



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

JUN 08 1994

URFO:PJG
Docket No. 40-8903
X61237

MEMORANDUM FOR: Docket File No. 40-8903
FROM: Pete J. Garcia, Jr., Project Manager
SUBJECT: ANNUAL TECHNICAL EVALUATION OF EMBANKMENT PERFORMANCE AT
HOMESTAKE MINING COMPANY'S GRANTS MILL

By letter dated January 25, 1994, Homestake Mining Company submitted a report documenting the annual technical evaluation of the performance of the tailings retention system at the Grants Mill. The technical evaluation was performed and submitted in accordance with Condition No. 12 of Source Material License SUA-1471 for the Grants Mill. The evaluation was performed by a consulting registered professional engineer who is very familiar with the tailings retention system at the site.

The main tailings pile at the site is now completely dry. Active recontouring of the pile top and flattening of the outslopes in preparation for final reclamation was in progress at the time of the evaluation. A synthetically lined evaporation pond has been constructed on top of the small tailings pile at the site to receive water collected as part of the ground-water remediation program required by the facility license.

Major findings of the technical evaluation are discussed below:

1. The French drain constructed around the toe of the large tailings impoundment has been effective in capturing seepage that had previously emerged from the toe of the impoundment.
2. The water level in the evaporation pond has dropped recently due to the use of water from the pond for conditioning interim cover and radon barrier soils being placed on the main tailings pile.
3. Piezometric water levels within the large impoundment have shown very little change, although general overall decreases in the water levels have been noted. The water levels should continue to decline as pile reclamation proceeds.

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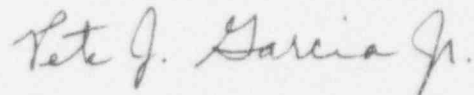
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4. Seven piezometers were destroyed during the recontouring activities. The technical evaluation included a recommendation that those piezometers be replaced, and additional piezometers installed to monitor settlement of the pile, once recontouring of the pile was complete.
5. Stability analyses of the tailings impoundments were not performed for this technical evaluation because all parameters affecting embankment stability have improved over the past year. The previous stability analyses performed had indicated that factors of safety for the embankment exceeded the minimum values recommended in Regulatory Guide 3.11.

As a result of the technical evaluation, the licensee concluded that the tailings retention system at the Grants Mill was performing as expected. No areas of concern were noted during the staff review of the licensee's January 25, 1994, submittal, with the exception that the submittal did not include a commitment to install piezometers as recommended. Mr. Fred Craft, the facility General Manager, was contacted by telephone on June 2, 1994, concerning the plans for installation of piezometers. Mr. Craft stated that the recommended installation of the piezometers had just begun and would be completed in 30 to 45 days. No further action is therefore necessary.



Pete J. Garcia, Jr.
Project Manager

Case Closed: X61237

JUN 08 1994

bcc:

Bucket No. 40-8903

PDR/DCS

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