

Duke Power Company
Generation Services Department
13339 Hagers Ferry Road
Huntersville, NC 28078-7929



DUKE POWER

July 29, 1994

William Hocutt
North Carolina Department of Environment,
Health and Natural Resources
Solid Waste Section
401 Oberline Road
Suite 150
Raleigh, N. C. 27605

SUBJECT: Structural Fill Notification
Smith - Highway 150 Project
File: GS-707.02 (Fossil)

Mr. Hocutt:

In accordance with Section .1706 of the Solid Waste Management Rules (Requirements For Beneficial Use Of Coal Combustion By-Products), please find attached the required written notification for the referenced structural fill project. Included in the notification are construction plans required for coal combustion by-products applications greater than 10,000 cubic yards. In addition, a copy of the approval letter for the Erosion and Sedimentation Control Plan is attached.

If you have any questions concerning the notification, please contact me at 704-875-5956.

A handwritten signature in cursive script that reads "L. D. Evans".

L. D. Evans, Scientist
Environmental Protection - Waste Management

LDE/D079410

Attachments

STRUCTURAL FILL NOTIFICATION

Duke Power Company
Smith - Highway 150 Project

The proposed project will utilize approximately 45,000 cubic yards of fly ash in a structural fill application to develop the property for marketing. The property is located on NC highway 150 in Iredell County as indicated on the attached USGS map (Mooresville Quanrangle, North Carolina - 7.5 minute series). The project is scheduled to commence on September 1, 1994 and to be completed on December 31, 1994. The fly ash will be supplied from Duke Power's Marshall Steam Station located on Highway 150 in eastern Catawba County at the following address:

Duke Power Company
Marshall Steam Station
PO Box 210
Terrell, N.C. 28682

Larry Evans will serve as the Generator Contact and can be contacted at:

Larry Evans
Duke Power Company
13339 Hagers Ferry Road (MG03A5)
Huntersville, N.C. 28078-7929
Phone: 704-875-5956

The following documents are attached:

- Signed statement of acknowledgement and consent from property owner
- TCLP data and certification
- USGS Topographic map showing location of project
- Approval letter for the Erosion and Sedimentation Control Plan for the project
- Construction Plans

NORTH CAROLINA

Iredell COUNTY

ACKNOWLEDGEMENT AND CONSENT

Pursuant to the provisions of G.S. 130A-294 and 15A NCAC 13B.1703, I, Terry K Smith, state that I/we am/are the owner/s of the following described property:

+/- 5 acre parcel of land located along North Carolina Highway 150 in Mooresville, N.C. further designated as tax plat #1K-69 (see attached map)

I/we further acknowledge and consent to the use of coal combustion byproducts as structural fill on the above described property. The volume of ash placed on this property is 50,000 tons. I/we agree to record this document in accordance with 15A NCAC 13B.1707.

This 25 day of July, 1994

Terry K. Smith
Owner

730 Salisbury Rd
Street

Mooresville N.C.
City State

(704) 8735281
Telephone Number

HAZARDOUS WASTE SAMPLE RESULTS
APPLIED SCIENCE CENTER

STATION : Marshall
 SAMPLE ID. : Marshall U-1 ash Leach
 LAB. SERV. #: 9402095

TCLP Leach

ANALYSIS	RESULT	LIMIT
AG:	✓ < 0.20 mg/l	5.0 mg/l
BA:	✓ 0.47 mg/l	100 mg/l
CD:	✓ < 0.03 mg/l	1.0 mg/l
CR:	* 0.77 mg/l	5.0 mg/l
PB:	✓ < 1.0 mg/l	5.0 mg/l
AS:	✓ < 0.10 mg/l	5.0 mg/l
SE:	* 0.27 mg/l	1.0 mg/l
HG:	✓ < 0.001 mg/l	0.2 mg/l
NI:	NR mg/l	134 mg/l
TL:	NR mg/l	130 mg/l
% ASH:	NR %	NO LIMIT
BTU:	NR BTU/lb	NO LIMIT
TOT. S	NR % wt.	NO LIMIT
TOT. CL	NR % wt.	NO LIMIT
FLASH PT.	NR Deg. F	< 140 Deg. F
pH:	NR Value	< 2.0 or > 12.5
% WATER	NR % wt.	NO LIMIT

* > unlimited LFL
Threshold

N/R: NOT REQUESTED.
* EXCEEDS RCRA LIMITS.

