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Energy Fuels Nuclear, Inc.

AUG 12 1982

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Docket File 40-8681

PDR

NRC Region IV

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DEMartin

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HJPettengill

RAScarano

REBrowning

JBMartin

WMUR r/f

WMUR w/f

WM r/f

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BF: [Signature]

WMUR:DMG

Docket No. 40-8681

Energy Fuels Nuclear, Inc.

ATTN: Mr. C.E. Baker

Manager, Regulatory Compliance

Three Park Central - Suite 900

1515 Arapahoe

Denver, Colorado 80202

Gentlemen:

This is in response to your letter dated May 21, 1982, requesting an amendment to the White Mesa Source Material License (SUA-1358) for a reduction in the thickness of the tailings reclamation cover at the White Mesa Mill. Based on our review of the D'Appolonia report (May 14, 1982) attached to your letter, we have identified the need for additional information. The following information items should be submitted for NRC review by August 30, 1982, as agreed to by Mr. C.E. Baker of your staff in his August 9, 1982 telephone conversation with Mr. D. Gillen of my staff.

1. Provide a copy of the May 23, 1980 Ford, Bacon and Davis report entitled "Radon Effectiveness of Potential Tailings Cover Materials from the White Mesa Uranium Project".
2. The water content was not addressed in the D'Appolonia study. What water contents are expected to exist in the tailings and cover materials over the long term? Predicted moisture contents of the cover materials are best obtained by the determination of moisture contents of the same or very similar materials as they exist in-situ.
3. Clarify the discrepancy that exists between the radium activities presented in Table 1 of the D'Appolonia study (370 and 620 pCi/g) and the activities provided by you for use in the radiological assessment of the proposed mill expansion (423 and 705 pCi/g).
4. Provide documentation of D'Appolonia's computer program methodology, along with input assumptions.

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5. Provide documentation of the density and soundness of the sandstone to be used for erosion protection. The following are pertinent ASTM test procedures that may be used to characterize the rock material:
- a) ASTM C-88 (Sodium sulfate soundness test)
 - b) ASTM C-127 (Bulk specific gravity test)
 - c) ASTM C-131 (Los Angeles abrasion test)
 - d) ASTM C-666 (Freeze - Thaw test)

If you should have any questions regarding these matters, please contact Mr. Daniel M. Gillen of my staff at (301) 427-4538.

Sincerely,

Original Signed by
D. M. Gillen

Dan E. Martin, Section Leader
New Facilities Section
Uranium Recovery Licensing Branch
Division of Waste Management

40-8681/dmg/82/07/14/0

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