

May 2, 2003

TO: Internal File

THRU: Jim Smith, Team Lead

FROM: Jerriann Ernstsens, Environmental Specialist, Biology

RE: Midterm Review, PacifiCorp, Des Bee Dove Mine, C/015/017-MT03

SUMMARY:

The Permittee submitted Appendices XIV and XV to take precedence of previous submittals concerning reclamation. The Permittee is currently implementing Phase 2 reclamation (Appendix XV). The biology sections of Appendix XV primarily focus on reclamation. This memo assesses primarily the revegetation sections of biology in Appendix XV for the midterm review.

TECHNICAL MEMO

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

Analysis:

The Environmental Description section in Appendices XIV and XV, primarily references the approved MRP for details.

Findings

Information provided in the application is considered adequate to meet the minimum Environmental Description section of the regulations.

OPERATION PLAN

Analysis:

The Operation Plan section in Appendices XIV and XV, primarily references the approved MRP for details.

Findings:

Information provided in the application is considered adequate to meet the minimum Operation Plan section of the regulations.

RECLAMATION PLAN

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

The Permittee, in coordination with the Division, developed the final seed mix for Phase 1 and 2, which are listed on page 6 in the Appendices. The seed mix is the same for both Phases. During a field visit (April 30, 2003), the Division removed a seed tag from an empty bag located on the ground at the Des Bee Dove mine permit area. The seed tag differs greatly from the seed mix approved by the Division. Table 1 lists:

- Seed mixed approved by the Division.
- Seed mix from the tag found on the ground.
- Seed mix from a tag copied by Energy West from a bag in the PacifiCorp warehouse (May 1, 2003).

TABLE 1

SEED TAG FROM PACIFICORP	APPROVED SEED MIX	SEED TAG ON GROUND
Indian ricegrass	Indian ricegrass	Indian ricegrass
Thickspike wheatgrass	Thickspike wheatgrass	Sodar streambank wheatgrass This is a variety belonging to the same species as Thickspike wheatgrass.
Salina wildrye	Salina wildrye*	MISSING The Permittee had planned to use a substitute if seed was unavailable.
Bottlebrush squirreltail	Bottlebrush squirreltail	MISSING
Great basin wildrye	Great basin wildrye	Great basin wildrye
Western wheatgrass	Western wheatgrass	Western wheatgrass
Bluebunch wheatgrass secar The Permittee added this species to the mix.		
Pacific aster	Pacific aster	MISSING
Palmer penstemon	Palmer penstemon	MISSING
		Globemallow
		Cicer milkvetch
		Lewis flax
Fourwing saltbrush	Fourwing saltbrush	MISSING
Shadscale	Shadscale	MISSING
Winterfat	Winterfat	MISSING
Low rabbitbrush	Low rabbitbrush	MISSING

TECHNICAL MEMO

The mix from the bag found on the ground is missing one of the grass species, and all the forbs and shrubs. The Permittee must check with the contractor to insure correct application of seed mix and rate.

The mix from PacifiCorp's warehouse has all the approved species. This mix also includes the additional species, Secar bluebunch wheatgrass. The plan does not mention the use of this species.

The Permittee agrees to augment the sites with transplants. If the site is covered with 6" or more than 6" of topsoil, then transplants will equal 750 or 200 per acre, respectively. Currently, the Permittee is not planning to plant containerized plants this year because of the low winter precipitation rate of 2003. The Permittee is hoping for a higher precipitation rate for the 2004-growing season and to plant containerized plants in the spring of 2004 (personal communications with Dennis Oakly, 5-1-03). The Permittee must understand that the period of extended responsibility for successful vegetation will begin after the last year of augmented revegetation-related work (refer to R645-301-357).

The Division visited the Des Bee Dove reclamation site on February 21, 2003. The field report reads:

As observed this day, the permittee had seeded and hydromulched the reclaimed area from the switchback on the upper mines access road to the area formerly occupied by the portals associated with the Deseret Mine portals. This included the slope downhill from the road which had previously been occupied by a mine car dump point associated with a tippel which operated prior to the one which was in operation when the Mines were shut down..

The mine operator stated that the hydromulch was applied at 1 ton per acre. The amount of cover seems to visually agree with the application rate mentioned. The cover was greater on one side of the gouges than the other. The mine operator described this uneven application as "shadowing". Because of the location of where the hydromulch truck could operate, there most likely was no way to avoid shadowing for this northeastern site. The degree of shadowing may be seen on the Division's image database (02212003).

Seed application method used is unknown at this time. The mine operator was contacted on March 4, 2003 to explain the seeding method used. Most of the seed seemed to be under the mulch, although there were areas where the seed floated on top of the mulch. The seed on top was primarily lighter weight seed with seed tufts.

In the first area gouged and mulched (looking uphill on right side, far-right of upper section) the noxious weed-free hay was not well incorporated into the topsoil. The mine operator showed the Division that this problem had been addressed for subsequent areas gouged and mulched.

The Permittee confirmed that seed was applied by hand, using a hurricane spreader, followed by hydromulch for the first three areas seeded during Phase 2 reclamation at Des Bee Dove (email from Chuck Semborski; 3/04/03).

Findings:

The Permittee is currently implementing revegetation techniques that mostly agree with the approved MRP.

RECOMMENDATIONS:

The Division reminds the Permittee to seek approval for changes in seed mixes. The Permittee must contact the Division at least two weeks prior to planting containerized plants at the Des Bee Dove site.