PDR
WM-33

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUL 11 1980

Department of Social and Health Services
ATTN: Nancy P. Kirner
Radioactive Materials Licensing
P. O. Box 1788
Olympia, Washington 98504

Gentlemen:

Enclosed you will find requests for additional information based upon our review of Dawn Mining Company's proposed new tailings disposal facility as described in various submittals.

To enable us to meet the September 1 completion date for our environmental assessment previously agreed to, we ask that you request a response from Dawn by August 1, 1980. To further expedite our review, Dawn should be requested to transmit a copy of their response directly to us.

If you have any questions concerning this transmittal, please contact P. Garcia of my staff at 301/427-4109.

Sincerely,

John J. Linehan, Section Leader
Operating Facilities Section
Uranium Recovery Licensing Branch
Division of Waste Management

cc: J. Thompson, Dawn
P. E. Lapat, Newmont Mining Corp.

Enclosure:
As stated

REQUEST FOR INFORMATION
DAWN MINING COMPANY

1. The geometry of the proposed pit is such that considerable stress will be placed on the liner near the toes of the slopes. Provide an evaluation to show that the 30 mil reinforced hypalon liner will have adequate tensile strength to resist the stresses or, alternatively, increase the thickness of the liner to be placed near the toes.

2. It is stated on page 4 of the report entitled "Geotechnical Design Data" that the eastern half of the proposed tailings disposal area is underlain by basalt, while the remainder of the disposal area is underlain by a "stiff" clay. In combination with the fact that the saturated weight of tailings placed in the pit will be greater than the weight of the material excavated in constructing the pit, the foundation conditions indicate a potential for differential settlement. Therefore, provide an analysis to show the amount of differential settlement which could be expected to occur, as well as an evaluation of the potential for disruption of the liner due to this settlement. Included in the analysis should be data on the compressibility of the clays underlying the site.

3. It is stated on page 13 of the "Geotechnical Design Data" report that the proposed disposal facility will be filled to its maximum pool level with water and then gradually filled with tailings. Clarify the operating procedure to be employed and perform a water balance study to show that the operating procedures will not result in a short-term liquid disposal problem.

4. Provide clarification on the function of the five foot high perimeter dikes to be constructed around the proposed disposal facility. Will they provide freeboard only, or will they serve as containment for the operating pool. If they will provide containment for the operating pool, seepage control, as well as erosion protection measures should be utilized. If this is the case, provide information on the seepage control and erosion protection methods to be employed.

5. Provide an analysis to show that sufficient flood storage capacity exists above the maximum operating pool level to store the direct precipitation and runoff resulting from the design floods specified in NRC Regulatory Guide 3.11, "Design, Construction, and Inspection of Embankment Systems for Uranium Mills."

6. Provide a detailed description of liner installation procedures as well as a description of the quality assurance program to be employed to ensure that the liner is installed properly.