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# Umetco Minerals Corporation

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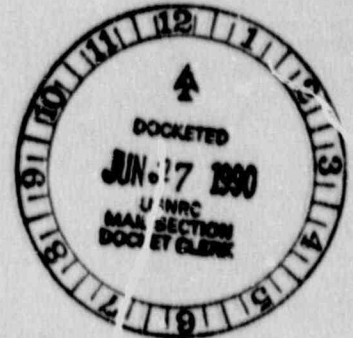


WHITE MESA MILL • P.O. BOX 669 • BLANDING, UTAH 84511  
☎ (801) 678-2221

RETURN ORIGINAL TO PDR, HQ.

June 25, 1990

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  
License Condition 20

Dear Mr. Hall:

The following is the response required by URFO's letter dated June 5, 1990.

If I can answer any questions that you may have, please feel free to contact me.

Sincerely yours,

*D.K. Sparling*  
D. K. Sparling  
Mill Manager

*J S Hamrick*  
J. S. Hamrick  
Site Environmental Coordinator

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DESIGNATED ORIGINAL  
Certified By *Mary C. Wood*

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*For 11*

*Add Info  
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1. Criterion 10 of Appendix A to 10 CFR 40 specifies the inflation rate to be used as that indicated by the change in the Consumer Price Index. The index used by the staff is the U.S. City Average, All Urban Consumers (CPI-U), which provides a consistent inflation factor for all licensees and avoids uncertainties over which urban area to associate with a remote location. The actual change in the CPI-U for the period of December 1987-1988 was 4.4 percent, and for December 1988-1989, was 4.6 percent. The surety amount should reflect these inflation factors.

Response: The 1987 surety amount, less the long term care fund, is \$4,576,985. Using the above inflation factors, the surety amount for 1989 is:

$$\$4,576,985 \times 1.044 \times 1.046 = \$4,998,177$$

The December 1989 long term care fund is \$465,000. The total surety amount is then:

$$\$4,998,177 + \$465,000 = \$5,463,177$$

2. It is the NRC's policy to allow a reduction of the required surety amount after discrete phases of reclamation are completed. However, no reduction for partial completion of an individual phase [line item] is allowed. This is done to satisfy the requirement of Criterion 9 of Appendix A to 10 CFR 40 which states, in part, that "an appropriate portion of the surety liability must be retained until final compliance with the reclamation plan is determined." Therefore, no credit can be taken for the 161,200 cubic yards of material which has been placed in Cell 2, and the cost estimate should be revised accordingly.

Response: No reductions will be made to the surety amount, \$5,463,177, until discrete phases of reclamation have been completed.

3. A cost estimate for decommissioning of the Velvet Mine IX facilities was submitted to the NRC on March 9, 1989. However, no amount was included in your revised surety calculations for the Velvet Mine IX. In addition, the cost estimates in your March 9, 1989 submittal are not adequate or of sufficient detail. A cost estimate should be prepared with similar content and detail as in your March 15, 1986, reclamation plan submittal. The basis or source of cost estimates (e.g., Means Cost Data) should be provided and amounts included for mobilization, contractor overhead and profit, and a minimum 15 percent contingency. These costs must also be adjusted to December, 1989 dollars and included in a revised total surety amount.

Response: The Velvet Mine IX takes an unlicensed uranium source (mine water), transfers uranium to resin beads (the licensed activity), and discharges unlicensed material (water stripped of uranium) to ponds. The appropriate reclamation plan will be concerned with materials and equipment covered by the licensed activity. In the case of the Velvet Mine IX, the reclamation plan

must estimate the costs associated with equipment removal and/or disposal at a licensed facility, and the decontamination of the area in which the equipment and materials were located.

The Velvet Mine IX column consists of piping, a pump, and a column filled with approximately 40 cubic feet of resin beads. See Figure 1. The piping is made of PVC and the column is made of FRP. Dismantling the piping, pump, installing blanks on column fittings, and loading all materials for shipping to the White Mesa Mill will take 2 men 2 days. Air samples for radon-222 and airborne uranium would be taken during dismantling. The samples may be personal or area.

The person responsible for sampling would scan the area for contamination after removal of the equipment and material. The area would be scanned for alpha and bet-gamma contamination. Any contamination present would then be removed to the White Mesa Mill.

