



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

WILLIAM E. (TOBY) VINSON, JR.  
Interim Director

October 3, 2018

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. George T. Hamrick  
Senior Vice President  
Duke Energy  
400 S. Tryon Street, ST0615-A  
Charlotte, NC 28202

RE: Dam Safety Order 16-01 Pertaining to Multiple Repairs to Multiple Dams  
Allen Retired Ash Basin Dam (GASTO-016)  
Allen Active Ash Basin Dam (GASTO-061)  
Buck Steam Station Main Dam (ROWAN-047)  
Cape Fear 1956 Ash Pond (Inactive) (CHATH-075)  
Cape Fear 1963 Ash Pond Dam (Inactive) (CHATH-076)  
Cape Fear 1970 Ash Pond Dam (Inactive) (CHATH-077)  
Cape Fear 1978 Ash Pond Dam (CHATH-078)  
Cliffside Active Ash Pond Downstream Dam (CLEVE-049)  
Cliffside Inactive Ash Basin #5 Main Dam (RUTHE-070)  
Dan River Active Primary Ash Basin Dam (ROCKI-237)  
Dan River Active Secondary Ash Basin Dam (ROCKI-238)  
Dan River Service Water Settling Pond Dam (ROCKI-241)  
H.F. Lee Active Ash Pond Dam (WAYNE-022)  
Lincoln CT Raw Water Reservoir Dam (LINCO-042)  
Marshall Active Ash Basin Dam (CATAW-054)  
Roxboro East Ash Pond Dam (PERSO-033)  
Roxboro West Ash Pond South Rock Filter Dam (PERSO-039)  
Weatherspoon 1979 Ash Pond Dam (ROBES-009)

Dear Mr. Hamrick:

Pursuant to the authority contained in North Carolina General Statute (NCGS) 143-215.32.(b) as delegated to the Director in the North Carolina Administrative Code, Title 15A, Subchapter 2K, Section .0302 (15A NCAC 2K.0302), the Division of Energy, Mineral, and Land Resources (DEMLR) issued a Dam Safety Order (DSO 16-01) on August 22, 2016 in accordance with the Coal Ash Management Act (CAMA), NCGS 130A-309.213(d)(1)(b). DEMLR has conducted annual inspections of all dams associated with a coal ash impoundment. Following is a list of the noted deficiencies for each dam identified in the DSO and the current compliance status of each dam based on DEMLR's inspections:



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**Coal Combustion Residual (CCR) Impounding Dams**

<b>Facility</b>	<b>Dam Description and State-ID</b>	<b>Deficiencies noted in DSO 16-01</b>	<b>Current Status</b>
Allen Steam Station	Allen Retired Ash Basin Dam (GASTO-016)	Spillway repair and the need for installation of new principal spillway, vegetation/tree removal, and slope repair	<b>RESOLVED</b>
Allen Steam Station	Allen Active Ash Basin Dam (GASTO-061)	Spillway repair and the need for installation of new principal spillway, and slope repair	<b>RESOLVED</b>
Buck Steam Station	Buck Steam Station Main Dam (ROWAN-047)	Spillway repair and the need for installation of new spillway	<b>RESOLVED</b>
Cape Fear Plant	Cape Fear 1956 Ash Pond (Inactive) (CHATH-075)	Vegetation/tree removal	<b>RESOLVED*</b>
Cape Fear Plant	Cape Fear 1963 Ash Pond Dam (Inactive) (CHATH-076)	Vegetation/tree removal	<b>RESOLVED*</b>
Cape Fear Plant	Cape Fear 1970 Ash Pond Dam (Inactive) (CHATH-077)	Vegetation/tree removal	<b>RESOLVED*</b>
Cape Fear Plant	Cape Fear 1978 Ash Pond Dam (CHATH-078)	Spillway repair and vegetation/tree removal	<b>RESOLVED*</b>
Rogers Energy Complex (a.k.a. Cliffside Steam Station)	Cliffside Active Ash Pond Downstream Dam (CLEVE-049)	Spillway and riser repair and the need for installation of new spillway	<b>RESOLVED</b>
Rogers Energy Complex (a.k.a. Cliffside Steam Station)	Cliffside Inactive Ash Basin #5 Main Dam (RUTHE-070)	The need for installation of new principal spillway	<b>RESOLVED</b>

