March 24, 1982

MEMO TO COAL FILE:

RE: Plateau Mining Company
Starpoint Mines
ACT/007/006
Carbon County, Utah

On March 23, 1982, Mary Boucek, Steve Cox and myself met with Mel Coonrod of PMC to approve the location of test plots for determining which type of mulch or combination of mulches are economical to use and yet provide satisfactory stabilization of steep slopes (see attached experiment design).

In addition to using the various mulches, an area was located and verbal approval was given to use barley in conjunction with mulch as a nurse/cover crop on a trial basis (as per UMC 817.114). (A copy of this memo will be considered written confirmation of the verbal approval to use barley as described above.)

LYNN M. KUNZLER
RECLAMATION BIOLOGIST

cc: OSM, New Mexico
Mel Coonrod, PMC
Joe Helfrich, DOGM

LMK/tr

Statistics
See Price River Memo dated March 24, 1982.

ACT/007/006

Hand delivered to L. Kunzler during Technical Inspection

EXPERIMENTAL SEEDING - SPRING 1982

PURPOSE:

By using a variety of soil tackifiers in the form of jute mesh, nylon mesh, cellulose mesh, straw, chemical tackifiers and a combination there of. An attempt will be made to determine the most cost efficient method of stabilizing steep slopes prone to sluffing for a period adequate to reestablish vegetation.

HISTORY:

In the summer and fall of 1980 a hand seeding program was initiated employing up to five people using cyclone seeders to distribute approximately 20 lbs. of seed/acre over all areas of disturbance. This was followed by mechanically blowing straw over the area that could be reached by conventional access.

The winter of 1980-1981 was extremely dry with little snow cover and periods of high winds. The combination of the two made the straw application ineffectual and the mulching value was almost totally lost.

There was negligible effectiveness of the straw by spring and little revegetation as a result of the effort.

1981 - a massive program of utilizing approximately 24 lbs. of seed with 140 lbs. of tackifier was mechanically sprayed over the entire area. This application was followed with an overspray of conweb 2,000 mulch at a rate of 2,000 lbs. per acre. Operation was completed November 7, 1981.

By March of 1982, it was apparent that the bulk of the area was maintained in good to excellent condition and the only areas which appeared to have lost the mulch cover were those excessively steep cuts where there was evidence of slope failure or excessive sluffing.

TEST PROCEDURES:

On March 12, 1982 B.& R. Reclamation was contracted to implement the following test plots:

Plot #1 - Seed & Tack & Fertilizer - Jute Mesh - over-spray conweb 2,000 mulch

Plot #2 - Seed & Tack & Fertilizer - Jute mesh

Plot #3 - Seed & Tack & Fertilizer - 1" over-cover straw

Plot #4 - Seed & Tack & Fertilizer - 1" over-cover straw held jute mesh

Plot #5 - Seed & Tack & Fertilizer - Nylon mesh

Plot #6 - Seed & Tack & Fertilizer - Nylon mesh - over-spray 2,000 lb conweb

Plot #7 - Seed & Tack & Fertilizer - Covered with cellulose blanket

Plot #8 - Seed & Tack & Fertilizer - Cellulose Blanket - over-spray 2,000 lb/over conweb 2,000 mulch

Plot #9 - Seed & Tack & Fertilizer - 2,000#/acre - conweb 2,000 wood fiber mulch

Plot #10 - Seed & Tack & Fertilizer -

Terra Tack II was utilized at a rate of 140#/acre, combined with a commercial fertilizer 16-16-8 at a rate of 200 lb/acre in combination with 22# of seed applied in conjunction with approximately 400 gallons of water.

The seed mix is as listed and was used on all sites.

Grasses:

1. Fairway Crested Wheatgrass -	2#/acre
2. Smooth Brome (Southern Strains) -	2#/acre
3. Intermediate Wheatgrass -	2#/acre
4. Pubescent Wheatgrass -	2#/acre
5. Bluestem Wheatgrass -	2#/acre
6. Orchardgrass -	2#/acre
7. Russian Wildrye -	2#/acre
8. Sandbury bluegrass -	2#/acre

Forbs:

9 Alfalfa (Nomad) -	2#/acre
10 Ladak-equal parts -	2#/acre
11 yellow sweetclover -	2#/acre
Total	2216#/acre

MONITORING:

An extensive monitoring program will be inacted April-June, 1982; September October, 1982 and continue for a three year period.