



July 16, 2024

Mr. Clayton Wein
Environmental Protection Specialist
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

RE: New Horizon Mine (Permit No. C-1981-008)
Minor Revision No. 130 (MR-130)
Topsoil Movement

Dear Mr. Wein:

Tri-State Generation and Transmission Association Inc. (Tri-State), is the parent company to Elk Ridge Mining and Reclamation, LCC (ERMR), New Horizon Mine. Therefore, Tri-State on behalf of ERMR is submitting minor revision 130 (MR-130) to Permit No. C-1981-008.

MR-130 proposes revisions to Section 2.05.4(2)(d) Topsoil Handling, Stockpiling, and Redistribution to include moving excess topsoil south of the facilities area offsite to support a project within the local Nucla community where soil is needed for a project.

If you have any questions about the enclosed minor revision, please contact Tony Tennyson at (970) 824-1232 or tony.tennyson@tristategt.org.

Sincerely,

DocuSigned by:

Chris Gilbreath

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Chris Gilbreath
Senior Manager,
Remediation and Reclamation

CG:TT

Enclosures

cc: Tony Tennyson (via email)
File: G474-11.3(21)b-5

Section 2.05.4(2)(d)
Topsoil Handling, Stockpiling and Redistribution

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All areas have been reclaimed north of BB Road and West of 2700 Road. One area was reclaimed to Prime Farmland (also refer to Section 2.06.6) and the other areas were reclaimed to dryland pasture. All areas have approximately 24 inches of Bench 1 placed prior to topsoil replacement. Please see Map 2.05.4-4, which delineates currently reclaimed areas, topsoil stockpiles remaining to reclaim sediment control structures and the prime farmland area on the ERMR Property.

Topsoil piles D, C, and H south of the facilities area will remain post mine for use at the discretion of the ERMR or the surface landowner. This remaining topsoil will be used for differential settling mitigation on irrigate pasture reclamation areas within the permit boundary, for use on ERMR owned properties outside of the mine permit boundary or used to support projects in the Nucla area to assist the local community.

Please see Map 2.05.4-4 for locations of topsoil piles discussed in this section.

10. Topsoil Preparation Procedures Prior to Seeding

This discussion has been divided into each of the three main post-mine land uses: Dryland Pasture (DP), Irrigated Pasture (IP), and Irrigated Cropland (IC). Irrigated Cropland covers both prime and non-prime farmland areas. In general, topsoil will not be placed while saturated, and will be replaced along the contour, whenever feasible, to minimize potential erosion and topsoil/spoil interface slippage problems. This practice will be discontinued on steep slopes where the safety of the equipment operator is in jeopardy.

Irrigated Cropland (Prime Farmland) Topsoil Preparation Procedures

Topsoil replacement operations may be carried out during most of the year, the exception being those periods when wet conditions would preclude handling of the topsoil materials.

- Deep ripping of topsoil - Upon successful completion of placing topsoil on the ripped Bench 1 the topsoil will be ripped to a depth of at least 2 inches greater than the depth of topsoil. This will alleviate compaction of the topsoil and assist in the removal of any boundaries between the ripped Bench 1 and topsoil.
- Land leveling - A blade pulled behind a farm tractor is used to level the topsoil surface and allow a smoother surface for seeding.
- Rock picking – Rock picking is done by a mechanical device that is pulled behind a tractor that windrows rocks and then another device that picks up large rocks over approximately 2.5 inches in diameter. Rocks up to approximately 24" diameter can be picked up by the device. Sandstone lenses that are identified in any topsoil or Bench 1 will be buried in lower Bench 1 overburden, at least eight feet below the topsoil level.

- Fertility testing - Three soil samples will be obtained in the field to be tested. The field is defined as that area that has recently been topsoiled. Samples will be taken and analyzed by a lab using the standard soil test for pH, salts, organic matter, nitrogen, potassium, and phosphorous. The lab will be informed that the desired crop is irrigated alfalfa and that the tonnage rate is 5.5 tons per acre. The reference area will be sampled separately.
- Disking - Prior to final seedbed preparation, soil conditioning and weed control tillage will be carried out through disking or other standard agricultural practice. Disking will be used to condition soil, break up clods, and control weeds prior to seeding. If annual weeds are a problem, several tillage operations may be required to get adequate control.
- Final Seedbed Preparation - (For irrigated areas) Cultipacking prior to seeding will be conducted if land leveling did not provide a smooth soil surface for seeding. The best period for tillage in these areas may be in the early spring prior to the irrigation season. For flood irrigated areas - A standard marker will create furrows of approximately 4" to 6" depth on 30" centers, which is standard for the gated pipe used for the flood irrigation.
- Fertilizer Application - Based on the results of fertility testing, fertilizer of the designated type will be applied at the rate specified from the lab testing. Fertilizer applications may be delivered through the irrigation system, by tractor with a broadcast spreader, or alternate method. The fertilizer will be applied in the same year that the fertility testing is done. Ongoing fertility testing after initial seeding is described in Section 2.05.4(2)(e) Revegetation.

