



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

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November 6, 2002

TO: Internal File ok
THRU: Pamela Grubaugh, Permit Supervisor *PG*
Daron Haddock, Permit Supervisor *DH*
FROM: Jerriann Ernstsens, Reclamation Specialist/Biology *JE*
Susan M. White, Mining Program Coordinator *SMW*
Dana Dean, P.E., Reclamation Specialist/Hydrology *DD*
RE: Technical Field Visit, Topsoil Stockpiles & Disturbed Paths, Consolidation Coal Company, Emery Deep Mine, C/015/015

Other Attendees: Seth McCourt, Consolidation Coal Company

Date & Time: October 29, 2002, 12:00 pm – 1:30 pm.

PURPOSE:

The purpose of the field visit to the Emery Deep mine was to examine the topsoil stockpile seeding effort and examine the disturbed path in the undisturbed area. The purpose of the visit was to also introduce Jerriann Ernstsens, the new DOGM Biologist, to the mine operator and familiarize her with mine site.

OBSERVATIONS:

TOPSOIL STOCKPILE

The stockpile had been graded, mounded, and seeded. Mounds were about 18” from basin tops to bottoms. All mounds were evenly spaced and about 5 feet between mound tops. The topsoil was fairly compacted. The sides of the pile were graded to a 2h:1v and were not roughened.

TECHNICAL FIELD VISIT

The mine operator applied two different seed mixes. One seed mix included a cool season grass and was applied to the topsoil stockpile. The second seed mix included a warm season grass and was applied to the berm on the south side of the topsoil stockpile. Both seed mixes were applied and then covered with a wood fiber hydromulch. The majority of the seedlings were present at the basin bottoms, and very few seedlings were present on the mound sidewalls.

The mine operator purported that the area had experienced the driest summer (2002) recorded in the past 100 years. The stockpile did not receive supplemental water. The berm, seeded with the warm season grass, was irrigated daily with a water truck. The duration or amount of supplemental water was not discussed.

The sides of the pile had very little germination and growth. The sides of the pile were smooth with little chance for water retention. Of the area examined, ground covered by seedlings on the topsoil stockpile may have been up to 25% in basin bottoms and less than 5% on mound sidewalls and tops. Ground covered by seedlings on the berm was uneven starting from east to west, respectively. Uneven ground cover by seedlings was reported by the mine operator to be most likely caused by unequal seed application rate by the operator. There could have been other factors, however, contributing to the uneven cover.

Seedling plant types that were acknowledged included two grass and one shrub species. One of the grass species had a broad, coarse and purplish leaf, with a cluster of flattened tillers arising from a central lead. The other grass species had narrow, purplish leaves arising loosely from a central lead. The shrub genus was noted as *Atriplex* sp.

There was a presence of tumbleweeds as well as a cacti species, which most likely had been transported with the soil.

DISTURBED PATH IN THE UNDISTURBED AREA

Contractors installing fan systems and power lines caused the disturbed path located near the fence along the south-southwest corner of the undisturbed area. This area was the subject of a violation issued by the Division. Vehicle tires removed local vegetation and left tire impressions in the topsoil. The disturbance path was approximately the width of the road (~10') and 200' long. The path followed the west fence

- starting at the undisturbed southwest boundary,
- traveling south to the southwest corner,
- turning 90 degrees,
- continuing along the south side of the fence, and
- ending ~20' east of the power tower.

The berm near the fan was breached and two metal sheets lay on top of the breached berm.

SPOIL PILE

The berm around the spoil pile was breached in the northeast corner.

ROADS

A county road was being constructed to the mine. Mine personnel were being asked if Consol was going to pay for oiling of the road.

SEDIMENTATION POND

The sedimentation pond was reported to be complete, pending a survey and P.E. certification. However, it was also reported that the road that lies between the portal and the topsoil stockpile would be expected to hold some of the volume of the sedimentation pond. The drawings submitted in the application do not reflect the actual construction of the pond since harder rock was encountered than anticipated and blasting would have been required to complete the pond as planned. A review of the as-built drawings will be the best way of determining how the pond is expected to function and whether it is adequate to hold the required storm event and sediment level.

UNDISTURBED DRAINAGE DITCH

The undisturbed drainage ditch was not separated from the disturbed area by any type of barrier. Mine personnel agreed to place a silt fence as a barrier that day.

PHOTOS TAKEN:

<ftp://ogm.utah.gov/PUB/mines/coal/c01/015/images>

RECOMMENDATIONS/CONCLUSIONS:

It was determined that the disturbance, at this time, is marginal and most likely the areas affected will recover through natural deposition of seed from nearby plants and root regeneration. It is recommended that reseeding is not necessary.

A determination of the adequacy of the sedimentation pond should be made after a review of the as-built drawings, which the Division expects to receive shortly.

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