### COST ESTIMATE (1989 DOLLARS)

#### Equipment and Labor Cost

Operator/Laborer @ \$13/hr x 1.35 (benefit)	\$17.55/hr, use \$20.00
Radiation Health Professional	\$85.00/hr
Case 580 Backhoe	\$35.00/hr
12 cy Truck	\$35.00/hr
Alpha Meter	\$100/day
Beta/gamma Meter	\$100/day
Radon 222 Sampler and Analysis	\$250/day
Airborne Sampler and U-nat Analysis	\$250/day

#### Demolition & Disposal of IX System

Mobilization - Demobilization	= \$1000
Demolition Labor: 2 men 2 days x 8 hrs/day x \$20/hr	= \$640
Demolition Equipment: Backhoe 4 hrs @ \$35/hr	= \$140
Disposal Labor: Operator 4 hrs @ \$20/hr	= \$ 80
Disposal Equipment: 12 cy Truck 4 hrs @ \$35/hr	= \$140
SUB TOTAL	\$2000

#### Sampling and Decontamination

Labor: 1 man 2 days @ \$85/hr	= \$1360
Equipment: Alpha Sampler/Analysis for 2 days	= \$ 500
Equipment: Radon Sampler/Analysis for 2 days	= \$ 500
Equipment: Alpha Meter for one-half day	= \$ 50
Equipment: Beta/gamma Meter for one-half day	= \$ 50
SUB TOTAL	\$2460

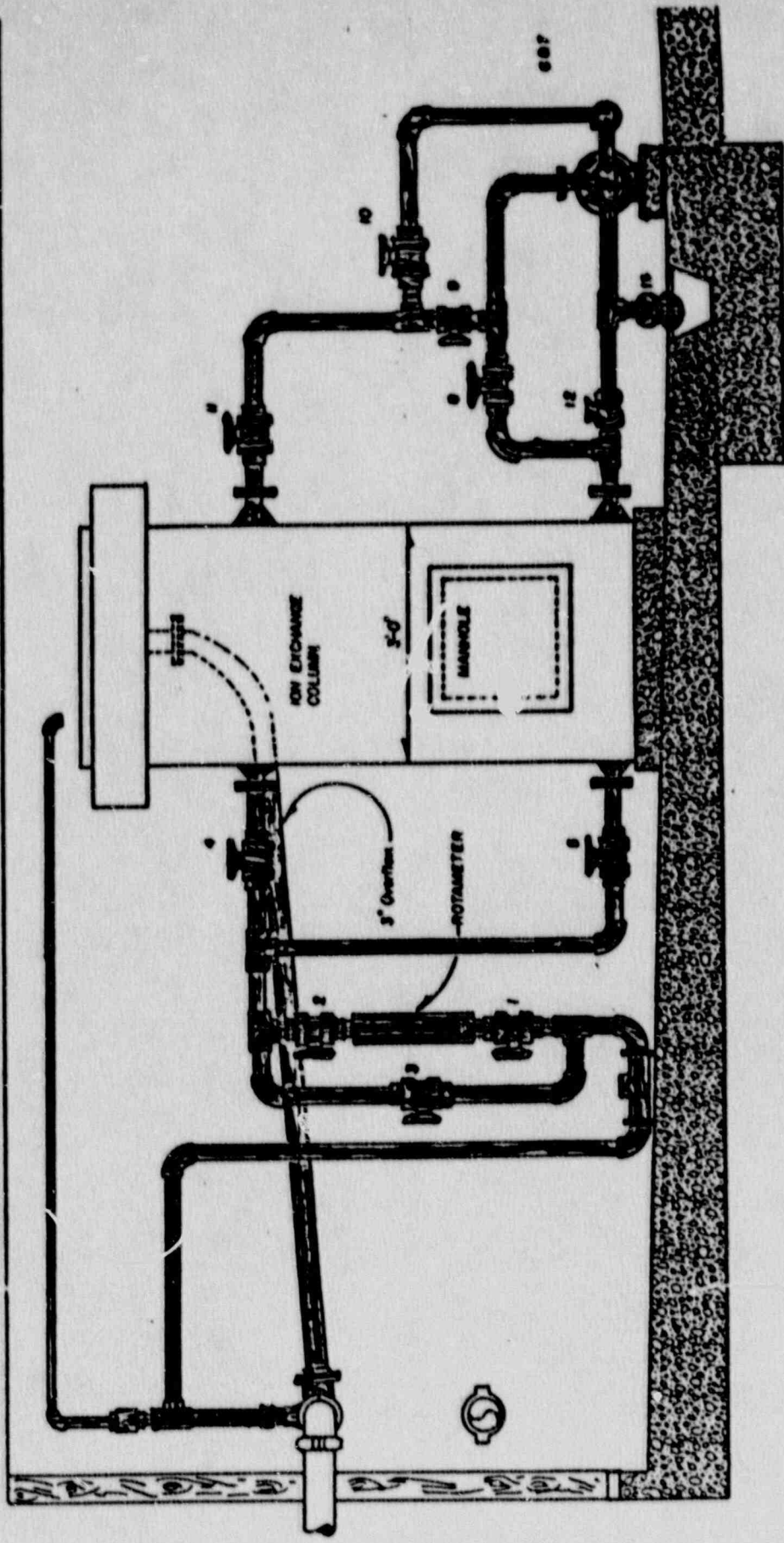


Contingency (15%)	<u>\$670</u>
SUB TOTAL	\$5130
Profit and Overhead (15%)	\$770
Project Management (5%)	<u>\$260</u>
TOTAL COST	\$6160

Total Required Surety for the White Mesa Mill, including the Velvet IX column and the long term care fund:

$$\$5,463,177 + \$6,160 = \$5,469,337$$

**Figure 1**



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