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March 5, 1997

Via Overnight UPS

Mr. Joseph J. Holonich, Branch Chief
High Level Waste and Uranium Recovery
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
2 White Flint North, Mail Stop T-7J9
11545 Rockville Pike
Rockville, MD 20852

Re: Revised Amendment Request to Process an Alternate Feed at White Mesa Uranium Mill
Source Material License SUA-1358
Docket No. 40-8681

Dear Mr. Holonich:

Energy Fuels Nuclear, Inc. ("EFN") hereby submits the enclosed revised request to amend Source Material License SUA-1358 to authorize receipt and processing of [certain residues resulting from the processing of ore for the extraction of uranium,] known as the ["Cotter Concentrate"] ("uranium material"). The uranium material will be shipped to the EFN White Mesa Mill ("the Mill") by [the United States Department of Energy ("DOE") Nevada Operations Office ("DOE/NV")], the "material owner".

The uranium material has been stored at the owner's facility, the [DOE Nevada Test Site ("NTS")] since November, 1987. The uranium material is currently stored in approximately [1,225] fifty-five gallon drums. The weight of the uranium material is approximately [790,000] pounds. The material owner estimates an average uranium content of [ten percent].

The processing of the uranium material will not increase the mill's production to exceed the License Condition No. 12 limit of 4,380 tons of U_3O_8 per calendar year. As production will remain within the limits assessed in the original Environmental Assessment, and as the process will be essentially unchanged, this amendment will result in no significant environmental impact beyond those originally evaluated.

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Complete details are provided in the attached request to amend, which includes the following sections:

- 1.0 Material Composition and Volume
 - 1.1 Radiochemical Data
 - 1.2 Review of Hazardous Constituent Data
 - 1.3 Regulatory Considerations
 - 1.4 Shipping

2.0 Process

- 3.0 Safety Measures
 - 3.1 Control of Airborne Contamination
 - 3.2 Radiation Safety
 - 3.3 Vehicle Scan

4.0 Certification

- Attachment 1 [Uranium Material Description]
- Attachment 2 [Material Owner's Letter to EFN]
- Attachment 3 [Letter from representative of Material Owner to State Agency]
- Attachment 3a [Letter from State Agency to Material Owner]
- Attachment 4 Energy Fuels Nuclear, Inc. White Mesa Mill Equipment Release/Radiological Survey Procedure

To ensure that all pertinent information is included in this submittal, the following guidelines were used in preparing this request to amend:

- U.S. Nuclear Regulatory Commission ("NRC") Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores (Federal Register Volume 60, No. 184, September 22, 1995).
- EFN request to the NRC for the amendment to process uranium-bearing potassium diurate ($K_2U_2O_7$) in a solution of potassium hydroxide/potassium fluoride in water ("KOH Amendment").
- NRC and State of Utah comments and requests for information relative to the KOH Amendment.

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- EFN request to NRC for the Rhone-Poulenc alternate feed amendment.
- NRC and State of Utah comments and requests for information relative to the EFN request for the Rhone-Poulenc alternate feed amendment.

We believe that use of these guidance materials, supported by our discussions with the NRC, has allowed us to prepare a complete, concise submittal. Therefore, as we discussed with our Project Manager, Jim Park, at White Mesa Mill on January 16, 1997, EFN requests that the NRC please attempt to reply to this request within 30 days of this transmittal date. Please note that in the attached Affidavit, EFN requests that bracketed portions of this revised application, and selected attachments, be treated as confidential. This letter and enclosed application are hereby transmitted as two versions:

1. Complete text with brackets indicating portions of text and the selected attachments to be withheld as confidential; and
2. An edited version of (1) with bracketed text deleted and selected attachments removed. This version is meant to be used for the Public Document Room.

I can be reached at (303) 899-5647.

Sincerely,

Michelle R. Rehmann by
Michelle R. Rehmann
Environmental Manager *Reh, A. Rehmann*

MRR/pl
Attachments