

VALLEY CAMP OF UTAH, INC.

Scofield Route
Helper, Utah 84526

20 July 1983

*Copy to Lynn
for response
copy to Shannon & Tom T.*
RECEIVED
JUL 22 1983

DIVISION OF
OIL, GAS & MINING

ACT/007/001, #3

Mr. Thomas N. Tetting
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Belina Mine Road
Modification Approval

Dear Mr. Tetting:

I am in receipt of your letter of July 12, 1983, regarding the subject road modification and the Division's stipulations for approval of same.

The following comments are offered in response to that letter.

Stipulation 6-17-83-1-RS

Previous correspondence, found in Volume IV of the Permit Application, states the rate of straw mulch application as 25-35 bales per acre. To determine the average pounds/acre at this rate of application, divide the average application of 30 bales/acre into 2,000; the bale weight would be 66.67 pounds. This wouldn't even be an average bale if 80 pounds were average. Assuming 80 pounds as average bale weight, 25 bales would be 2,000 lbs/acre; 30 bales would be 2,400 lbs/acre, and 35 bales would be 2,800 lbs/acre.

This application rate would appear to meet or exceed the minimum specified in your July 12, 1983 letter.

The reason we stated a 25-35 bales per acre application rate was because of the possible variance in bale weights.

In addition, correspondence from your office in 1980 states"In areas where annual precipitation is between 18 and 25 inches, mulches are not generally needed, except perhaps on some extended south or west facing slopes." Considering the average precipitation

for the mine plan area, any application of mulch at all would exceed that requirement. However, we will continue to use mulches of some form or another to increase the possibility of obtaining a successful re-vegetation.

Due to frequent precipitation events and early occurrences of frost and dew, artificial watering for re-vegetated areas isn't really required for the securing of mulch in any form. In the past, we have used mulch with a chemical tackifier, chopped machine blown straw and hand cast loose straw. The particular method is dependent upon the size, steepness, stability, exposure and general location of area in regards to velocity and direction of wind. Artificial watering of areas where a straw mulch has been applied, has also been made a part of general re-vegetation practices. These procedures would continue with future efforts.

Normal annual precipitation in the mine plan area is approximately 30 inches (Vaughn Hansen Associates, 1980), although a more conservative estimate of 22.5 inches (Volume II, Section 783.18) was used in the permit application.

Dryer than usual moisture conditions would be a year in which the precipitation total failed to meet the definition of a "Normal Precipitation Year." This particular definition can be found in the vegetation guidelines issued by the Division on April 12, 1982.

The anticipated rate and frequency of artificial irrigation is 0.5 inches every ten (10) days.

Stipulation 6-17-83-2-RS

The seed mix list submitted for use along the road was a temporary re-vegetation listing. Why is the Division stipulating a permanent re-vegetation seed mix for areas disturbed in conjunction with this project, when the re-vegetated areas previously done were seeded with a different mix?

If your revised, suggested seed mix is to be used, I am assuming you have approved the road as a permanent installation.

If this is the case, please refer to Volume III, Appendix B, for reseeding mixture, species and quantities.

I'm unsure if *Dactylis Glomerata* (orchard grass) is native to Utah or not, but it certainly is native to the mine plan area, since it can be found in riparian, aspen, sagebrush and some disturbed areas in our permit area. Maybe one reason for this occurrence is that, upon the recommendation of the Division, on several occasions, orchard grass has been included in previous re-vegetative efforts.

This type of policy change, for whatever reason, is not conducive to effective operational management, and continues to cause problems and delays in mine plan submittal and approval.

The percent of mixture as shown on the submitted list was by weight.

Thank you for pointing out the relationship of "Thick-spike Wheatgrass" and "Streambank Wheatgrass." I would suggest we use "Blue Bunch Wheatgrass" as a replacement for the "Streambank" and use the same percentage for the mix.

Orchard grass and Ladak Alfalfa should not be removed from the seed list, since both can be found in considerable quantities throughout this region. Both species have been found in four (4) of the eight (8) areas surveyed within the mine permit area.

The recommended 22.4 pounds of pure live seed per acre is superfluous if such a seed mix is to be applied to all areas. We have correspondence dating back to 1976 from the Division recommending 9-12 pounds per acre. As a result of these "suggestions" and consultation from vegetative experts over the past seven (7) years, we have accepted the 9-12 pounds per acre as a minimum. Subsequently, all previous reseeding was done under this guideline, and all mine permit re-vegetation planning was also oriented to this quantity. Notwithstanding the fact that most of our past re-vegetative efforts have exceeded the increased quantity, and probably will in the future, I believe a reconsideration of the 22.4 pound minimum is justified under the circumstances. I would appreciate maintenance of the previously recommended seed quantity of 9-12 pounds, since the new recommendation suggests a personal preference rather than actual necessity.

I hope this response will produce an unconditional approval, and will be happy to discuss any of the subject matter if you have questions.

Mr. Thomas N. Tetting
20 July 1983
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Sincerely,

A handwritten signature in cursive script, appearing to read "T. G. Whiteside".

T. G. Whiteside
Chief Engineer