



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
URANIUM RECOVERY FIELD OFFICE
BOX 25325
DENVER, COLORADO 80225

URFO:CDMC
Docket No. 40-8681
04008681790E
X61100

MAY 05 1994

RETURN ORIGINAL TO PDR, HQ.

Umetco Minerals Corporation
ATTN: R. A. Van Horn
P.O. Box 1029
Grand Junction, Colorado 81502

Dear Mr. Van Horn:

Our staff has completed review of your letter dated April 18, 1994, comprising a draft proposal for an enhanced ground-water monitoring program and for a hydrogeologic investigation at the White Mesa facility. It is our understanding that the draft proposals for monitoring tailings seepage and for the hydrogeologic investigation are in response to questions included in the NRC's letter to you dated March 31, 1994, and are submitted to support your request to implement points of compliance and an enhanced ground-water monitoring program at the White Mesa Facility. Furthermore, it is our understanding that your response to Enclosure 1 of the March 31, 1994, letter is forthcoming.

We are pleased to have the opportunity to comment on the proposed programs. Based on the information you provided, our staff finds additional information and clarification of some issues is required before we can proceed with review of your amendment request. A list of the information we require is included as an attachment to this letter. If you have any questions, please call Cynthia Miller-Corbett (303) 231-5811.

Sincerely,

Ramon E. Hall
Director

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PDR ADOCK 04008681
C PDR

Attachment:
As stated

cc:
W. W. Brice, Umetco
W. Sinclair, RCPD, UT

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ADDITIONAL QUESTIONS CONCERNING AMENDMENT TO IMPLEMENT POINTS OF COMPLIANCE AND MONITORING PROGRAM AT THE WHITE MESA FACILITY

Vadose Zone Monitoring of Tailings Disposal Cells

1. You are proposing installation of a resistivity survey network to detect tailings cell leakage in the vadose zone. Although we agree that this method is capable of detecting leakage, we need some additional details. Specifically, so that we can independently verify your proposed layout, please indicate the spacing of electrodes and, therefore, the depth of monitoring. Additionally, please provide information to ensure the resistivity surveys layout will be appropriate for detecting tailings cell leakage.
2. Because a resistivity survey is capable of detecting routine moisture fronts due to percolation from the surface, you will need to propose an action level, and its rationale, for moisture detection to indicate tailings cell leakage has occurred.
3. Please revise the monitoring frequency to be consistent with the routine detection monitoring program, which is quarterly.

Additional Characterization Studies: Geohydrogeology

1. Please provide the basis for your selection of the locations for the angle boreholes. As depicted in Figure 6 of the April 18, 1994, submittal, your proposed locations are next to one another to the south of Cell 3. Our initial reaction is that it would appear that better characterization of the subsurface geology would be provided by drilling one of these boreholes to the east of the cells. Also, there appears to be some confusion over the number of boreholes to be drilled. We understand from earlier discussion that there would be two locations, and that each location would consist of two boreholes oriented perpendicular to one another. Please clarify and justify that your proposed program will adequately characterize any joint system that is present.
2. Please indicate whether the angle boreholes and the vertical boreholes will be incorporated in the detection monitoring program. If not, please provide your proposal for additional ground-water monitoring wells in the uppermost aquifer. It is the staff's understanding that additional wells to monitor the Burro Canyon aquifer would be installed to the southeast, south, and southwest.
3. Please verify that the variable ground-water quality is representative of water quality in one aquifer. As previously indicated in our March 31, 1994, letter to you, this information is necessary before we can proceed with evaluating baseline ground-water quality conditions.

MAY 05 1994

bcc:
 Docket No. 40-8681
 PDR/DCS
 URFO r/f
 SJCollins, RIV
 DBSpitzberg, RIV
 RAScarano, RIV
 HLUR Branch, DWM, 7J-9, TWFN
 DCWard
 CDMiller-Corbett
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PM:URFO <i>CMC</i>	PM:URFO <i>RCW</i>	DD:URFO <i>[Signature]</i>	D:URFO:RIV <i>[Signature]</i>	
CDMiller/lv	DCWard	EFHawkins	REHall	
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