

US EPA ARCHIVE DOCUMENT



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March 20, 2009

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

Dear Mr. Kinch:

This document is prepared in response to the letter from Lisa P. Jackson dated March 9, 2009 and from Mr. Barry N. Breen dated March 9, 2009 to Chief Executive Officer, South Carolina Electric & Gas, 1426 Main Street, Columbia, South Carolina and to Plant Manager, Canadys Steam Power Station, Hwy 61, Canadys, South Carolina, Re: Request for Information Under Section 104(e) of the Comprehensive Environment Response, Compensation, and Liability Act, 42 U.S.C. 9604(e).

Please find attached my signed certification and responses to questions set forth in Enclosure A. Additionally, you will find attached Enclosure B identifying the additional facilities on the South Carolina Electric & Gas system having similar diked or bermed management units or management units designated as landfills which receive liquid-borne material from a surface impoundment used for the storage or disposal of residuals or by-products from the combustion of coal, including, but not limited to, fly ash, bottom ash, boiler slag, or flue gas emission control residuals.

Sincerely,

James M. Landreth

Cc: Mr. William B. Timmerman, CEO
Mr. Stephen A. Byrne, Sr. Vice President Generation, Nuclear & Fossil Hydro
Plant Manager, Canadys Steam Power Station

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.

Signature: Name: James M. LandrilleTitle: Vice PresidentDate: 3/23/2009

Enclosure A

1. ***Relative to the National Inventory of Dams criteria for High, Significant, Low, or Less-than-Low, please provide the potential hazard rating for each management unit and indicate who established the rating, what the basis of the rating is, and what federal or state agency regulates the unit(s). If the unit(s) does not have a rating, please note that fact.***

The Canadys Station management units are comprised of two ash ponds, neither of which has been assigned a hazard rating by the South Carolina Department of Health and Environmental Control. Dams and reservoirs in South Carolina are regulated pursuant to the SC Dams and Reservoirs Safety Act and the regulations pertaining thereto. Regulation 72-2.D.1 of the SC Dams and Reservoirs Safety Act Regulations exempts the following types of dams from the Dams and Reservoirs Safety Act:

"1. Unless the hazard potential as determined by the Department is such that dam failure or improper reservoir operation may cause loss of human life, any dam which is or shall be (a) less than twenty-five feet in height from the natural bed of the stream or water course measured at the downstream toe of the dam, or twenty-five feet from the lowest elevation of the outside limit of the dam, if it is not across a stream channel or water course, to the maximum water storage elevation and (b) has or shall have an impounding capacity at maximum water storage elevation of less than fifty acre-feet."

The 80-acre "Inactive Ash Pond" and 95-acre "Active Ash Pond" dikes at Canadys Station are no more than 12 feet and 20 feet in height, respectively. Since both of the pond dikes are less than 25 feet in height, the ponds are exempt from the Act per Regulation 72-2.D.1 and therefore no ratings have been assigned.

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

The 80-acre "Inactive Ash Pond" was commissioned in 1974 and received coal combustion byproducts until 1989. The 95-acre "Active Ash Pond" was commissioned in 1989 and continues to receive coal combustion byproducts. The description for management units for coal combustion residuals/by-products offered in the USEPA March 9, 2009 letter is widely encompassing and, upon its most conservative interpretation, could be broadly construed to include the following other ponds/basins at the Canadys Steam Power Station:

- Settling Ponds #1 and #2
- Coal Pile Runoff Basins #1 and #2
- Coal Pile Runoff Detention Basin
- Low Volume Waste Ponds A, B, & C
- Spray Pond

The above ponds/basins are primarily used for wastewater treatment purposes and are not designated as landfills/impoundments for the storage or disposal of coal combustion byproducts. SCE&G therefore believes that these ponds/basins are not consistent with the intentions of EPA's Request for Information and we have limited our responses to the "Inactive" and "Active" Ash Ponds.

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).***

Both the "Inactive Ash Pond" and "Active Ash Pond" permanently contain fly ash, bottom ash, pyrites and boiler slag.

Enclosure A

4. ***Was the management unit(s) designed by a Professional Engineer? Is or was the construction of the waste management unit(s) under the supervision of a Professional Engineer? Is inspection and monitoring of the safety of the waste management unit(s) under the supervision of a Professional Engineer?***

The "Active Ash Pond" was designed by a SCE&G Professional Engineer and its construction was performed under the supervision of Professional Engineers.

