



January 17, 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 North Mine  
Permit No. C-2010-089  
2021 Annual Reclamation Report**

Dear Mrs. Binns,

Tri-State Generation and Transmission Association, Inc. (Tri-State), is the parent company to Elk Ridge Mining and Reclamation, LLC New Horizon North Mine. The New Horizon North Mine operates under the Colorado Division of Reclamation, Mining, and Safety Permit No. C-2010-089.

In accordance with Rule 2.04.13(1), by February 15, or other such date as agreed on, each permittee shall file an annual reclamation report covering the previous calendar years for all areas under bond. New Horizon North Mine by permit is required to submit the report annually by March 15. Therefore, enclosed please find the Annual Reclamation Report for the calendar year 2021 as required.

If you should have any additional questions or concerns, please feel free to contact Tony Tennyson at (970) 326-3560 at your convenience.

Sincerely,

DocuSigned by:

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

D250C711D0BF450...

Chris Gilbreath  
Senior Manager  
Remediation and Reclamation

CG:TT:dbb

Enclosure

Cc: Tony Tennyson (via email)  
C.F. 11.1 - G474-11.3(21)c-9

**Elk Ridge Mining & Reclamation, LLC**

**PERMIT C-2010-089**

**NEW HORIZON NORTH MINE**

**2021 ANNUAL RECLAMATION REPORT**

**JANUARY 1, 2021 to DECEMBER 31, 2021**

## **Table of Contents**

A. Rule Requirements.....	1
B. Permittee .....	1
C. Disturbed Areas .....	1
D. Backfill and Grading.....	1
E. Reclamation Activities.....	2
1. Spoil & Topsoil Quality .....	2
2. Topsoil.....	2
3. Seeding .....	2
4. Soil Fertility Testing and Fertilizer Application .....	2
F. Wildlife Monitoring and Mitigation .....	3
G. Interim Revegetation Report.....	3
H. Weed Management .....	3

## **List of Tables**

Table 1 – Stockpile Volumes at the End of Report Year.....	4
Table 2 – New Horizon North Reclamation Table .....	5

## **List of Figures**

Figure 1 – CDRMS Annual Reclamation Report Form.....	6
--	---

## **List of Attachments**

Attachment 1 – Soil Testing Results

## **List of Maps**

Map 1 – Annual Reclamation Report Map

## **A. Rule Requirements**

Rule 2.04.13(1)(a-f) states, by February 15, or such date agreed on, each permitted shall file an annual reclamation report covering the previous calendar year for all areas under bond. The report shall include, but are not limited to, text, discussion and maps which address:

- the name and address of the permittee and permit number
- location and number of acres disturbed during that year
- location and number of acres backfilled and graded during that year
- location and number of acres topsoiled during that year
- the species, location and number of acres of vegetation planted during that year, including any augmented seeding or cultural practices
- location, number of acres and date of planting for all previously revegetated areas

Per Section 2.04.13 of Permit No. C-2010-089 the New Horizon North Mine submits the annual reclamation report annually by March 15. Additional requirements for contents of this annual reclamation report can be found in Section 2.05.4(2)(d), Section 2.05.4(2)(e), and Section 2.05.6(2).

## **B. Permittee**

Elk Ridge Mining and Reclamation, LLC  
New Horizon North Mine  
Permit No. C-2010-089  
PO Box 628  
Nucla, CO 81424

## **C. Disturbed Areas**

During 2021, 0.0 acres of new disturbance occurred at the New Horizon North Mine.

At the end of 2021, the total disturbance was 157.1 acres. Of this, 42.9 acres are in long-term mining, reclamation, or facilities. All of the active mining areas have been backfilled, graded, and topsoiled. Therefore, there are no active mining areas exist at the New Horizon North Mine.

## **D. Backfill and Grading**

During 2021, 0.0 acres were backfilled and graded.

## **E. Reclamation Activities**

### **1. Spoil Quality**

The spoil sampling and analysis program for the New Horizon North Mine is described in Section 2.05.4(2)(d), Table 2.05.4(2)(d)-1 of the approved permit. All areas for spoil quality (Bench 1) have been sampled for the entire mine site. Please see previous annual reclamation reports for the results of the analyses.

### **2. Topsoil**

During 2021, 0.0 acres were topsoiled. Table 1 provides the overall stockpile volumes for the mine.

