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U-004-307 .12

**REPORT AND RECOMMENDATION CONCERNING THE OFF-SITE
DISPOSAL OF FMPC BOILER PLANT FLY ASH - (USED AS A
REFERENCE IN OU 2 RI REPORT)**

01/05/87

WMCO:EH(EC):87-0001
WMCO DOE-FN
7
LETTER

6791



*pk. (Callier)
received a
(copy)*

**Westinghouse
Materials Company
of Ohio**

PO Box 398704
Cincinnati, Ohio 45239

(513) 738 6200

WMCO:EH(EC):87- 0001

January 5, 1987

Mr. James A. Reafsnyder
Site Manager
Department of Energy
P. O. Box 398705
Cincinnati, OH 45239

Dear Mr. Reafsnyder:

**SUBJECT: REPORT AND RECOMMENDATION CONCERNING THE OFF-SITE DISPOSAL OF FMPC
BOILER PLANT FLY ASH**

- Reference: 1) Letter, J. A. Reafsnyder to M. Bruce Boswell, President,
"Feasibility Investigation of Off-Site and On-Site
Disposal/Storage For Both Sanitary Waste and Fly Ash," dated
October 23, 1986.
- 2) EPA CONTACT REPORT, dated 12/3/86. C. A. Aas to J. Moore.
Requirements for Offsite Disposal of FMPC Boiler Plant Coal
Fly Ash.

Data has been compiled regarding uranium content of FMPC bituminous coal and coal ash. WMCO recommends off-site disposal of Boiler Plant fly ash, DOE has concurred with this recommendation (Reference 1), and WMCO requests DOE obtain approval for this activity from OEPA.

A description and specification of the coal used at the FMPC is provided in Attachment I. Uranium content in coal was <5 ppm, and in fly ash, uranium concentration ranged from <5 to 34 ppm (see Attachment II). Spectrochemical analysis of metals in the coal and fly ash was also performed (Attachment III).

WMCO concludes that the option of off-site disposal of boiler fly ash at the Rumpke landfill should be pursued. The Rumpke landfill has requested a written indication from the OEPA that they can safely dispose of FMPC fly ash at their landfill. The OEPA indicated to WMCO, by telephone (Reference 2), that fly ash is specifically excluded from RCRA regulations, that there is no indication that FMPC fly ash would be classified as hazardous waste, and it is unlikely to be considered a regulated solid waste. The OEPA then requested that DOE write a letter to them, explaining exactly what the materials to be landfilled are, where they came from, and what DOE is planning to do with them. The OEPA stated that they would explain, in writing, that disposal of FMPC fly ash could be safely accomplished at any licensed landfill, and that their letter should satisfy the restrictions that Rumpke has placed on FMPC fly ash shipments.

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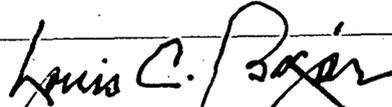
Mr. James A. Reafsnyder

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WMCO:EH(EC):87-0001

The data that would be needed in the request to OEPA for off-site disposal has been provided in order that this request can be completed and finalized by DOE.

Very truly yours,



Louis C. Bogar
Vice-President and Manager
Environment, Safety and Health

CAA/dsm

Attachments

cc: C. A. Aas
V. A. Barto
M. B. Boswell
G. E. Butterworth, III
D. J. Carr
R. N. Collier, DOE/FMPC
L. C. Dolan
J. R. McDonald
R. E. Watts
W. A. Weinreich

DE-AC05-760R0156
 U.S. Department of Energy
 U. Oak Ridge Operations
 P.O. Box E Contracts Division
 Oak Ridge, Tennessee 37831
 P. O. Box E
 Oak Ridge, Tennessee 37831

ADMINISTERED BY (If other than Item 8) ALTERATION OR
 RELEASE NUMBER
 MATERIALS/SERVICES FURNISHED
 ARE SUBJECT TO CONDITIONS
 AND INSTRUCTIONS OF PURCHASE ORDER
 P. O. ORDER SUPPLEMENT 200

