

Umetco Minerals Corporation



WHITE MESA MILL • P. O. BOX 669 • BLANDING, UTAH 84511
(801) 678-2221

40-8681
Due 10-30-93

June 15, 1993

Mr. Ramon E. Hall, Director
U. S. Nuclear Regulatory Commission
Region IV
Uranium Recovery Field Office
Box 25325
Denver, CO 80225

Re: Umetco Minerals Corporation
SUA-1358, Docket No. 40-8681
White Mesa Mill, Utah
Allied Chemical Company - CaF₂ By-product
U. S. NRC Letter of May 5, 1993

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Dear Mr. Hall:

Allied Signal's Metropolis Works located in Metropolis, Illinois produces a uranium-bearing filter cake as a by-product of their process to concentrate U₃O₈ for conversion to uranium hexafluoride. This material is primarily calcium fluoride but it contains natural uranium as U₃O₈ in quantities that normally exceed two percent. Umetco Minerals Corporation has entered into an agreement with Allied Signal to recover the uranium and hereby applies for a license amendment to process this material for the recovery of uranium values contained.

Uranium recovered will be split between Allied and Umetco, based on the Nuexco Exchange Value of uranium. Uranium recovered will be the only compensation received and this material is to be processed for the recovery of uranium only.

There is a secondary benefit to recovering the uranium in this material. Adding this material to other ores at the rate of 17 pounds of calcium fluoride per ton of ore improves the indicated leach recovery by one percent. Depending on the ore grade fed, this would result in 2,500 to 5,000 pounds of additional uranium recovery per month. Umetco has purchased and fed calcium fluorspar as a source of calcium fluoride in the past to enhance leach recovery at the Uravan Plant.

Allied Signal and Umetco both believe the RCRA Regulations exempt this material from the TCLP test requirements.

93-0477

We have complied with your request for TCLP testing and copies of the first results are attached. Complete results will be sent to the NRC as soon as received by Umetco.

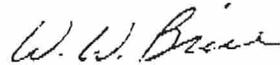
These results are from two samples. One sample is a composite of material sampled for uranium content in 1990, the other is a random grab sample from 20 different barrels in inventory. Each barrel sampled represented a different lot. This sample was blended and cut.

Prior to receiving this material a sample was sent to EDA Laboratories for an EPA Toxicity Test. A copy of this test which passed all requirements is attached.

Representative samples of uranium content, amenability tests and a typical analysis of White Mesa Mill tailings solution are also attached.

If we can answer any questions that you may have, please contact me or Scott Schierman.

Sincerely yours,



W. W. Brice
Maintenance Superintendent

WWB/gp

Enclosures