



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

JUL 11 1990

URFO:DLJ
Docket No. 40-6659
SUA-551, Amendment No. 31
04006659820E

Petrotomics Company
ATTN: R. A. Juday, Supervisor
Shirley Basin Mill
P.O. Box 8509
Shirley Basin, Wyoming 82615

Dear Mr. Juday:

Our office is in receipt of your June 18, 1990, request to modify the reclamation plan quality control testing program. You have indicated that in addition to the utilization of sand cone tests and nuclear densometers, you would prefer to utilize rubber balloon apparatus to determine field densities. Accordingly, we are revising your license to include the use of this apparatus in your reclamation quality control program.

Therefore, pursuant to Title 10, Code of Federal Regulations, Part 40, Source Material License SUA-551 is hereby amended by modifying License Condition No. 49 to read as follows:

49. The licensee shall reclaim the tailings impoundment as stated in their submittals dated June 27, 1986; January 15, March 18 and August 31, 1987; June 30, 1988; and February 8, April 28, August 15 and August 16, 1989; subject to the following:
 - A. Should the clay stockpile not contain an adequate amount of clay material for the pile top cover, the licensee shall locate an alternate clay source and provide documentation of its acceptability for NRC review and approval in the form of a license amendment prior to placement. This documentation shall include appropriate laboratory testing and radon attenuation modeling to indicate that the design using the alternate clay material meets the requirements of Criterion 6, Appendix A to 10 CFR Part 40.
 - B. Should the overburden material obtained from the Southwest Channel excavation not be adequate to provide the required overburden material for the pile top cover, the licensee shall locate an alternate overburden source and provide documentation of its acceptability for NRC review and approval in the form of

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a license amendment prior to placement. This documentation shall include appropriate laboratory testing and radon attenuation modeling to indicate that the design using the alternate overburden material meets the requirements of Criterion 6, Appendix A to 10 CFR Part 40.

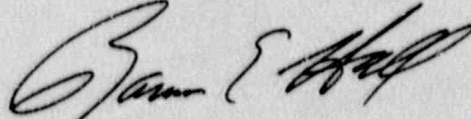
- C. Should complete placement of the radon barrier in one construction season not be possible, the licensee shall establish winter shutdown and spring startup procedures and submit these for NRC review and approval prior to initiating winter shutdown.
- D. Testing and inspection of the rock and the correlation of the nuclear gauge with sand cone results during construction shall meet or exceed the criteria set forth in the "Staff Technical Position on Testing and Inspection Plans During Construction of DOE's Remedial Action at Inactive Uranium Mill Tailings Sites," January 1989. The rubber balloon apparatus may be used to determine field density if correlated with the sand cone in the same manner as the nuclear gauge is correlated. The rubber balloon apparatus should be used in accordance with ASTM D-2167.
- E. The rock to be used for riprap shall meet the scoring criteria described in Appendix D of the "Draft Staff Technical Position on Design of Erosion Protection Covers for Stabilization of Uranium Mill Tailings Sites," August 1989. Minimum riprap specifications and durability test results from representative samples must be submitted for NRC review and approval at least 60 days prior to placement of the riprap. Minimum durability tests shall include L. A. Abrasion, absorption, soundness and specific gravity.
- F. The licensee shall submit a report for NRC review and approval, detailing the results of the settlement monitoring program and substantiation that any projected settlement will not adversely affect the clay covers' performance over the design life. This report must be approved in the form of a license amendment prior to placement of the overburden and topsoil.
- G. The licensee shall submit to NRC a final cost estimate based on this approved plan no later than three (3) months following issuance of this amendment. This estimate shall be used as a basis for the surety arrangement required by License Condition No. 23.

All other conditions of the license shall remain the same. The license is being reissued in order to incorporate the revised condition.

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This amendment was discussed with you and agreed to on July 3, 1990.

Sincerely,



Ramon E. Hall
Director

Enclosure:
Source Material License SUA-551

Case Closed: 04006659820E