

US EPA ARCHIVE DOCUMENT



DUKE ENERGY CORPORATION
WP994 / 1000 East Main Street
Plainfield, IN 46168-1782

Via Certified Mail 7008 2810 0000 0830 9260

March 25, 2009

Mr. Richard Kinch
US Environmental Protection Agency (5306P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: CERCLA 104(e) Request for Information
Cliffside Steam Station
573 Duke Power Road
Mooresboro, North Carolina 28114

Dear Mr. Kinch,

Duke Energy Carolinas, LLC (DEC) hereby responds to the request for information the EPA submitted to the Cliffside Steam Station, letter dated March 9, 2009, under Section 104(e) of CERCLA, 42 USC § 9604(e), relating to surface impoundments or similar diked / bermed management units which receive liquid-borne material for storage or disposal of residuals or by-products from the combustion of coal. DEC received this request on March 12, 2009, and today's response complies with the 10-business day deadline.

The attached responses are full and complete and were developed under my supervision with assistance from Duke Energy's Engineering and Technical Services group. The following clarifications should be noted for the attached responses.

- The responses in this submittal are for surface impoundments and the associated secondary / clarifying ponds used for temporary or permanent storage of flyash, bottom ash, boiler slag, and flue gas emission control residues at this station (hereinafter "coal combustion by-products").
 - These ponds are also an integral part of the station's wastewater treatment system used to manage wastewater before discharge.
- The response to the questions does not include ponds that are retired / closed and which no longer contain free liquids.
- The response to questions does not include landfill runoff collection ponds or any other miscellaneous ponds / impoundments that are not designed to or do not regularly receive and store coal combustion by-products.
- Where actual measurements could not be collected within the timeframe allotted by EPA, DEC has provided estimates, which are noted as such.
- The criteria that DEC used to identify any spills or unpermitted releases over the last 10 years in the response to Question #9 include the failure of physical pond or impoundment structures (i.e. berms, dikes, and discharge structures); the criteria do not include exceedances of the NPDES discharge limits that have already been reported in the discharge monitoring report.

I certify that the information contained in this response to EPA's request for information and the accompanying documents is true, accurate, and complete. As to the identified portions of this response for which I cannot personally verify their accuracy, I certify under penalty of law that this response and all attachments were prepared 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, those persons directly responsible

for gathering the information, the information submitted is, to the best of my knowledge, 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.

If you have any questions regarding today's submittal please contact Richard Meiers at our corporate offices at 317-838-1955.

Sincerely,
Duke Energy Carolinas, LLC



Barry E. Pulkamp
Senior Vice President Regulated Fleet Operations

Attachments (3)

Responses to Enclosure A
Inspection Report
Confidential Business Information

cc Rick R. Roper
Cliffside Steam Station
General Manager II Regulated Fossil Fleet
Steve Hodges
Senior EHS Professional
Richard J. Meiers
Principal Environmental Scientist

Attachment # 1

Response to Questions in Enclosure A

Cliffside Steam Station

March 25, 2009

1. Relative to the National Inventory of Dams criteria for High, Significant, Low, or Less than Low Hazard Potential, please provide the rating for each management unit and indicate which State or federal regulatory agency assigned that rating. If the unit does not have a rating, please note that fact.

No State or Federal regulatory agency has assigned a rating relative to the National Inventory of Dams criteria for the management unit at Cliffside Steam Station; however, the North Carolina Utilities Commission has classified it as low hazard under the NC Dam Safety Rules due to the lack of downstream development.

2. What year was each management unit commissioned and expanded?

Primary Active Ash Pond was commissioned in 1983

3. What materials are temporarily or permanently contained in the unit? Use the following categories to respond to this question: (1) fly ash; (2) bottom ash; (3) boiler slag; (4) flue gas emission control residuals; (5) other. If the management unit contains more than one type of material, please identify all that apply. Also, if you identify "other," please specify the other types of materials that are temporarily or permanently contained in the unit(s).

Management Unit	Active Pond	Retired Unit 1-4 Basin**	Retired Unit 5 Basin***
Contents	1, 2, 3, 4, 5*	5	5

* "Other" includes water treatment, boiler blow down, floor and laboratory drains and drains from equipment cleaning, cooling tower blow down, boiler chemical cleaning wastes, storm water runoff, coal pile runoff, and fire protection, and mill rejects.

** This closed ash basin is now used to transfer liquids from yards and plant sump drains to the Active Pond.

*** A section of this closed ash basin is used for erosion control sediment pond for new construction.

4. Do you have a Professional Engineer's certification for the safety (structural integrity) of the management unit(s)? Please provide a copy if you have one. If you do not have such a certification, do you have other documentation attesting to the safety (structural integrity) of the management unit(s)? If so, please provide a copy of such documentation.

It is a North Carolina Utilities Commission (NCUC) requirement from 1976 to have an inspection performed every 5 years by an independent consultant who uses a qualified licensed professional engineer. Per NCUC Docket No. E-100, Sub 23, routine inspections are done to assure structural integrity. The most recent report is attached (Attachment 2).

