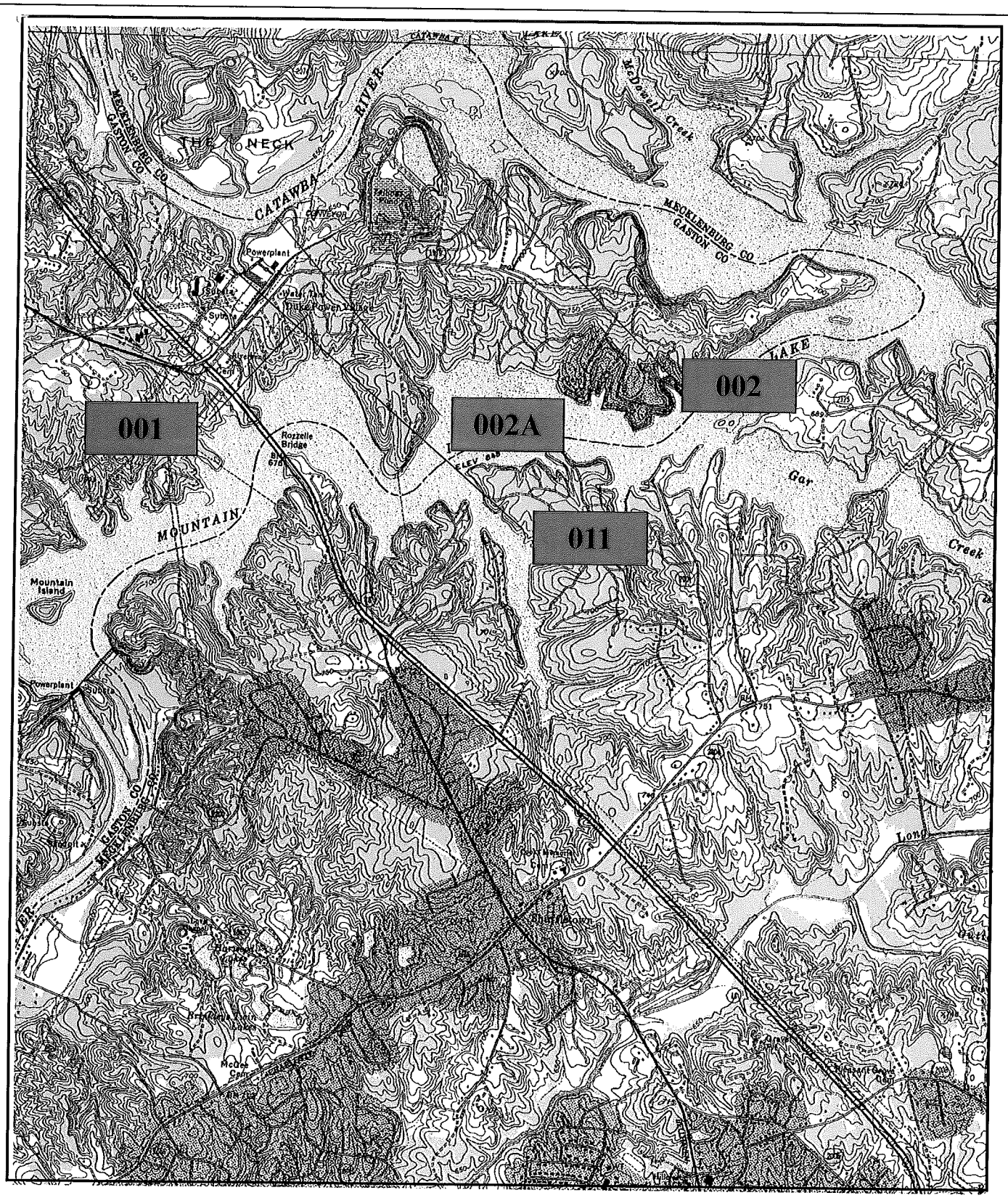
1. No later than 270 days from the effective date of this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition A. (18.).
2. The facility shall conduct monthly sampling from the effective date of the permit. After one year from the effective date of the permit the monitoring will be reduced to quarterly
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. The facility shall use EPA method 1631E.

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

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

Appendix A

Plan for Identification of New Discharges (attached).



Duke Energy Corporation

Riverbend Steam Station

State Grid/Quad: F15SW/Mt. Island Lake, NC

Receiving Streams: Catawba River **Sub-Basin:** 03-08-33

Stream Class: WS-IV & B-CA **Permitted Flow:** Not limited

Drainage Basin: Catawba River Basin

Latitude (001): 35° 21' 28" N **Longitude (001):** 80° 58' 12" W

Latitude (002): 35° 22' 06" N **Longitude (002):** 80° 57' 31" W

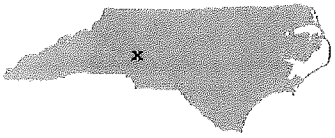
Latitude (002A): 35° 21' 51" N **Longitude (002A):** 80° 58' 11" W

Latitude (011): 35° 21' 38" N **Longitude (011):** 80° 58' 38" W

Map not to scale

North

Facility Location



NPDES Permit No. NC0004961
Gaston County