

24008681200R

# Umetco Minerals Corporation



WHITE MESA MILL • P.O. BOX 889 • BLANDING, UTAH 84511  
☎ (801) 678-2221

40-8681  
ATTACHMENT 1

January 18, 1989

Mr. R. Dale Smith, Director  
U. S. Nuclear Regulatory Commission  
Region IV  
Uranium Recovery Field Office  
Box 25325  
Denver, CO 80225

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Re: Umetco Minerals Corporation  
SUA-1358: Docket No. 40-8681  
White Mesa Mill, Utah

Dear Mr. Smith:

Umetco requests a License Amendment to allow plant tests of a source material. Umetco is proposing a range of plant testing options to determine the best methods for processing this source material, in terms of both economics and facility of processing.

The material in question contains natural uranium and a limited quantity has been received under Umetco's Source Material License SUA-1358, License Conditions 6, 7, and 8. This material is currently being stored on one of the cement pads in the ore storage area. The material received to date, approximately 600 wet tons, is less than 10% of the total available. Further receipts of this material have been suspended pending NRC review and approval.

The material has been the subject of an extensive supplier initiated testing and review program. These results have been provided to Umetco by the supplier. A review of the information from this program has shown the material to be non-hazardous except for its uranium content. However, Umetco will extensively assay and characterize this material to independently verify the supplied information, especially in reference to RCRA and CERCLA constituents.

An earlier sample of this material had been provided by the supplier for amenability testing, and it was Umetco's understanding that this sample was representative of the whole. The uranium assay of this sample showed 0.37% natural uranium as U<sub>3</sub>O<sub>8</sub>. The overall grade of this material is expected to be 0.15%. The average assay of material received to date is 0.143%. Based on the preliminary amenability

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tests, no problems are anticipated in processing this material.

The specific testing options that Umetco wishes to explore may be modified by experience. That is, if a particular method appears unproductive, further tests may not be run that depend on success in the processing unit where difficulties were encountered. Each plant test would involve performing amenability tests at conditions that, as closely as possible, match those anticipated from the particular method.

The plant tests would, in general, demonstrate specific responses of the material to the conditions in that part of the circuit. The amenability tests would be used to prove or disprove the White Mesa Mill's ability to economically recover uranium.


The test methods that Umetco wishes to explore are:

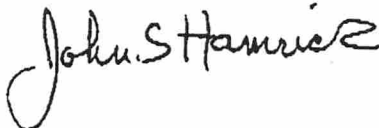
- 1) Introduction of material into the grizzly and subsequent processing through the entire circuit.
- 2) Introduction of the material into the preleach circuit.
- 3) Introduction of the material into the leach circuit.
- 4) Introduction of the material into the CCD circuit.
- 5) A thin layer, acid cure heap leach.

Please note that Umetco anticipates that each of these proposed methods will lead to the economic recovery of uranium from this source material.

Enclosed find a check for \$150 for the application fee. If I can answer any questions that you may have, please feel free to contact me.

Sincerely yours,

  
D. K. Sparling  
Mill Manager

  
John S. Hamrick  
Site Environmental Coordinator