5. When did the company last assess or evaluate the safety (i.e., structural integrity) of the management unit(s)?

The management units listed in the response to question #2 was last inspected in September, 2006.

Briefly describe the credentials of those conducting the structural integrity assessments/evaluations.

MACTEC is an industry leader in engineering, environmental, and construction services to public and private clients worldwide. Based in Atlanta, MACTEC includes 3,000 employees in 80 locations.

Identify actions taken or planned by facility personnel as a result of these assessments or evaluations.

See attached inspection report (Attachment 2). Typical findings that require corrective actions are: Treat excess vegetation, clear ditch line of sediment and debris, re-seed sparsely vegetated and disturbed areas, or mow slopes in a diagonal pattern running transverse to existing rut lines. Other more site specific maintenance items are detailed in the reports.

If corrective actions were taken, briefly describe the credentials of those performing the corrective actions, whether they were company employees or contractors.

See attached Inspection report (Attachment 2). Duke Energy's Generation Engineering Department provides engineering oversight, review, and documentation of maintenance done and repairs made. The inspection report and corrective actions are filed with the NCUC.

If the company plans an assessment or evaluation in the future, when is it expected to occur?

Duke Energy Carolinas' inspection program requires an annual inspection. We may do these in-house by qualified personnel or we may elect to contract the annual inspections. Monthly visual inspections are conducted by Duke Energy personnel. A visual inspection is also conducted after a significant rainfall. The next 5-year independent inspection will be completed in 2011.

6. When did a State or a Federal regulatory official last inspect or evaluate the safety (structural integrity) of the management unit(s)? If you are aware of a planned state or federal inspection or evaluation in the future, when is it expected to occur? Please identify the Federal or State regulatory agency or department which conducted or is planning the inspection or evaluation. Please provide a copy of the most recent official inspection report or evaluation.

The North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality and Division of Land Quality staff inspected Cliffside Steam Station's Ash basins on January 13, 2009. There were no issues or deficiencies identified in the inspection report from NCDENR dated March 19, 2009. No other State or Federal regulatory officials have performed ash pond dike inspections in the last five years. DEC is not aware of any federal or state agency inspection reports. It is a North Carolina Utilities Commission (NCUC) requirement from 1976 to have an inspection performed every 5 years by an independent consultant who uses a qualified licensed professional engineer. The last such inspection occurred in September, 2006. The next such inspection will occur in 2011.

7. Have assessments or evaluations, or inspections conducted by State or Federal regulatory officials conducted within the past year uncovered a safety issue(s) with the management unit(s), and, if so, describe the actions that have been or are being taken to deal with the issue or issues. Please provide any documentation that you have for these actions.

DEC is not aware of any safety issues discovered as a result of any assessments, evaluations, or inspections conducted by State or Federal regulatory officials at the Cliffside Steam Station within the past year.

8. What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of material currently stored in each of the management unit(s). Please provide the date that the volume measurement was taken.

The response to this question contains Confidential Business Information, which is of a competitive and commercial nature, pursuant to 40 C.F.R. Part 2. Our response is therefore provided in a separate attachment (Attachment 3), which has been labeled "CBI." DEC requests that EPA treat the information in Attachment 3 as CBI and safeguard it from inadvertent disclosure and contact DEC if EPA receives a request for this CBI.

9. Please provide a brief history of known spills or unpermitted releases from the unit within the last ten years, whether or not these were reported to State or federal regulatory agencies. For purposes of this question, please include only releases to surface water or to the land (do not include releases to groundwater).

On October 7, 2005 the Cliffside Steam Station experienced a significant localized flood event. The floodwaters from the Suck Creek entered into the retired Units 1-4 ash basin, topped the top of the dam and washed away part of the basin's dike. Notifications were made to the North Carolina Division of Water Quality. The dike was repaired. There have been no other spills or unpermitted releases from any of the management units listed in response #2 over the past ten years.

10. Please identify all current legal owner(s) and operator(s) at the facility.

Duke Energy Carolinas, LLC is the legal owner and operator at the facility.

Attachment #3

CBI

This attachment contains Confidential Business Information, which is of a competitive and commercial nature, pursuant to 40 C.F.R. Part 2. DEC requests that EPA treat the information in Attachment 3 as CBI and safeguard it from inadvertent disclosure and contact DEC if EPA receives a request for this CBI.

Cliffside Steam Station Response to Question # 8

Active Pond

- 84 acres in total surface area with 5,025 acre/feet of total storage volume
- The station estimated in January 2009 that the pond was approximately 80% full
 - The ash basin maintains at least a capacity for free water volume that is sufficient to handle maximum 24 hour flows including a 10 year 24 hour rainfall event.

Retired Unit 5 Basin

- This basin was 46 acres but has been closed and covered with soil; a section is used for erosion control sediment pond for new construction.

Retired Units 1-4 Basin

- 14 acres in total surface area with no available ash storage area. This pond is used to transfer liquids from yards and plant sump drains to active ponds