Irrigated Pastureland Topsoil Preparation Procedures

Topsoil replacement operations may be carried out during most of the year, the exception being those periods when wet conditions would preclude handling of the topsoil materials.

- Deep ripping of the subsurface - Upon successful completion of placing topsoil on the ripped Bench 1 the topsoil will be ripped to a depth of at least 2 inches greater than the depth of topsoil. This will alleviate compaction of the topsoil and assist in the removal of any boundaries between the ripped Bench 1 and topsoil.
- Deep ripping of topsoil - Upon successful completion of placing topsoil it will be ripped 2 inches or greater than the depth of topsoil. This will alleviate compaction of the topsoil and assist in the removal of any boundaries between the ripped subsoil and topsoil.
- Land leveling - A blade may be pulled behind a farm tractor to level the topsoil surface

and allow a smoother surface for seeding.

- Rock picking - Rock picking is done by a mechanical device that are pulled behind a tractor that windrows rocks and then another device that picks up large rocks over approximately 2.5 inches in diameter. Rocks up to approximately 24" diameter can be picked up by the device. Sandstone lenses that are identified in any topsoil or Bench 1 will be buried in lower Bench 1 overburden, at least eight feet below the topsoil level.
- Fertility testing - Three soil samples will be obtained in the field to be tested. The field is defined as that area that has recently been topsoiled. Samples will be taken and analyzed by a lab using the standard soil test for pH, salts, organic matter, nitrogen, potassium, and phosphorous. The lab will be informed that the vegetation is irrigated pastureland. The reference area will be sampled separately.
- Disking - Prior to final seedbed preparation, soil conditioning and weed control tillage will be carried out through disking or other standard agricultural practice. Disking will be used to condition soil, break up clods, and control weeds prior to seeding. If annual weeds are a problem, several tillage operations may be required to get adequate control.
- Final Seedbed Preparation - (For irrigated areas) Cultipacking prior to seeding will be conducted if land leveling did not provide a smooth soil surface for seeding. The best period for tillage in these areas may be in the early spring prior to the irrigation season. For flood irrigated areas - A standard marker will create furrows of approximately 4" to 6" depth on 30" centers, which is standard for the gated pipe used for the flood irrigation.
- Initial Fertilizer Application - Based on the results of the fertility testing, fertilizer of the designated type will be applied at the rate specified from the lab testing. Fertilizer applications may be delivered through the irrigation system, by tractor with a broadcast spreader, or alternate method. The fertilizer will be applied in the same year that the initial fertility testing is done. Ongoing fertility testing after initial seeding is described in Section 2.05.4(2)(e) Revegetation.

Dryland Pasture Seedbed Topsoil Preparation Procedures

For dryland pasture reclamation areas the following procedures will be observed during topsoil replacement.

- Ripping - Upon successful completion of placing topsoil on the ripped Bench 1 the topsoil will be ripped to a depth of at least 2 inches greater than the depth of topsoil. This will alleviate compaction of the topsoil and assist in the removal of any boundaries between

the ripped Bench 1 and topsoil.

- Land leveling – New Horizon uses a blade pulled behind a farm tractor to level the topsoil surface and allow a smoother surface for seeding.
- Rock picking – For dryland pasture areas it will be at the operators discretion on whether rock picking will occur.
- Disking - Prior to final seedbed preparation, soil conditioning and weed control tillage will be carried out through disking or other standard agricultural practice. Disking will be used to condition soil, break up clods, and control weeds prior to seeding. If annual weeds are a problem, several tillage operations may be required to get adequate control.
- Final Seedbed Preparation - Cultipacking prior to seeding will be conducted if land leveling did not provide a smooth soil surface for seeding. The best period for tillage in these areas will be immediately prior to seeding.

For areas greater than 15% slope, the following procedures will be followed:

- Scarification - The single lift topsoil will be scarified (ripped) to its placement depth using a motor grader with rippers which will operate perpendicular to the slope, creating rough surfaces to trap moisture and prevent soil erosion along this slope. An example of an area where this would be employed is the north edge of the Benson West, the ERMR-Lloyd and the ERMR-Johnson property, where there is a significant steeper slope in these areas.

11. Topsoil Sampling Plan

Prior to topsoil being seeded it will be sampled to ensure it has correct properties to ensure appropriate vegetative growth will occur. Table 2.05.4(2)(d)-5 below provides the topsoil sampling criteria that will be utilized.