0015

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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January 11, 1995

TO: File

From: Tom Munson

RE: Site Visit, NOV # 93-25-3-1 and NOV # 91-32-6-1, J.B. King Mine,Western States Minerals Corp File #2 and #5, Emery County, Utah

015/002

On January 10, 1995 a site visit was carried out to determine if the channels constructed and the site reconfiguration of the refuse pile and other problem areas was completed to the Division's satisfaction and met the requirements of the approved permit. All site work was completed as of December 22,1994, per letter from Mr. Buzz Gerick. This memo addresses this field visit and what was observed.

Channel Reconstruction

The operator constructed channels which will over time closely approximate the premining characteristics of the original stream channels both in location and characteristics. Detailed studies were carried out to determine the criteria by which the operator could most reasonably mimic the premining channel characteristics. The characteristics of the Adjacent channels as surveyed are found in the approved permit. This information was used as a template to determine the designs for the reconstructed channels. This information is found in the permit under UMC 817.44. Information from adjacent channels was taken on Bottom Width, Channel Depth, Channel Top Width, and Width of Meander.

This information was then used then to establish an acceptable range of design parameters for reconstruction combined with the incorporation of site specific conditions, determining the actual final constructed channels. As built plans are being submitted as soon as the on-site surveys can be drawn up. After much thought by the Division and the operator, the use of geomorphic and engineering principals, the final design mimicked as closely as possible natural channels in the area. A criteria is set up to judge the success or failure of these channels. Those expectations are defined in the updated plan and will be the tool by which success or failure is judged.

Plunge pools were built at the top of the reclaimed channel reaches so the flow of water would be directed into these channels and stay in these channels. The final channel dimensions are considered dynamic and are expected to change over time, losing the manmade look of construction and taking on natural channel look. The operator has met the Division's and the permit requirement for these channels at this point in time. NOV 91-32-6-1 should be terminated.

Site Reconfiguration to Achieve Erosional Stability

The operator did extensive reclamation work on the refuse pile to achieve erosional stability by adding 150 truck loads of rock and gravel to the surface in order to achieve this desired effect. The remainder of the site was assessed and other erosion found on the site will be examined to determine if erosional stability has been achieved based on a comparison with data collected from off site areas and summarized in the plan. The operator will establish permanent transects on site to monitor on going erosion to determine if it is behaving as expected and this information will be summarized to justify Bond release and erosional stability. NOV # 93-25-3-1 should be terminated.

H: JB