I certify that the TCLP analysis is representative of the fly ash to be used for this project.

Larry D. Evans 7/29/94
Larry D. Evans

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



August 9, 1994

Mr. L.D. Evans, Scientist
Generation Services Department
Duke Power Company
13339 Hagers Ferry Road (MG03A5)
Huntersville, NC 28078-7929

Subject: Structural Fill Notification-Terry K. Smith, Highway 150 Project, Iredell County

Dear Mr. Evans:

The Division of Solid Waste Management, (the "Division"), has received your Notification of a coal combustion by-product (ash) structural fill to be located near Mooresville in Iredell County, NC. Construction is proposed to commence September 1, 1994. This project has been estimated to require approximately 45,000 cubic yards of fly ash.

Division engineers have briefly reviewed the construction plans submitted and have questions about various aspects of that plan. Also, some omissions and rule conflicts were noted. These are:

- 1) How close (> 100 horizontal feet?) is the nearest public or private well to the site?
- 2) Dimensions were not noted which specifically showed no ash is to be within 25 feet of any property boundary or bedrock outcrop.
- 3) Is the site within an area subject to a one-hundred year flood?
- 4) Is the existing topographic surface at least two feet above the seasonal high ground water table?
- 5) The construction plan shows ash placed within two feet above and beside the stream 78" CMP. A separation of fifty feet minimum must be maintained from this flowing water [Rule .1704(a)(1)].

Mr. L.D. Evans
August 9, 1994
Page 2

- 6) Are any wetlands involved at this site?
- 7) Any local, state, or federal permits required to allow enclosing this stream in a pipe and altering the streams flow path must be obtained.

The above items must be addressed and Division concerns related to them removed before this project is begun. Please contact Bill Hocutt at (919) 733-0692 if there are questions about these points of issue.

Analyses of groundwater samples collected from monitoring wells located at a North Carolina coal ash structural fill site indicate that the ash may have caused or contributed to violation of the 15A N.C. Administrative Code 2L Standards for arsenic, cadmium, chromium, lead, and selenium, as well as elevated sulfate levels. Based upon this information, the Solid Waste Division strongly recommends that you retain the services of a qualified hydrogeologic consulting firm to assist you in determining the vulnerability of the groundwater at the site based on site attenuation, waste extractability and end use to inhibit infiltration and consider installation of groundwater monitoring wells on vulnerable sites before commencing fill operations.

The Notification informatin⁶ received did not identify any firm or person separate from Duke Power as being the constructor on this project. Therefore, no copy of this letter was sent to any directly involved firm or individual other than Duke Power. Apprising the landowner of his responsibility for any groundwater contamination which might result from this coal ash structural fill is the responsibility of Duke Power.

Sincerely,

James C. Coffey
Permitting Branch Supervisor
Solid Waste Section

JCC/sh

cc: Dexter Matthews
Jan McHargue
Jim Barber
Bill Hocutt

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management



James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

August 10, 1994

Mr. L.D. Evans, Scientist
Generation Services Department
Duke Power Company
13339 Hagers Ferry Road (MG03A5)
Huntersville, NC 28078-7929

Subject: Structural Fill Notification-Terry K. Smith, Highway 150 Project, Iredell County

Dear Mr. Evans:

The Division of Solid Waste Management, (the "Division"), has received your Notification of a coal combustion by-product (ash) structural fill to be located near Mooresville in Iredell County, NC. Construction is proposed to commence September 1, 1994. This project has been estimated to require approximately 45,000 cubic yards of fly ash.

