



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

John E. Skvarla, III  
Secretary

April 7, 2014

**Greg McLeod**  
**Director, State Bureau of Investigation**  
**3320 Garner Road**  
**Raleigh, North Carolina 27610**

Mr. McLeod:

As you are aware, in early February of this year, there was a coal ash release at the Duke Energy Dan River Plant in Eden, North Carolina. In accordance with N.C. Gen. Stat. § 143-215.6B(k), I am requesting the State Bureau of Investigation investigate the coal ash release to determine if an environmental crime has been committed.

On February 28, 2014, the North Carolina Department of Environment and Natural Resources ("NCDENR") issued a Notice of Violation and Recommendation for Enforcement to Duke Energy for the discharge into the Dan River. The Notice identified violations of State water quality statutes, rules, and State permits. NCDENR is continuing to develop information to support a civil penalty assessment for the ash release.

As part of our ongoing review, NCDENR has constructed the attached timeline of events surrounding the construction and monitoring of the coal ash pond and the 48-inch stormwater pipe that ultimately failed. This timeline raises serious concerns as to what Duke knew about the vulnerabilities of the stormwater pipe under the primary ash pond at the Dan River facility prior to the unlawful discharge. NCDENR has also found that Duke Energy was required to obtain, but currently does not have, a permit to allow discharges of stormwater from their facility. I am requesting the investigation focus on Duke Energy's decision to expand the primary ash pond at the Dan River facility over the stormwater pipe that failed, any unlawful discharges, and any other permitting violations that might have occurred.

NCDENR will provide any and all assistance you believe is necessary to complete this investigation. If you have any questions about this issue please call me at (919) 707-8622.

Sincerely

John E. Skvarla, III  
Secretary, NCDENR

Enclosure (1): Chronological Summary

cc: Governor Pat McCrory  
Phil Berger Jr. Esq., District Attorney, Rockingham County  
Roy Cooper, Attorney General

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- 1956 The original coal ash pond constructed as a single embankment structure over two stormwater drainage culverts discharging into the Dan River.  
*EPA 9/2009 Report, Page 6*
- 1968 The original structure was raised and made larger and thereby covering the stormwater pipe.  
*ERC Hearing transcript of George Everett 2/17/2014; EPA 9/2009 Report, Page 6*
- 1976-77 The structure was raised again and divided into 2 ponds by an intermediate dike.  
*EPA 9/2009 Report, Page 6*
- 1976 NC Utilities Commission Order, Docket No. E-100, Sub 23 began requiring utilities to perform inspections of their ash pond dikes consistent with the Army Corps of Engineers' "Recommended Guidelines for Safety Inspections of Dams" dated May, 1976, once every five years.
- 1981 The first Dan River coal ash basin dike inspection was performed by a geotechnical engineering firm named Law Engineering.
- 1986 Law Engineering conducted the second Dan River coal ash basin dike inspection and made eight recommendations in their inspection report dated June 30, 1986, including the following recommendations
4. *"It is recommended that qualitative monitoring of inflow and outflow be done at the culverts which pass under the ash basin to check for potential leakage. It is recommended that this monitoring per done at 6-month intervals. If there is a significant difference between inflow and outflow, or whenever there is some cause to suspect leakage, the inside of the culverts should be inspected for leakage."*
- They noted earlier in the report on page 4-5, "It would also be desirable to do quantitative [not qualitative] monitoring of inflow and outflow of the 48-inch diameter culvert that also passes beneath the ash basin; part of this culvert is constructed of corrugated metal pipe which would be expected to have less longevity of satisfactory service than the reinforced concrete pipes."
- In a letter to the NC Utilities Commission dated July 7, 1986, S.G. Crews, Duke Supervising Design Engineer, and S.B. Hagar, Duke Chief Engineer stated that Recommendation # 7 on page 7-9 of the inspection report would be completed during the fall of 1986 and the other recommendation will be addressed and handled as appropriate.
- 1991 Third inspection performed by WKD Geoscience (Job No. 11008).
- 1996 Fourth inspection performed by Law Eng (LAW Job No. 30100-6-2038).
- 2001 Fifth inspection performed by Law Eng (LAW Job No. 30100-1-0949)
- 2006 Sixth inspection performed by MACTEC, formerly known as Law Engineering (Job No. 6324-06-3908)

2007 In their inspection report MACTEC Engineers Mr. Mel Y. Browning, P.E. and Clay E. Sams, P.E. made the following recommendation concerning the 48 inch pipe:

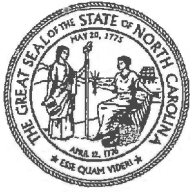
*"The outflow of the drainage pipes extending under the primary ash basins to the river should be monitored for turbidity of the discharge, which would be indicative of soil entrance into the pipes under the basin. The appearance of turbidity would make it advisable to perform a TV camera inspection of the pipe to determine if the leak or leaks are a threat."*

2009 Staff from EPA and an engineering firm (Paul C. Rizzo Associates) contracted by EPA under Project No. 09-4157 inspected the Dan River coal ash ponds on May 26 and 27. The inspection report noted the 48" diameter culvert to be a corrugated metal pipe which passed underneath the primary ash pond and recommended monitoring to ensure its integrity.

*"At the time of inspection, flow through the drainage feature crossing under the sluice lines was able to be observed at the outlet (a corrugated metal pipe)."*  
Section 3.2.3; Page 16.

*"The outflow of the drainage pipes extending under the primary ash basins to the river should be monitored for turbidity, which would be indicative of soil entrance into the pipes through leaks under the basin. The appearance of turbidity would make it advisable to perform a TV camera inspection of the pipe to determine if the leak or leaks are a threat."* Section 3.2.4, Page 17

2014 In February, Duke Energy identified a broken stormwater pipe underneath the primary coal ash pond had broken and was draining into the Dan River.



**ROY COOPER**  
ATTORNEY GENERAL

**NORTH CAROLINA**  
**STATE BUREAU OF INVESTIGATION**  
DEPARTMENT OF JUSTICE

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Office of the Secretary

April 14, 2014

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Secretary John E. Skvarla, III  
NC Department of Environment and Natural Resources  
1601 Mail Service Center  
Raleigh, NC 27699-1601

Department of Environment  
and Natural Resources

Secretary Skvarla:

I am in receipt of the correspondence you sent to SBI Director McLeod on April 7, 2014, requesting an investigation concerning the release of coal ash into the Dan River by Duke Energy, back in February 2014. As you are probably aware, the State Bureau of Investigation has already been actively involved in investigating a full scope of matters related to this incident for some time and continues to interview individuals in our ongoing independent criminal investigation.

As our agents from the SBI's Special Investigations Unit, Diversion and Environmental Crimes Unit, and Federal Law Enforcement partners address many aspects of the investigation, I look forward to the continued cooperation of DENR staff throughout this process.

If you have any questions or if I can be of further assistance in matters of mutual concern, please feel free to contact me at 919-662-4500.

Sincerely,

Erik A. Hooks  
Assistant Director  
North Carolina State Bureau of Investigation

EAH:ja



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