Mine File
S. Linner

STATE OF UTAH
DEPARTMENT OF HEALTH

NORMAN H. BANGERTER, GOVERNOR

SUZANNE DANDOY, M.D., M.P.H., EXECUTIVE DIRECTOR

RECEIVED
APR 21 1986
DIVISION OF
OIL, GAS & MINING

April 16, 1986

Mr. Glenn M. Eurick
Environmental and Occupational Health Coordinator
Barrick Mercur Gold Mines Inc.
P.O. Box 838
Tooele, Utah 84074-0838

RE: Barrick Mercur Gold Mine
Heap No. 2
Clay Aggregate Liner

Dear Mr. Eurick:

We have reviewed the soils testing information submitted concerning the 18 inch clay aggregate liner for leach dump No. 2. The information presented gives us concern with regard to the permeability rates.

The bottom 9 inch lift has 3 tests of the 12 conducted which show permeability rates in excess of the maximum of 1.0×10^{-7} cm per second. One of the tests has a permeability rate of 3.0×10^{-7} cm per second.

The top 9-inch lift has all 13 permeability tests exceeding the maximum specified permeability rate of 1.0×10^{-7} cm per sec. The most rapid permeability rate is 3.3×10^{-7} cm per sec.

These percolation rates exceed the preliminary design criteria approved 19 Sept. 1985, and there is added concern because operations are expected to last 5 or 6 years according to the following projected schedule:

1986	2 Lifts	Begin July 1986
1987	3 Lifts	
1988	2 Lifts	
1989	2 Lifts	
1990	2 Lifts	
1991	1 Lift	Finish July 1991

Finally, the measured depth of compacted clay at point No. 366 must be brought up to the 18-inch minimum thickness and then verified by additional testing throughout the remainder of that grid area.

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An evaluation of the condition of the clay liner and the geotextile fabric, which has been exposed to the elements through the winter, should be made and a written report submitted. We request that this office be notified 3 days prior to the inspection so a representative can be present.

These concerns must be adequately resolved prior to initiating any additional work to complete the liner system for leach dump No. 2.

Please call if there are any questions.

Sincerely,

Calvin K. Sudweeks, Director
Bureau of Water Pollution Control

CGD:mw

cc: Mr. John Sprague, General Manager Barrick Mercur Mine
Mr. Myron Bateman, Tooele County Health Dept.
Mr. Loren Morton
Mr. Tom Suchoski, Oil, Gas & Mining

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