## UNITED STATES



## NUCLEAR REGULATORY COMMISSION

**REGION IV** 

URANIUM RECOVERY FIELD OFFICE BOX 25325 DENVER, COLORADO 80225

OCT 23 1989

URF0:ROG Docket No. 40-6659 SUA-551, Amendment No. 29 04006659450E 04006659451E 04006659452E 04006659452E

Petrotomics Company P.O. Box 8509 Shirley Basin, Wyoming 82615

Gentlemen:

We have completed our review of your proposed reclamation plan for the Petrotomics Mill. A list of the information considered in our review is given in Enclosure 1.

In addition to the other issues covered in this amendment, we have utilized this licensing action as an opportunity to correct an error in your mailing address, shown in License Condition No. 2 and to modify the license expiration date shown in License Condition No. 4. You will note that we have also taken this opportunity to change the initialism in your license from USNRC to NRC in accordance with agency policies.

Based on our review of the information submitted and pursuant to Title 10, Code of Federal Regulations, Part 40, Source Material License SUA-551 is hereby amended by revising License Condition Nos. 2 and 4, deleting License Condition No. 30 and adding License Condition No. 49 to read as follows:

- P.O. Box 8509 Shirley Basin, Wyoming 82615
- Until NRC determines that site reclamation has been completed.
- 30. DELETED by Amendment No. 29.

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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:

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- 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 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.
- 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.

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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.

The effect of this amendment is to correct an error in your address, to modify the expiration date of your license and to approve your proposed site reclamation plan. All other conditions of this license shall remain the same. The license is being reissued to incorporate the revisions specified above.

The issuance of this amendment was discussed and agreed upon in a telephone conversation with Mr. Steve Pfaff on October 10, 1989. Questions on this amendment may be addressed to Ray Gonzales of my staff at (303) 236-2815.

Sincerely,

fortouting Director

Enclosures: List of submittals Source Material License SUA-551

## ENCLOSURE 1

## LIST OF SUBMITTALS

- Letter from S. J. Pfaff, Petrotomics Company, to H. J. Pettengill, NRC. Subject: Submittal of Detailed Reclamation Plan; dated June 27, 1986.
- Letter from S. J. Pfaff, Petrotomics Company, to E. Hawkins, NRC. Subject: Responses to NRC's November 10, 1986 comments on the Reclamation Plan; dated January 15, 1987.
- Letter from R. A. Juday, Petrotomics Company, to E. F. Hawkins, NRC. Subject: Responses to NRC's February 17, 1987 letter on the Reclamation Plan Radon Barrier; dated March 18, 1987.
- Letter from S. J. Pfaff, Petrotomics Company, to E. F. Hawkins, NRC. Subject: Responses to NRC's July 10, 1987 comments on Petrotomics' January 15, 1987 submittal; dated August 31, 1987.
- Letter from S. J. Pfaff, Petrotomics Company, to E. F. Hawkins, NRC. Subject: Responses to NRC's November 27, 1987 comments on Petrotomics' August 31, 1987 submittal; dated June 30, 1988.
- Letter from S. J. Pfaff, Petrotomics Company, to E. F. Hawkins, NRC. Subject: Reclamation Plan Radon Emanation Factors; dated February 8, 1989.
- Letter from R. A. Juday, Petrotomics Company, to E. F. Hawkins, NRC. Subject: Responses to NRC's March 15, 1989 comments on Petrotomics' June 30, 1988 submittal; dated April 28, 1989.
- Letter from R. A. Juday, Petrotomics Company, to E. F. Hawkins, NRC. Subject: Proposal to add rock armor north and south of the North Swale Discharge Channel; dated August 15, 1989.
- Letter from R. A. Juday, Petrotomics Company, to E. F. Hawkins, NRC. Subject: Revised Figure G.4-77; dated August 16, 1989.