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Docket File 6659
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 LLW Branch

URFO:GRK
 Docket No. 40-6659
 04006659390E

MEMORANDUM FOR: Docket File No. 40-6659

FROM: Gary R. Konwinski, Project Manager
 Licensing Branch 2
 Uranium Recovery Field Office, RIV

SUBJECT: ANNUAL TECHNICAL EVALUATION OF EMBANKMENT
 PERFORMANCE FOR THE PETROTOMICS MILL

By letter dated October 24, 1985, Petrotomics submitted copies of the technical evaluation of the performance of the tailings embankment system as well as graphed piezometer and tailings pond water level readings at the Shirley Basin Mill. These data are required to be submitted on an annual basis by License Condition No. 31 of Source Material License SUA-551. The technical evaluation was performed by Mr. Ron Juday, Mine Technical Supervisor for Petrotomics.

A staff review of the technical evaluation as well as supporting data finds the following major points:

1. Freeboard requirements were maintained at all times. Although some large water level changes are indicated over short periods of time, they are in response to water level manipulation to maintain maximum evaporative surface area.
2. Quarterly readings of embankment piezometers indicated that of the 27 monitored piezometers, 6 showed water level changes in excess of one foot during the last year. The water level changes indicate that the zone of saturation in the embankment is falling. This is related to the falling solution level in the tailings impoundment and expected to continue.

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3. Annual surveying of the 28 surface settlement monuments located on the embankment indicate that elevation changes in all but three have been less than one tenth of a foot. Although monuments 2-B, 3-B and 4-B showed elevation changes of approximately one tenth of a foot, these changes are not of a magnitude to cause concern.

The technical evaluation, which is a review of monthly tailings impoundment inspection reports as well as field survey of the embankment concludes that the embankment is in excellent condition and functioning as designed. The staff concurs with the finding of Petrotomics' submittal and concludes that it is in accordance with the guidance presented in Regulatory Guide 3.11.1. No further action is therefore necessary.

/s/

Gary R. Konwinski, Project Manager
Licensing Branch 2
Uranium Recovery Field Office, RIV

Approved by:

/s/

Harry J. Pettengill, Chief
Licensing Branch 2
Uranium Recovery Field Office, RIV

Case Closed: 04006659390E

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