Division engineers have briefly reviewed the construction plans submitted and found that no statements, descriptions on the drawing submitted or direct references to the Rule .1704 siting restrictions. These restrictions are that no ash is to be placed: less than 50 feet from jurisdictional wetland (unless approved by U.S. Corps of Engineers), less than 50 horizontal feet from the top of the bank of a perennial stream or other surface water body, less than 2 feet of the seasonal high ground-water table, less than 100 horizontal feet from any source of drinking water such as a well or spring, within an area subject to a one-hundred year flood (unless approved by the Division), or less than 25 feet from any property boundary or bedrock outcrop. Also, any local, state, or federal permits required must be obtained.

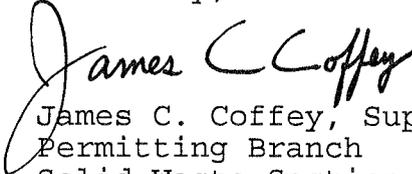
The Division must be notified of compliance with the above items before this project is begun. Please contact Bill Hocutt at (919) 733-0692 if there are questions about these issues.

(over)

As stated in Rule .1705 (k), if the facility fails to comply with the requirements of this section, the constructor, generator, owner or operator shall take such immediate corrective action as may be required by the Department.

If there are any questions, please contact me at (919) 733-0692.

Sincerely,

A handwritten signature in cursive script that reads "James C. Coffey". The signature is written in black ink and is positioned above the typed name and title.

James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

cc: Dexter Matthews
Jan McHargue
Bill Hocutt
Julian Foscue

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



August 12, 1994

Mr. L.D. Evans, Scientist
Generation Services Dept.
Duke Power
13339 Hagers Ferry Road (MG03A5)
Huntersville, N.C. 28078-7929

RE: Structural Fill Notification-Terry K. Smith
Highway 150 Project
Iredell County

Dear Mr. Evans:

This letter constitutes a clarification of a previous letter dated August 10, 1994, regarding the coal ash structural fill notification for the referenced project. This letter also acknowledges the receipt of your notification 30 days before using coal ash as structural fill as required by Section .1700 of the Solid Waste Management Rules.

As stated in the August 10, 1994, letter, the Division has some concerns regarding compliance with the siting requirements and the proposed design for this project. Specifically, the Division is concerned with the adequacy of the storm water drainage system and its capability to prevent the infiltration of ground or surface water into the coal ash. Rule 1704 (a) 3 prohibits the placement of coal ash within two feet of the seasonal high ground-water table and Rule 1704 (a) 2 prohibits the placement of coal ash within 50 feet of the top of a bank of a perennial stream or other surface water body.

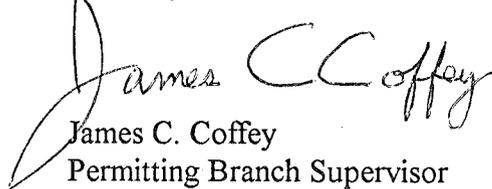
Rule .1706 (d) requires certification to the Division, following closure, signed and sealed by a registered professional engineer that ALL requirements in the Rules of Section .1700 have been met. Consequently, that certification should address the Division's concerns and therefore establish compliance with the requirements of this section.

Mr. L.D. Evans
August 10, 1994
Page 2

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Sincerely,

A handwritten signature in cursive script that reads "James C. Coffey". The signature is written in dark ink and is positioned above the typed name and title.

James C. Coffey
Permitting Branch Supervisor
Solid Waste Section

JCC/sh

cc: Dexter Matthews
Jan McHargue
Jim Barber
Bill Hocutt

Jim Barber

DEM
Water Quality / Sect. Wetlands.
404 Corp of Engineers

Stream < 1/3 Acre No problem

OFF PROPERTY

Water Resources

733-4064

Stream Watch

George MORRIS

Jim MEADE 8116

Jebby LEWIS 818

certain size/vol. cannot discharge

> 5 ft³/sec.?

1000 yd² plain?

Water Shed FIRM STEP TEMP