### **3. Seeding**

The New Horizon North Mine permanently seeded 0.0 acres in 2021. Please see Table 2 for specific details on each reclamation unit, and Map 1 for the reclamation areas seeded to date.

### **4. Soil Fertility Testing and Fertilizer Application**

The landowner conducted soil testing in 2021. The results of the test are presented in Attachment 1.

Fertilizer was applied to reclamation unit IP-1. Fertilizer and rates that were applied in 2021 are as follows:

IP-1	
<u>Fertilizer</u>	<u>Pounds/Acre Applied</u>
Monoammonium Phosphate	76

### **5. Irrigation**

The CC Ditch Company commenced water deliveries on April 17, 2021, and New Horizon North Mine began irrigation operations shortly thereafter. The CC Ditch Company discontinued water delivery for the year on October 9, 2021.

During June of 2021 water deliveries were stopped due to a failure on the High Line Canal which provides water to the New Horizon North Mine irrigation system through the 2nd Park Lateral. It took approximately a month to repair the High Line Canal failure, and once it was repaired water deliveries recommenced. The loss of water during June did not impact irrigated pastures reclamation areas at New Horizon North Mine.

## **6. Irrigated Pasture Yields**

In 2021, the first cutting from reclamation unit NHN-04 yielded 176.8 tons, the second cutting produced 186 tons, and the third cutting produced 144.8 tons.

## **F. Wildlife Monitoring and Mitigation**

No wildlife monitoring nor mitigation occurred in 2021.

## **G. Interim Revegetation Report**

Interim vegetation monitoring did not occur at the New Horizon North Mine in 2021. Future Interim Vegetation Reports will be included as an attachment.

## **H. Weed Management**

During 2021, various areas within the permit boundary were treated for noxious weeds by spot spraying and/or hand removal. The actual treatment sites were generally small and random and thus too small to accurately depict on a map.

Target species for noxious weeds included Knapweed(s), Thistle(s), White Top, Russian-olive, saltceder/tamarisk, burdock, mullein, halogeton, purple loosestrife, and Western whorled milkweed. Other target species are included in the Montrose County (2010) and San Miguel County (2002) Noxious Weed lists.

**Table 1 – Stockpile Volumes at the End of Report Year**

<u>Stockpile Type</u>	<u>Volume (Cubic Yards)</u>
Topsoil Pile 1 - Mixed	33,720
Topsoil Pile 2 - Mixed	32,290
Topsoil Pile 3 - Progresso	16,580

**Table 2 – New Horizon North Reclamation Table**

Area	Reclamation Period		Status				Notes:
	Year	Acreage	Revegetated Years	Bond Release			
				Phase 1	Phase 2	Phase 3	
NHN-01	2017	3.7	4	2017			3.7 acres planted to Dryland Pasture
NHN-02	2017	2.7	4	2017			2.7 Acres planted to Dryland Pasture
NHN-03	2018	20.6	3	2017			20.6 Acres planted to Dryland Pasture
NHN-04	2019	88.3	2	2017			88.3 Acres planted to Irrigated Pasture
NHN-05	2019	4.9	2	2017			7.3 Acres planted to Dryland Pasture
NHN-06	2020	0.6	1				0.6 Acres planted to Dryland Pasture
Total		120.8					



**Figure 1 - CDRMS Annual Reclamation Report Form****Colorado Division of Reclamation, Mining and Safety**

Annual Reclamation Report for Calendar Year – 2021

New Horizon North Mine	C-2010-089	Elk Ridge Mining & Reclamation, LLC.
Mine Name	Permit Number	Permittee
P.O Box 628 – 27646 W. 5 <sup>th</sup> Street Nucla, CO 81424		
Address		

This report, required by Rule 2.04.13, is due by February 15 of each year, or other date, as agreed upon by the Division. It should include text, discussion, and maps, at a minimum, in addition to any other reclamation monitoring data as required by the approved permit. The location of the acreage reported under each land status category and year of seeding (if applicable) should be clearly identified on a map included with the report.