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Dan River Steam Station	Dan River Active Primary Ash Basin (ROCKI-237)	Slope repair	<b>RESOLVED</b>
Dan River Steam Station	Dan River Active Secondary Ash Basin (ROCKI-238)	Dredging and pond lowering project	<b>RESOLVED</b>
H.F. Lee Plant	H.F. Lee Active Ash Pond (WAYNE-022)	Slope repair and vegetation/tree removal	<b>RESOLVED*</b>
Marshall Steam Station	Marshall Active Ash Basin Dam (CATAW-054)	The need for installation of new spillway	<b>RESOLVED</b>
Roxboro Plant	Roxboro East Ash Pond (PERSO-033)	Pipe removal	<b>RESOLVED</b>
Roxboro Plant	Roxboro West Ash Pond South Rock Filter (PERSO-039)	Spillway repair and the need for installation of new spillway	<b>RESOLVED</b>
Weatherspoon Plant	Weatherspoon 1979 Ash Pond (ROBES-009)	Clean toe drains and installation of aggregate drainage blanket, vegetation/tree removal, and slope repair	<b>RESOLVED*</b>

Regarding “tree/vegetation removal” projects: the trees/vegetation that have root systems such that removal of the root systems could reduce slope stability and cause slope failure, shall be removed after the structures have been dewatered and an approvable closure plan has been approved by DEMLR. All other trees (please see below for more information) shall be removed by the deadline in this DSO.

\*Note on the status of *Vegetation / Tree Removal* projects: The noted deficiencies in the original DSO 16-01 required full removal of vegetation from dam embankments (except where removal of the root systems could reduce slope stability and cause slope failure) and As-Built drawings plan to be submitted by December 31, 2016. DEMLR issued a Certificate of Approval to Repair (COAR) for the proposed work on September 10, 2015. On June 27, 2016, Duke Energy requested a delay for the removal of trees that are greater than six (6) inches in diameter on the basin embankment and to only remove trees that were dead or leaning, while the trees that are less than six (6) inches in diameter are to be monitored and removed before they grow to be greater than six (6) inches per Duke Energy’s internal Operations & Maintenance (O&M) plan. On September 20, 2016, DEMLR requested a certified engineering assessment that verifies leaving the vegetation in place would not pose a threat to the integrity and safety of the dam. In addition, DEMLR also requested that Duke Energy implement a monitoring program until all vegetation is completely removed. Upon receiving the requested reports, after receiving a required



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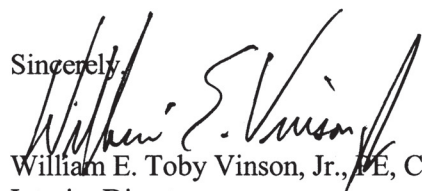
engineering assessment for each site where a delay was requested, DEMLR has been approving the extension requests of COARs on an annual basis.

**Non-CCR Impounding Dams**

Facility	Dam Description and State-ID	Deficiencies noted in DSO 16-01	Current Status
Dan River Steam Station	Dan River Service Water Settling Pond Dam (ROCK1-241)	Spillway repair	<b>RESOLVED</b>
Lincoln Combustion Turbine (CT) Station	Lincoln CT Raw Water Reservoir Dam (LINCO-042)	Spillway repair	<b>RESOLVED</b>

Provided that Duke Energy continues to comply with the stipulations of the *Vegetation / Tree Removal* project scope listed above, all the noted deficiencies within DSO 16-01 have been identified and rectified. Regarding any questions pertaining to the above documents or the administration of the DEMLR Dam Safety Program, please contact Mr. Andrew Brooks, PE, State Dam Safety Engineer, at 512 N. Salisbury St., Raleigh, NC 27699 or (919) 707-9217, or me at telephone number (919) 707-9201.

Sincerely,

  
William E. Toby Vinson, Jr., PE, CPESC, CPM  
Interim Director

TV/ab/dk

cc: Mr. Randy Hart, Duke Energy  
Mr. Jeff Poupart, Division of Water Resources