

Simmons - DNR, Leigh <leigh.simmons@state.co.us>

Chambers Pit (M-1980-136) Technical Revision 05 Extension Request

Ben Langenfeld <benl@lewicki.biz> To: "Simmons - DNR, Leigh" <leigh.simmons@state.co.us> Cc: "Bartuska, Tyra L (United Companies)" <tyra.bartuska@unitedco.com> Thu, Jul 27, 2023 at 12:31 PM

Leigh

Please see the attached adequacy response for the Chambers Pit TR05.

Ben Langenfeld, P.E.

Lewicki & Associates

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Chambers Pit (Fairgrounds) TR 05 AdeqResponse 230727.pdf 249K



July 27, 2023

Leigh Simmons Colorado Division of Reclamation, Mining, and Safety 1313 Sherman St, Rm 215 Denver, CO 80203

RE: Chambers Pit (M-1980-136) Technical Revision Mining and Reclamation Plan Updates

Leigh Simmons

Please see the response items for the TR-05 adequacy review of the Chambers Pit from your office.

2. Exhibit E has been updated to clarify the reclamation plan. The proposed text of Exhibit E states that the total disturbed area to be reclaimed is 78.3 acres. This is inconsistent with the most recent Annual Report for the site, which states that a total of 90 acres is currently affected (mining + incomplete and or unreleased reclamation).

Please clarify the total number of affected acres.

The total Rule 1.1(3) affected area is 78.3 acres.

3. The proposed text of Exhibit E states that backfilling and grading is complete at the site. Again, this seems to be inconsistent with the most recent Annual Report, which states that 35 acres have been backfilled and graded.

Please clarify the status of backfilling and grading at the site.

Backfilling and grading is completed at the site. Please note that the annual report was filed in November 2022, whereas the technical revision was filed seven months later. Backfilling and grading required since the annual report has been entirely around the processing area in the middle of the site and did not take long to complete.

- 5. A seed mix is proposed in Table 5.1. The proposed seed mix comprises 4 grass species:
- Luna Pubescent Wheatgrass
- Barton Western Wheatgrass
- Vinall Russian Wildrye
- Fairway Wheatgrass (presumably this is a crested wheatgrass)

The stated goal of reseeding is for erosion control to stabilize the area while the landowner, Eagle County, finalizes plans for the site following release. In addition to permit commitments, the vegetation will also need satisfy the requirements of Rule 3.1.10(1) which calls for the establishment of "...a diverse, effective, and long-lasting vegetative cover that is capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer..."



Lewicki & Associates



Although the diversity standard in the rule is not explicitly defined, three wheatgrasses and a rye grass would not satisfy the Division's typical understanding of "diverse", which would normally include several forbs at least.

The proposed species should be well suited to the environment and will likely establish cover fairly quickly under favorable conditions. The proposed seeding rate is typically around half the recommended rate for a monoculture of each species, which is reasonable.

'Vinall' Russian wildrye is no longer recommended and has been replaced by 'Mankota'. (Reference: https://www.nrcs.usda.gov/plantmaterials/idpmspg5773.pdf)

Please review the proposed seed mix. Please update Table 5.1 to replace Vinall Russian Wildrye, and to clarify the total pounds of live seed per acre.

Please see the updated Table in Exhibit E, section 5.1.

6. Landowner approval will expedite final bond release.

Has Eagle County been consulted on the proposed seed mix?

The proposed seed mix is based on the seed mix approved by Eagle County in the original land use permit application. CDRMS requested changes (forb inclusion and change of wildrye species) have been added to that original seed mix.

The goal of reseeding at the Chambers Pit is to establish erosion resistant slopes for long enough for Eagle County to implement its development plans for the property. Specific cover and density standards are not necessary to accomplish this goal and are not required by Rule 3.1.10.

Please contact my office with any further questions or comments on this application.

Sincerely,

-JAM

Ben Langenfeld benl@lewicki.biz (720) 842-5321, ex. 1



4. Reclamation Timetable and Sequence

Mining has completed onsite. Reclamation will be completed in the next two years in accordance with Eagle County requirements.

5. Revegetation Plans

Disturbed areas outside of the internal roads will be seeded for revegetation following grading, topsoiling, and discing of the soil. The seed mix is shown below. Since the post mine land use is Recreation, the goal of seeding is for erosion control while Eagle County develops final plans to use their property following release.

5.1. Grass Seed Mix

Species	Pounds of pure live seed per acre (drilled)
Luna Pubescant Wheatgrass	4.5
Barton Western Wheatgrass	4.0
Mankota Russian Wildrye	2.5
Fairway Wheatgrass	1.5
Bottlebrush	0.5
Rabbitbrush	0.5
Four-winged Saltbush	0.5
Total	13.5

Seed may be applied via broadcast (2x the drilled rate) or hydroseed.

Post Reclamation Site Drainage

All ground drains internally at the Chambers Pit. Refer to map F-1 for the post reclamation drainage of the site.

7. Revegetation Success Criteria

Revegetation will be deemed adequate when erosion is controlled, the vegetation cover matches neighboring areas, and when it is considered satisfactory according to Division standards. This will be monitored in the two years following the completion of reclamation.

8. Monitoring Reclamation Success

Measures will be employed for the control of any noxious weed species. The objective of this weed management plan is to control undesirable plants on the Chambers Pit property. Plants identified through the Colorado Noxious Weed Act (C.R.S 35-5.5) and the Eagle County Noxious Weed List as undesirable and designated for management within the county will be removed. Any weeds identified as List A species will be eradicated. Other lower listed plants identified as noxious weeds will be managed by control measures. A Weed Control Plan will be utilized as follows:

