



June 1, 2022

Mrs. Janet Binns
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)
Permit Revision No. 09 (PR-09)
Post Mine Land Use Change**

Dear Mrs. Binns:

Tri-State Generation and Transmission Association Inc. (Tri-State), is the parent company to Elk Ridge Mining and Reclamation, LCC (ERMR), which owns and operates the New Horizon Mine. The New Horizon Mine operates under the Division of Reclamation, Mining and Safety (DRMS) Permit No. C-1981-008. Therefore, Tri-State on behalf of ERMR is submitting PR-09 to Permit No. C-1981-008.

Under PR-09, Tri-State is proposing to relocate the prime farmland reclamation area, at and adjacent to Pond 013, up to the west side of the currently reclaimed irrigated pastures areas on ERMR owned properties. This additional submittal to PR-09, will propose the current area at and adjacent to Pond 013 to be an Industrial area post mine instead of dryland pasture. This is necessary to support a long-term water treatment plant in that location.

Also included with the permit revision is a revised public notice, and a change of index sheet to ease incorporation of these materials into the permit. If you have any further questions regarding this permit revision, please contact Tony Tennyson at (970) 326-3560 or tennyson@tristategt.org.

Sincerely,

DocuSigned by:

A handwritten signature in black ink that reads "Chris Gilbreath".

D250C711D0BF450...

Chris Gilbreath
Senior Manager,
Remediation and Reclamation

CG:TT:der

Enclosures

cc: Tony Tennyson (via email)
File: G474-11.3(21)b-3

CHANGE SHEET FOR PERMIT REVISIONS, TECHNICAL REVISION, AND MINOR REVISIONS

Mine Company Name: New Horizon Mine

Date: **May 31, 2022**

Permit Number: **C-1981-008**

Revision Description: **PR-09 Prime
Farmland**

Volume Number	Page, Map or other Permit Entry to be	Page, Map or other Permit Entry to be	Description of Change
	REMOVED	ADDED	
1			No change
2			No change
3			No change
4			No change
5			No change
6			No change
7			No change
8	Map 2.05.4-5	Map 2.05.4-5	Map 2.05.4-5 has been updated.
9	Section 2.05.4(2)(e) page 1 (1 page)	Section 2.05.4(2)(e) page 1 (1 page)	Section 2.05.4(2)(e) Table of Contents has been updated.
9	Section 2.05.4(2)(e) pages 5 through 8 (4 pages)	Section 2.05.4(2)(e) pages 5 through 8 (4 pages)	Section 2.05.4(2)(e) has been updated.
10			

Section 2.05.4(2)(e)

Revegetation

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2.8 Commercial Facilities (F)

These areas include dwellings, outbuildings, sheds, storage areas, barns, driveways, parking areas, and other miscellaneous related disturbance. All of these areas are related to the post-mining land use of agriculture. A letter from New Horizon stating that it desires those outbuildings, parking areas, storage areas, and other agricultural related areas to be part of the operation is provided in Attachment 2.05.3(3)-17.

2.9 Adjacent Support Facilities (ASF)

In accordance with Rule 1.04(71), areas will be established that will be used as adjacent support facilities which will be adjacent to and are an integral part of the post mine land use.

To accommodate ongoing postmining land use maintenance on the Morgan property, Bench 1 material will be hauled to the previously approved ASF on their property and utilized as needed. ASF areas may be seeded to some extent at the request of the landowner and New Horizon will seed these areas in accordance with the surface landowner's desires. See Attachment 2.05.4(2)(e)-12 for landowner letter requesting the ASF areas to be left as a permanent feature on their respective property.

2.10 Industrial (ID)

In accordance with Rule 1.04(71)(f), a post mine land use of industrial will occur to support ongoing water treatment facility.

3.0 Postmining Land Use

The postmining land use will be similar to the pre-mining land use of agriculture. Three types of postmining land use will include Irrigated Pasture, Dryland Pasture, and Prime Farmland (Irrigated Cropland). Irrigated Pasture and Dryland Pasture will be the highest percentage of all postmining vegetation types. Areas north of BB Road and west of 2700 Road were originally classified to be reclaimed as Irrigated Pasture, but this was not appropriate since the water was not available to provide proper irrigation on the total area of these lands. New Horizon will reclaim the majority of its own property west of 2700 Road as dryland pasture. Attachment 2.05.4(2)(e)-8 contains correspondence with landowners agreeing to the post mine land use on their respective property.

Benson West Property (owned by ERMR)

This parcel is north of BB Road and immediately west of 2700 Road.

This tract was originally classified by New Horizon as Irrigated Pasture and Rangeland. This tract was flood irrigated in the past, but it is now irrigated with side rolls. New Horizon

developed a flood irrigation design for the Benson West property. This design can be seen in Attachment 2.05.4(2)(e)-9. It allows for the irrigation of 12.40 acres of Irrigated Pasture with 12 shares of water. The remaining disturbed acres of the Benson west property will be reclaimed as Dryland Pasture. Site grading will allow for future irrigation across a major portion of the property.