Land Category	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Acreage in Active Mining Areas <sup>1</sup>	0	0	0	=	0

Land Category	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Acres Disturbed <sup>2</sup>	157.1	0	0	=	157.1
Acres Backfilled and Graded	83.0	0	0	=	83.0
Acres Topsoiled	120.8	0	0	=	120.8

Acreage in Long-term Facilities <sup>3</sup>	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Non-Permanent Facilities	42.9	0	0	=	42.9
Permanent Facilities (permitted)	0	0	0	=	0
Totals	42.9			=	42.9

Acres Seeded (permanent)	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
9 Years and Less	120.8	0	0	=	120.8
10 Years and Greater	0	0	0	=	0
Totals	120.8			=	120.8

Bond Release	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Phase I Released	0	120.2	0	=	120.2
Phase II Released	0	0	0	=	0

## New Horizon North Mine

---

Phase III Released	0	0	0	=	0
--------------------	---	---	---	---	---

<sup>1</sup>Includes pits, topsoil stripped areas in advance of pits, and spoil not backfilled and graded

<sup>2</sup>Surface Mine Acres Disturbed = B&G + Long-Term Facilities + Active Mining Areas; Underground Mine Acres Disturbed = B&G + Long-Term Facilities; Separately-permitted Loadouts = B&G + Long-Term Facilities

<sup>3</sup>Includes haul, access and light-use roads, temporary dams and impoundments; permanent dams and impoundments; diversion and collector ditches, water and air monitoring sites; topsoil stockpiles; overburden stockpiles; repair, storage and construction areas; office area, repair shops, and parking; coal stockpiles, loading, and processing areas; railroads; coal conveyors; refuse piles and coal mine waste impoundments; head-of-hollow fills; valley fills; ventilation shafts and entryways; and non-coal waste disposal area (garbage dumps and coal combustion by-products disposal areas).

**Attachment 1**  
**Soil Testing Report**

# New Horizon North Mine

Dustin Garvey  
Garvey and Company  
PO Box 646  
Nulca CO 81424



Colorado State University Extension

SOIL, WATER & PLANT TESTING LABORATORY  
FORT COLLINS, COLORADO 80523-1120  
Phone 970-491-5061 Fax 970-491-2930



NUMBER OF SAMPLES 3  
DATE RECEIVED 3/6/2021  
DATE REPORTED 5/26/2021  
COUNTY Montrose

## AGRICULTURAL TEST REPORT

IDENTIFICATION		ROUTINE SOIL TEST RESULTS																
Lab No.	Sample ID	Sample Depth	pH	EC Salts mmhos/cm	Excess Lime	Texture Estimate	SAR	Gyp meq/100g	Organic Matter %	Nitrate N ppm	Phosphorus P ppm	Potassium K ppm	Zinc Zn ppm	Iron Fe ppm	Manganese Mn ppm	Copper Cu ppm	Sulfur S ppm	
F476	pivot		7.2	1.2	medium	sandy clay loam			2.7	4.48	7.5	92.3	7.0	24.3	2.6	3.4	26.6	
F477	sage		7.9	0.4	high	sandy clay loam			3.0	23.81	12.1	279.3	5.9	11.3	4.6	2.1	24.9	
F478	pasture		8.0	0.3	high	sandy clay loam			3.4	1	4.3	114.6	12.7	61.7	3.6	5.5	54.3	
<b>FERTILIZER RECOMMENDATIONS:</b>																		
I. D.	FIELD INFORMATION								POUNDS OF ACTUAL NUTRIENT PER ACRE									
Lab No.	Sample ID	Acres	Irrigation	Proposed Crop	Yield Goal	Lime (T/A) to raise pH to:			N lbs/A	P <sub>2</sub> O <sub>5</sub> lbs/A	K <sub>2</sub> O lbs/A	Zn lbs/A	Fe lbs/A	Mn lbs/A	Cu lbs/A	Sulfur lbs/A	Gypsum T/A	
F476	pivot	90	sprinkler						0	0	0	0	0	0	0	0	0	N/A
F477	sage		sprinkler						0	0	0	0	0	0	0	0	0	N/A
F478	pasture		sprinkler						0	0	0	0	0	0	0	0	0	N/A
									0	0	0	0	0	0	0	0	0	N/A
									0	0	0	0	0	0	0	0	0	N/A
									0	0	0	0	0	0	0	0	0	N/A
<b>SPECIAL COMMENTS AND SUGGESTIONS:</b>																		
Fertilizer recommendations had been generated by the lab manager in previous years, based on his expertise. We are not able to provide them now because we do not have the necessary resources to do this, therefore, we are encouraging our clients to seek assistance from local extension services. As mentioned above, we are working to quickly find a way to fill that gap and foresee partnering with extension to strengthen our capacity and improve the resources we provide for you.																		

Web site: <http://www.soiltestinglab.colostate.edu>

APPROVED \_\_\_\_\_