BUYER: J. R. Harrison ORDER DATE: 11/6/85 CASH TERMS: Net 15 FOB POINT: Our Works, Fernald

ITEM NO.	QUANTITY ORDERED	UNIT	NLO CODE	DESCRIPTION	DISCOUNT FOR P	UNIT PRICE
001	25,000	Tons	18-301	Bituminous coal for DOE Contract No. DE-AC05-860R21593, excerpts of which are attached.	15 days	\$44.75
Yancy Minerals, Inc. P.O. Box 370042 Boston, Massachusetts 02110 Period of Agreement: October 1, 1985 through September 30, 1986.				Payment to be made to Yancy Minerals, Inc.		
Bi umineous coal for DOE's Fernald Materials Production Center				ton	\$44.75	\$1,118,750.00

DELIVERY DATE: See Above 15% TOTAL AMOUNT OF CONTRACT \$1,118,750.00
 Page 1 of 1 FOR NLO, INC. 16. TABLE OF CONTENT REFERENCE OUR INVITATION
 Signature: [Signature] FOR BID NO. DESCRIPTION TOTAL VALUE 1,118,750.00

INSTRUCTIONS FOR VENDOR

A SOLICITATION/CONTRACT FORM B CONTRACT CLAUSES

C PRIORITY RATED ORDER (DO-E2) PRICES

D DELIVERIES OR PERFORMANCE

E CONTRACT ADMINISTRATION DATA

F OHIO SALES AND USE TAX

G SPECIAL CONTRACT REQUIREMENTS

H OTHER STATEMENTS OF OFFERORS

SHIPPING INSTRUCTIONS

(1) Deliveries accepted between the hours of 8:10 A.M. to 4:00 P.M. Monday through Friday. FACTORS FOR AWARD

(2) Original Bill of Lading should be mailed on the day of shipment.

(3) Truck shipments to 2400 Willey Road, Fernald, Ohio 45030.

(4) United Parcel Service to: 7400 Willey Road, Fernald, Ohio 45030.

(5) Railroad shipments to Fernald, Ohio - C & O Railroad, Cincinnati, Ohio 45239.

(6) Parcel Post shipments to: P. O. Box 39158, Cincinnati, Ohio 45239.

(7) Air Freight - Contact the Company for instructions.

(8) As Contract Operators of the Government we are not authorized to pay on any contingency on materials F.O.B. shipping point, the contract which consists of the following documents: (a) the Government's solicitation and your offer.

PHILIP H. COLES
 All 21692-1L officer
 Copy of P.O. to Leroy Pennington
 Signature of Contracting Officer: [Signature]
 DATE SIGNED: 10/01/85

C.1 . DESCRIPTION/SPECIFICATION OF SUPPLIES (APR 1984)

<u>1. Specifications</u>	<u>Contractors' Guaranteed Specifications</u>
Moisture, 8% maximum	<u>8% max.</u>
Ash, 12% maximum	<u>12% max.</u>
Volatile Matter, 32% to 42% range	<u>32-42%</u>
Fixed Carbon, 47% to 55% range	<u>47-55%</u>
BTU, 12,500 Minimum (as received)	<u>12,500 min. (as rec'd)</u>
Fusion Temp. of Ash, 2300°F Minimum	<u>2300°F min.</u>
Sulphur, 1% Maximum	<u>1% max.</u>
Size, 2" x 0" with not more than 20% below 1/4" size	<u>2" x 0 not more than 20% 1/4"</u>

¹The Government reserves the right to reject any coal on delivery that does not meet sizing specifications or contains more than 20% fines below the specified 1/4" x 0" size.

<u>2. Additional Required Information</u>	
Shipping Point, County, State	<u>Jackson, Kentucky</u>
Invoice Terms	<u>15 days invoice</u>
Bid price per ton, F.O.B. Mines Loaded into rail cars/trucks (Firm price for the period of agreement).	<u>\$33.75</u>

NOTE: FOR TRUCK SHIPMENTS, BIDDER TO STATE TODAY'S TRUCK RATE PER TON \$ 11.00 /Net Ton

3. The Contractor shall supply coal of the quality which meets or exceeds the quality as listed in their proposal and which is the basis for "penalty/premium" (price adjustments) determines.