The "Inactive Ash Pond" was designed by the engineering company of Gilbert Associates, Inc. While detailed documentation for the original design and construction of the pond is limited; in 1995, SCE&G commissioned Coastal Engineering and Testing to conduct a geotechnical engineering evaluation of subsurface soils under the supervision of Professional Engineers. Through soil boring evaluations, the dikes were determined to be of sound construction.

Routine, scheduled inspections and monitoring of the ash ponds are not performed under the supervision of a Professional Engineer. Currently SCE&G performs assessments/evaluations of the dike structure for both ash ponds as part of the NPDES permit on an annual basis. The results are internally documented. The annual inspection reports are not submitted to DHEC unless a finding is identified or a corrective action plan is required. A daily visual inspection is performed to look for signs of cracking, settling, slope movement, erosion and vegetation growth. If any follow up action is required, a Work Order is written and the items completed and closed out in a timely manner. All follow up actions to date have been for minor maintenance.

5. ***When did the company last assess or evaluate the safety (i.e., structural integrity) of the management unit(s)? Briefly describe the credentials of those conducting the structural integrity assessments/evaluations. Identify actions taken or planned by facility personnel as a result of these assessments or evaluations. If corrective actions were taken, briefly describe the credentials of those performing the corrective actions, whether they were company employees or contractors. If the company plans an assessment or evaluation in the future, when is it expected to occur?***

Structural integrity assessments/evaluations for static stability were performed on the 95-acre "Active Ash Pond" in 2002, 2005, and 2007. The 2002 assessment/evaluation was performed by General Engineering, an engineering consulting firm specializing in environmental consulting and engineering design. The 2005 study was performed by GEI Consultants, Inc (GEI), and the 2007 study was performed by Camp, Dresser, & McKee (CDM). GEI and CDM are geotechnical engineering specialists. No structural integrity corrective actions were taken, planned, or deemed necessary as a result of the 2002, 2005, or 2007 assessments.

As stated in Response #4, in 1995, SCE&G contracted Coastal Engineering and Testing to conduct a geotechnical engineering evaluation of subsurface soils of the 80-acre "Inactive Ash Pond". Through soil boring evaluations, the dikes were determined to be of sound construction. The geotechnical evaluation was performed under the supervision of Professional Engineers.

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.***

Enclosure A

SCE&G is not aware of past inspections by State or Federal regulatory officials for the purpose of evaluating the safety (structural integrity) of the ponds. SCE&G is not aware of any planned State or Federal inspections in the future.

The South Carolina Department of Health and Environmental Control (SCDHEC) periodically inspects the ash ponds. However, these inspections are generally for NPDES permit compliance purposes and do not involve evaluations of the structural integrity of the ponds.

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.***

No.

8. ***What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of materials currently stored in each of the management unit(s)? Please provide the date that the volume measurement(s) was taken. Please provide the maximum height of the management unit(s). The basis for determining maximum height is explained later in this Enclosure.***

The "Inactive Ash Pond" has a surface area of approximately 80 acres and a total calculated storage capacity of 1,613,300 cubic yards. The volume of materials currently stored in the "Active Ash Pond" is estimated to be 675,000 cubic yards. SCE&G's estimate of the volume of materials currently stored in the "Inactive Ash Pond" is based on a detailed bathymetric survey of the pond performed in September 2004. The maximum height of the pond is 12 feet.

The "Active Ash Pond" has a surface area of approximately 95 acres and a total calculated storage capacity of 2,270,200 cubic yards. The volume of materials currently stored in the "Active Ash Pond" is estimated to be 2,189,468 cubic yards. SCE&G's estimate of the volume of materials currently stored in the "Active Ash Pond" is based on a detailed bathymetric survey of the pond performed in September 2004, ash disposal records for the period September 2004 to present, and ash removed from the pond for recycling for the period September 2004 to present. The maximum height of the pond is 20 feet.

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).***

✓ Upon information and belief, there have not been any spills or unpermitted releases from the ash ponds within the last ten years.

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

The Canadys Steam Power Station facility to include the subject ash ponds is legally owned and operated by SCE&G.

Enclosure B

Urquhart Station
100 Keith Mullis Drive
Beech Island, South Carolina 29842

Wateree Station
142 Wateree Station Road
Eastover, South Carolina 29044