

North Carolina Department of Environment and Natural Resources

Pat McCrory Governor Division of Water Quality
Thomas A. Reeder
Acting Director

John E. Skvarla, III Secretary

15 July 2013

Dana Newcomb, EHS Professional Duke Energy Carolinas, LLC Dan River Combined Cycle Station 900 South Edgewood Road Eden, NC 27288

Subject:

Compliance Evaluation Inspection (MODIFICATION)

NPDES Permit NC0003468

Dan River Combined Cycle Station WWTP

Rockingham County

Dear Ms. Newcomb:

Aana Taylor-Smith of the Winston-Salem Regional Office of the North Carolina Division of Water Quality (DWQ or the Division) conducted a compliance evaluation inspection of the Dan River Combined Cycle Station Wastewater Treatment Plant (WWTP) on 1 July 2013. Your assistance and cooperation were greatly appreciated. Inspection findings are summarized below and an inspection report is attached for your records.

The facility is located at 900 South Edgewood Road in Eden, Rockingham County, North Carolina. Treated wastewater is discharged from the plant to the Dan River, which is currently classified as Class C waters in the Roanoke River Basin. The treatment system consists of avery small package plant with aeration chamber, clarifier, chlorinator and de-chlorinator; an oil/water separator; a yard sump overflow; and two ash basin lagoons.

Site Review

The facility was clean and well secured. All components of the treatment system were inspected and found to be operational. No discrepancies from the permit were noted. Water level in the lagoons was down so that an engineering firm could conduct drilling for monitoring wells. You mentioned during the inspection that mowing is conducted four times per year at the lagoons, but that the facility may look into additional mowing this year due to additional growth.

The plant has four outfalls at which discharge is permitted: 001A, 001, 002A, and 002. Outfall 001A is an internal outfall that discharges from the filtered water plant, including wash-down water and laboratory wastes (low volume waste sources). Wastewater at this outfall is treated with an oil/water separator and discharge occurs twice monthly. Outfall 001 discharges treated domestic wastewater from the small package plant, once-through cooling water, intake screen backwash, and cooling tower blowdown. Outfall 002A, the yard sump overflow, is an internal outfall which episodically discharges rainfall runoff,

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including runoff from the coal yard. Outfall 002 discharges low volume wastes, boiler cleaning wastewater, ash disposal, stormwater, boiler blowdown, and metal washing wastewater from the ash basin lagoons.

All outfalls were inspected. Discharge was clear and free of solids, sheen, and foam at outfalls 001A, 001, and 002. Outfall 002A had no discharge at the time of inspection. Receiving waters at outfalls 001 and 002 appeared clear and free of pollution indicators. Access to the discharge points was well maintained and effluent pipes were in good condition.

Documentation Review

Ms. Taylor-Smith evaluated laboratory data during the inspection. Comparison of lab reports and monitoring data with discharge monitoring reports (DMRs) showed no concerns or errors. Chain of custody records were available and complete. The Duke Energy internal laboratory performs required lab testing for the facility, Environmental Testing Solutions performs toxicity testing, and Pace Analytical Laboratories performs testing for field parameters. Visitation and operation/maintenance logs were reviewed and found to be complete and current.

The recent Notice of Violation (NOV) letter and NOV and Notice of Recommendation for Enforcement (NOV/NRE) letter for Iron limit exceedences were discussed with you during the inspection. Those Violations have been addressed and Duke Energy is working towards a solution on both matters.

We appreciate your efforts to effectively operate and maintain this treatment system. No additional response to this letter is required. If you have questions regarding the inspection or this letter, please do not hesitate to contact Ms. Taylor-Smith or me at (336) 771-5000.

Sincerely,

W. Corey Basinger Surface Water Regional Supervisor

Winston-Salem Regional Office Division of Water Quality

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Attachments:

1. Inspection Checklist

CC: Central Files w/attachment WSRO – SWP w/attachment

+ Checklist same as Atlach. W/ letter fert 7/2/13