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Regulatory Publications Branch
Division of Freedom of Information and Publication Services
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Draft NRC Technical Position Paper on Design of Erosion Protection Covers for Stabilization of Uranium Mill Tailings Sites, August, 1989.

Dear Sir:

Homestake Mining Company of California (Homestake) operates a NRC licensed uranium mill and tailing facility at their Grants, New Mexico operations and has continuously done so since 1958. Homestake personnel have reviewed the above referenced document and has provided general comments for inclusion with the comments of the American Mining Congress.

Homestake hereby takes this opportunity to express its support of those comments submitted by the American Mining Congress, A.K. GeoConsult and other representatives throughout the uranium industry.

In general, the draft document represents an important and positive step toward establishing logical and consistent erosion protection guidelines. It is a welcome advancement in the process of design, review and approval of uranium mill tailing site stabilization plans. For quite some period, a large area of uncertainty has existed within this process because the NRC's expectations for, and interpretations of, the design objectives of stabilization plans have not been clearly stated. The draft document still contains some ambiguity and subjectivity that weakens its effectiveness. These concerns are express in detail in the American Mining Congress and A.K. GeoConsult submissions.

Comments on NRC's Draft Staff Technical Position on Erosion Protection specific to the Homestake (Grants) Mill include:

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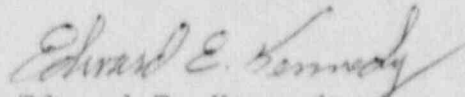
1. Homestake's stability plan was submitted to the NRC in December, 1986 and was subsequently revised in both 1987 and 1988 in response to NRC comments. However, Homestake has received no comments on its plan for more than a year. The draft Staff Technical Position should spell out not only the technical requirements, but should also include the NRC's procedures and time frames for review of the erosion protection designs (as well as other components of the stabilization plans). A procedure for tracking these reviews is needed by which operations, such as Homestake, can stay informed about the status of their plan and can anticipate with more confidence the schedule for approval, or anticipate when the NRC would issue comments.
2. Tests for rock quality should be reduced or eliminated in those cases where a licensee can show that the rock proposed for use in slope cover or riprap has been exposed to rainfall, runoff, freeze-thaw, etc. for periods of at least 200 to 1000 years and remains sound and competent. Such evaluations of rock durability based on actual exposure to weathering and erosional forces should be much more dependable than laboratory testing. If this type of evaluation were permitted, Homestake's sources of potential rock for use in the stabilization plan could be expanded. For example, local basaltic lava flows located close to Homestake's mill site could be used in addition to the limestone rock already identified for use in erosion protection.
3. Uniformity of rock cover is nearly impossible to measure in the field. The reclaimed Homestake tailing impoundment will have long, wide outslopes that will make measurement of uniformity of the rock cover very costly and time-consuming, at best. The minimum thickness of the rock cover (the thickness required to meet the design thickness) is all that should be required and can be more easily measured than the uniformity of rock thickness.
4. The diversion of San Mateo Creek and Lobo Canyon flood flows, where they come close to or cross the Homestake site, should be an allowable alternative to providing large riprap to protect the toe of the slope up to the peak elevation of the design flood. If recontouring and diversion can effectively pass the design flood and still keep the peak velocity at the impoundment toe below the allowable limit for the rock cover, this approach to erosion protection against lateral flows should be acceptable.
5. It is possible that during the development and processing of the rock material for use in erosion protection on outslopes and the toe of the slope, Homestake will develop a large volume of rock fines (e.g. crusher waste). This rock material could be used as a rock mulch to spread across top slopes, thereby making possible increased gradients on those slopes

to values that might exceed gradients permissible for vegetated ground. NRC's Staff Technical Position does not discuss the use of rock mulch in protecting flat slopes, but this should be considered and allowed as an alternative between the options of full vegetative cover and full rock cover.

Homestake would like to express its appreciation for the opportunity in commenting on what may become one of the most important documents the uranium operators have at their disposal.

Very truly yours,

HOMESTAKE MINING COMPANY



Edward E. Kennedy
Director of Environmental
Affairs

EEK/bgl

xc: F.R. Craft
J.E. Gilchrist (AMC)
A.K. Kuhn (A.K. GeoConsult)