

WILLIAM G. ROSS, JR.

Acting Secretary

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Director

January 22, 2017

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: Draft NPDES Permit

Permit NC0038377

Mayo Steam Electric Generating Plant

Person County Facility Class I

Dear Mr. Sideris:

Enclosed with this letter is a copy of the draft permit for your facility. Please review the draft very carefully to ensure thorough understanding of the conditions and requirements it contains.

The draft permit contains the following significant changes from your current permit:

- The daily maximum TSS limit was reduced to 50 mg/L (Outfall 002) to meet the requirements of 40 CFR 423.
- The daily maximum limit and monthly average limit for Total Beryllium (Outfall 002 decanting) were added to the permit based on the results of Reasonable Potential Analysis. The weekly average limit was removed.
- The daily maximum limit and monthly average limit for Total Fluoride (Outfall 002 decanting) were added to the permit based on the results of Reasonable Potential Analysis. The weekly average limit was removed.
- The daily maximum limit and monthly average limit for Total Thallium (Outfall 002 decanting) were added to the permit based on the results of Reasonable Potential Analysis. The weekly average limit was removed.
- The limits for Total Cadmium, Total Chromium, Total Lead, Total Molybdenum, Total Selenium, Total Mercury, Total Antimony, Total Nickel, and Total Barium (Outfall 002 decanting) were eliminated from the permit based on the results of Reasonable Potential Analysis.
- The limits for Total Boron, Total Cobalt, and Total Manganese (Outfall 002 decanting) were eliminated from the permit due to the absence of the state water quality standards for these parameters.
- The monitoring for Total Molybdenum, and Total Nickel was eliminated (Outfall 002 decanting) from the permit due to the removal of the limits.
- The monitoring frequency for Total Copper, Total Barium, Total Boron, and Total Zinc were reduced to Monthly (Outfall 002 decanting) based on the results of Reasonable Potential Analysis.
- The Selenium Study and Crutchfield Branch Special Conditions were eliminated from the permit, they are replaced with Outfalls 101 and 102 for toe drains. Please see A. (8.) and A. (9.).

- The monitoring frequency for the Whole Effluent Toxicity was increased to Monthly (Outfall 002) to address the EPA comment.
- The monitoring frequency for the Total Chlorides was increased to Weekly (Outfall 002) to address the EPA comment.
- The monitoring for Total Iron, Total Vanadium, Total Cobalt, and Total Manganese was eliminated from the permit due to the absence of the state water quality standards for these parameters.
- The monitoring for Total Silver (Outfall 002 decanting) was eliminated from the permit based on the results of Reasonable Potential Analysis.
- A separate effluent page for the dewatering of the ash pond (Outfall 002) was added to the permit. Please see Condition A. (4.).
- The following monitoring parameters were eliminated (Outfall 009) to be consistent with the latest update to 40 CFR 423: Total Beryllium, Total Cadmium, Total Chlorides, Total Chromium, Total Copper, Total Fluoride, Total Lead, Total Manganese, Total Nickel, Total Silver, Total Barium, Total Thallium, Total Vanadium, Total Antimony, Total Boron, Total Cobalt, Total Molybdenum, Total Zinc, and TSS.
- The Technology Based Effluent Limits for Total Arsenic, Total Mercury, Total Selenium, and Nitrate/nitrite as N were added to the permit (Outfall 009) based on the requirements in 40 CFR 423.
- The monitoring frequency for Total Arsenic, Total Mercury, Total Selenium, and Nitrate/nitrite as N was reduced to Quarterly (Outfall 009) based on the review of the effluent data.
- The monitoring for Total Arsenic, Total Mercury, Total Selenium, and Nitrate/nitrite as N was added to the permit (Outfall 002) to accommodate potential oveflows from the FGD settling basin.
- The turbidity limit was added to the permit (Outfall 002) to meet the state turbidity standard per 15A NCAC 2B .0211(3) (k).
- The limits for BOD and Fecal Coliforms were added to Outfall 002 to address the EPA comment.
- The Seep Outfalls 101A, 102A, 102B, 108, and 110 (Please see A. (10.) through A. (14.)) and Seep Pollutant Analysis Special Condition (Please see A. (32.)) were added to the permit.
- The Toe Drain Outfalls 101 and 102 (Please see A. (8.) and A. (9.)) were added to the permit.
- The Domestic Wastewater Treatment Plant Special Condition was added to the permit to assure compliance with the 40 CFR 133.102. Please see Special Condition A. (23.).
- The Additional Conditions and Definitions Special Condition was added to the permit. Please see Special Condition A. (25.).
- Federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and program reports. The final NPDES Electronic Reporting Rule was adopted and became effective on December 21, 2015. The requirement to begin reporting discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application has been added to your final NPDES permit. Please See Special Condition A. (25.)

For information on eDMR, registering for eDMR and obtaining an eDMR user account, please visit the following web page: http://deq.nc.gov/about/divisions/water-resources/edmr.

For more information on EPA's final NPDES Electronic Reporting Rule, please visit the following web site:

http://www2.epa.gov/compliance/final-national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule.

- The Special Condition entitled Groundwater Monitoring Well Construction and Sampling was added to the permit. Please see Special Condition A. (27).
- The attachment 1 entitled "Groundwater Monitoring Plan" was added to the permit.
- The special condition entitled "Structural Integrity Inspections of Ash Pond Dam" was added to the permit in accordance with the new EPA requirements. Please see Special Condition A. (28).
- The "Clean Water Act Section 316(b)" Special Condition was added to the permit. Please see Special Condition A. (29.).
- The Fish Tissue Monitoring near Ash Pond Discharge Special Condition was added to the permit. Please see Special Condition A. (30.).
- The Instream Monitoring Special Condition was added to the permit to monitor the impact of the facility on the receiving stream. Please see Special Condition A. (31.).
- The Biocide Special Condition A. (33) was added to the permit to be consistent with the permitting procedure for power plants.
- The Ash Pond Closure Special Condition was added to the permit to facilitate the decommissioning of the ash ponds. Please see Special Condition A. (34.).
- The new internal outfall 002A was added to the permit to accommodate construction of the new Retention Basin. Please see A. (5.).
- The new internal outfall 002B was added to the permit to accommodate construction of the new yard sump. Please see A. (6.).
- The former Stormwater Outfalls 004, 005, 006b, 006c, 006d, and 006e were added to the permit. Please see A. (15.) through A. (21.).
- The requirement for a physical-chemical treatment of wastewater generated during the decanting and dewatering was added to the permit.
- The Internal Outfall 011 for monofill leachate was added to the permit. Please see A. (34.).

Please provide any comments you have regarding the draft permit to this office by February 22, 2017. At this time, the Division is also publishing a notice in the newspapers of general circulation in Person County, inviting public comment on the draft permit. Following the 30-day comment period, we will review all pertinent comments received and take appropriate action on the permit renewal.

If you have any questions about the NPDES permit process, please contact me at the following e-mail address: sergei.chernikov@ncdenr.gov, or telephone number: 919-807-6386.

Sincerely,

Sergei Chernikov, Ph.D. Environmental Engineer II Complex NPDES Permitting Unit

cc: Central Files
NPDES Files
EPA Region IV
Raleigh Regional Office / Water Quality (e-copy)
Raleigh Regional Office / Public Water Supply Regional Engineer (e-copy)
WSS/Aquatic Toxicology Unit (e-copy)