4. The following are specifications of coal required by the Government and specifications of coal that will be rejected:

<u>Government Specifications (As Received)</u>	<u>Rejection Specifications (As Received)</u>
BTU 12,500 minimum	11,000 minimum
Ash 12% maximum	16% maximum
Moisture 8% maximum	10% maximum
Sulphur 1% maximum	1.3% maximum

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3939 MONTGOMERY ROAD
CINCINNATI, OHIO 45212
513-531-9014

6791 Attachment I
Weekly Composite
Boiler No. 1
Sample # 1477

11/19/86
J.O.S.

Member: A.S.T.M.

LAB NO.
(033901)

DATE 11-4-86

Westinghouse Materials of Ohio

IDENTIFICATION P.O. #C-71421
Sample #146
10-31-86

FUSION TEMP.

IT
ST
HT
FT

ANALYSIS	As Rec'd	Dry	
Moisture	4.57		
Ash	7.62	7.98	
Btu	13,016	13,639	
Sulfur	0.62	0.65	
Volatile	36.41	38.15	
Fixed Carbon			
Grindability-----			
F.S.I. (Coke Button)			

Screen Size %

Other Test:

Approved by:

Mark Grah
Manager

Comments:



3939 MONTGOMERY ROAD
CINCINNATI, OHIO 45212
513-531-9014

Attachment I **6791**
Boiler no.
Sample # 1476
Weekly Composite

11/19/86
JOB

LAB NO.
(033897)

Member: A.S.T.M.

DATE 11-4-86

Westinghouse Materials of Ohio

IDENTIFICATION PO #C-71421 FUSION TEMP.
Sample #142 IT
10-31-86 ST
HT
FT

ANALYSIS	As Rec'd	Dry	Screen Size	%
Moisture	5.66			
Ash	7.83	8.30		
Btu	12,783	13,550		
Sulfur	0.68	0.72		
Volatile	36.32	38.50		
Fixed Carbon				
Grindability	-----			
F.S.I. (Coke Button)				

Other Test:

Approved by:
Mark Gal
Manager

Comments:

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REPORT OF CHEMICAL ANALYSES

<u>Material</u>	<u>Date Sampled</u>	<u>Uranium (ppm)</u>
Coal Composite	11/20/86	< 5
Ash Composite	11/20/86	12
Bottom Ash	11/24/86	< 5
Bottom Ash	11/25/86	< 5
Bottom Ash	11/26/86	5.9
Mechanical Precipitator Ash	11/24/86	26
Mechanical Precipitator Ash	11/25/86	11
Mechanical Precipitator Ash	11/26/86	11
Electrostatic Precipitator Ash	11/24/86	28
Electrostatic Precipitator Ash	11/25/86	32
Electrostatic Precipitator Ash	11/26/86	34

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Attachment III

REPORT OF SPECTROCHEMICAL ANALYSIS (WEIGHT PERCENT)

<u>Material</u>	<u>Coal-Composite - 11/19/86</u>	<u>Ash Composite - 11/19/86</u>
Al	>1.3	>1.3
B	0.04	<0.008
Ba	0.012	0.015
Be	0.001	<0.001
Bi	<0.001	<0.001
Ca	0.20	0.10
Cd	<0.015	<0.015
Co	0.008	<0.008
Cr	0.015	<0.008
Cu	0.015	0.001
Fe	1.3	0.3
Mg	0.125	0.05
Mn	0.008	<0.001
Mo	0.001	<0.001
Na	0.125	<0.06
Nb	<0.008	<0.008
Ni	0.02	<0.008
Pb	0.008	<0.04
Si	>1.3	>1.3
Sn	<0.004	<0.004
Ti	0.5	0.125
V	0.015	0.003
Zn	<0.12	<0.12
Zr	<0.015	<0.015

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