Please see Map 2.05.4-5 for the location of the Irrigated Pasture and the Dryland Pasture portions on this tract. Additional lands surrounding the irrigated pasture area can be irrigated in the future if the landowner decides to do so. A minimum of 52 acres can be irrigated since the slopes are very mild (approx. 2.5%). Since the planned irrigated pasture area is at the high point, all lower areas can be easily irrigated if a future landowner decides to make the water available for this area.

Lloyd Property (owned by ERMR)

This parcel is north of BB Road and immediately west of the aforementioned Benson West parcel. For clarity of identification, it will be referred to as the Lloyd parcel.

This tract was originally classified by New Horizon as Irrigated Pasture and Rangeland. The irrigated portions of this tract were flood irrigated in the past. Irrigation water was allowed to traverse over the land at will. There is not any evidence the land was ever developed into a tract suitable to be irrigated by a sprinkler system.

Eighty-four shares of water are available for the Lloyd property, and a side roll irrigation system (2 side rolls) are in place and provide irrigation water to 26 acres of Irrigated Pasture and 4 acres of Prime Farmland on the Lloyd Property. The remaining disturbance acres of reclamation on the Lloyd's property will be reclaimed as Dryland Pasture.

See Map 2.05.4-5 for the location of the irrigated pasture, irrigated cropland, prime farmland, and dryland pasture portions of this tract. Additional lands surrounding the irrigated pasture area can be irrigated in the future if the landowner desires to do so, since the slopes are very mild (approx. 4%), which represents the planned final topography (Map 2.05.4-5).

Johnson Property (owned by ERMR)

This parcel is immediately west of the Lloyd parcel.

This tract was originally classified by New Horizon as Irrigated Pasture, Irrigated Pasture Hayland, and Rangeland. Portions of these tracts were flood irrigated in the past. Irrigation water was allowed to traverse over the land at will. An area of 98A soil of 4.76 acres in size on this property was determined to be Prime Farmland by the NRCS. The construction of Pond 013 disturbed some of this soil (3.96 acres). The prime farmland soil from Pond 013

were excavated in a single lift and stored in a stockpile adjacent to Pond 013. Since irrigation infrastructure and water is not available on the Johnson Property the 4 acres of prime farmland reclamation will occur on the Lloyd property as shown on Map 2.05.4-9 and described above under the Lloyd Property section. The area that the prime farmland soils where originally located on the Johnson Property will be an industrial area post mine to support a water treatment facility.

Morgan Property

The Morgan property south of BB Road and west of 2700 Road of 107.96 acres that has been designated in the pre-mine discussion (Section 2.04.3) as Irrigated Cropland (IC). All of this tract will be restored to Irrigated Cropland (IC). As previously mentioned, a large portion of this IC area is also designated as Prime Farmland.

Prior to mining, the Morgan's irrigated their property via sideroll, gated pipe, and traveling big gun. Center pivot irrigation, siderolls, and big guns will be used to provide the post-mine irrigation for the reclaimed Morgan Property. All design calculations and layouts for this system are included in Attachment 2.05.4(2)(e)-7.

As of April, 2010, Morgan has leased 62 shares of water (or whatever is necessary) to New Horizon to irrigate all of their property within the permit area. The lease addendum letter concerning the additional water is included in Attachment 2.05.4(2)(e)-7. Therefore, the entire Morgan-owned area in the permit will be reclaimed as Irrigated Cropland (IC). The Morgan Property contains significant amounts of Prime Farmland. This is discussed in detail in permit Section 2.06.6.

ERMR Property – Facilities Area

This parcel of 18.8 acres is located in the southeastern corner of the permit area

This tract was originally classified as Irrigated Pasture in the pre-mine land use but no water shares were purchased with this tract and none are allocated for future use. Portions of the tract were "Flood Irrigated" in the past. This land will be reclaimed to Dryland Pasture.

This 18.8 acre area will be graded to a very mild slope which will be planned for future irrigation, if any post bond release landowner decides to irrigate the property. This slope is expected to be 2% to 4%.

4.0 Vegetation Sampling Procedures

Vegetation cover for all reclaimed units will be measured by a point intercept method that meets the provisions of Rule 4.15.11(1)(a)(i). The observational unit will be at intervals along

a transect at least 5 meters in length, where 100 data points will be collected. A point sampling device supported by a rigid frame will be used to ensure unbiased and near vertical point placement.

Herbaceous production will be measured by a quadrat sampling method that meets the provisions of Rule 4.15.11(1)(b)(i). The observational unit will be a rectangular or circular plot frame at least $\frac{1}{4}$ square meter and large enough to encompass individual plants of the larger species being sampled. Current year growth of herbaceous non-woody species will be clipped within each quadrat. The sampled plant material will be bagged and taken to the laboratory for oven-dried weighing.

Sampling points for cover and herbaceous production will be located by using a systemic grid with a random start to create up to 50 transects within each study area (reclaimed sites and the reference area). These coordinates will be entered into a (GPS) unit and by means of the navigation feature, the transect coordinates will be located in the field. The production quadrat will be placed 1 meter to the right of the origin to preclude trampling for the cover sampling.

Vegetation sampling for measuring reclamation success will be conducted to ensure a repeatable and unbiased estimate of each vegetation population parameter. Measurements made on the reference area will be done in the same manner and season as measurements made on reclaimed lands, to ensure valid comparisons as specified in Rule 4.15.11(1).