## **RECLAMATION PLAN**

## A. Postmining land uses

The post mining land use will be the similar to the pre-mining use which included non-irrigated pasture land. Irrigation was not part of the pre-mining use nor will be included in the post-mining land use.

# **B.** Contouring plan for affected lands

Included in this section is Reclamation Plan Map RP1 which shows the proposed approximate post-mining contours and how the contours tie into the existing contours outside of the affected area boundaries. The contours will not change significantly as the land will need to be as level post-mining as it was pre-mining for returning the land to pasture. The only real change will be to elevation.

Mullinax practices always maintaining a minimum of <sup>1</sup>/<sub>2</sub> mile perimeter from the permit boundary to the adjacent lands while mining. This will ensure that affected lands post mining contours will blend with the adjacent topography.

By maintaining the original contours and limiting the grade of the final slopes as much as possible, the lands should be stable and without erosional features. Mullinax will establish post mining slopes and configurations to be as stable as possible. No slope steeper than 3:1 will be allowed. The post mining slopes will tie to undisturbed native lands with as little change in slope gradient as possible.

## C. Surface prep

As the pit development allows Mullinax Inc will initiate a direct backhaul and replacement of any excess or reject material. This will be accomplished using loaders, a blade, a dozer, a paddle wheel scraper and haul trucks. Material will be place and post mining contours will be established.

## **D.** Topsoil and/or subsoil replacement

Mullinax Inc will redistribute salvaged topsoil when properly graded areas are available. Placing it in an even thickness throughout all disturbed areas to match the pre-mining depth of roughly 6 inches to achieve a uniform and stable thickness to help meet the revegetation goals of the post-mining land use. This will be accomplished with a direct haul of topsoil to the graded areas as soon as the overall pit development allows.

The actual date for permanent reclamation will depend upon regional market sales and the relative rate of mining but should follow the schedule in the "Projected Timetable for Completion of the Reclamation Plan."

Following the distribution of topsoil the area to be planted will be ripped and scarified to ensure that surface compaction does not hinder re-vegetation.

There are no stream channels or banks in the permit area. Mullinax will rely on the Storm Water Pollution Prevention Plan (SWPPP) that will be obtained to control erosion and prevent pollution of any waterway.

The SWPPP includes monthly visual inspections and yearly written inspections of the site and machinery to avoid pollutants making their way into adjacent waterways.

We do not foresee any need for soil amendments.

# **E. Revegetation practices**

Standard farm equipment will be used in the revegetation efforts. A disc or harrow may be used to prepare the seedbed while a drill will be used to seed the large areas. If small areas require seeding, hand broadcasting may be used rather than a drill.

Planting will be done during suitable seeding periods in the spring and fall. Native range is dependent upon rain for moisture. Therefore, Mullinax typically performs permanent seeding activities during April and May in the spring and during mid-September through October in the fall.

Mullinax Inc's goal is to establish a vegetative community that is equivalent to, or better than, the pre-mining vegetative community. We will use what is referred to as Native Blend by Sheridan Seed Company when we seed the reclaimed area. The species in this blend are as follows:

- 1) 25% western wheatgrass
- 2) 25% thickspike
- 3) 20% green needle
- 4) 20% slender wheatgrass
- 5) 10% spreader alfalfa

This seed mixture will be used on all topsoil piles, berms, stockpiles, and reclaimed areas. Mullinax will apply the seed at a rate of approximately 20 lbs per acre. Any alterations from this plan will be discussed with Land Quality officials prior to implementation and will also be addressed in the annual mine report.

Following seeding, measures will be taken to limit livestock grazing on newly vegetated ground. Options such as fencing or working with the landowner to limit utilize optional grazing land in the area will be discussed prior to seeding. The landowner will be notified of the restriction to allow grazing on the land for at least two years following the reclamation per LQD guidelines.

Mullinax, Inc. will evaluate the success of reclamation through vegetation establishment in accordance with LQD Guideline 2 by utilizing a combination of qualitative and quantitative methods. These methods include:

- 1. **Visual Inspections:** Regular site visits will be conducted to assess the overall health and density of the vegetation, comparing it to pre-reclamation conditions and the target vegetation standards set by LQD Guideline 2.
- 2. **Vegetation Sampling:** If needed, we will conduct a vegetation study to measure species composition, cover, and density. This will allow us to quantify the success of plant establishment and compare the results with the established success criteria.
- 3. **Success Criteria Comparison:** The reclamation success will be compared to the performance standards outlined in the LQD guidelines, including species diversity, cover percentage, and the presence of invasive species.
- 4. **Long-term Monitoring:** Post-reclamation monitoring will be carried out to track the success over time and to ensure that vegetation continues to establish and meet the required criteria.

Any necessary corrective actions will be taken if the vegetation establishment does not meet the success standards.

This multi-faceted approach will ensure that reclamation is evaluated effectively and meets the expectations outlined in LQD Guideline 2.

Mullinax does not intend to use any mulch on the reclamation process unless it is recommended to encourage growth, protect the young seedlings, and retain moisture. No woody species will be planted as the permit area is to be reclaimed back to the original grazing land that is void of woody species.

## F. Final hydrologic restoration

No surface or ground water will be encountered at this location. Therefore, the potential for erosion, siltation, and pollution will exist only during natural moisture events such as a rainstorm. The characteristics of our mining operation are such that a mine pit is created which acts as a water retention basin, holding storm water and not allowing it to flow out of the pit which causes erosion and sediment dispersal. Areas of the pit that may not hold storm water run-off will have silt fence or berms put in place along the edge of the pit to contain silt and minimize erosion. The roadways that are constructed across drainage crosses will remain per the landowner's request.

#### **G. Special reclamation standards**

At the completion of the pit, the scale house and truck scale will be removed and the area will be reclaimed. The roads that have been built will remain for the landowner to use.

#### Forbes Pit Reclamation SchedulereaMining Period Area 2028-2029 Area 1 2028-2029 Area 2 Area 3 2029-2030 Area 4 2030-2031 Area 5 2031-2032 Area 6 2032-2033 Phase 2 -Phase 3

#### **Reclamation Performance Bond Calculations**

Forbes

12A Version 12/6/23

Backfill Section II.A., Guide Overburden Respr	line 12A <b>ead</b>	627 Scraper		
	Backfill			
Pit No.	Yardage	Haul Distance	Cost/BCY	Backfill Cost
1	25,000	500	\$0.551	\$13,775.00
				\$0.00
			Total	\$13,775.00
Highwall Reductio	<b>n</b> line 12A			
Do Cal Dozer	Highwall	Highwall	Cost/Linear Et	Highwall
Pit No.	Height	Length	Highwall	Reduction Cost
1	10	500	\$0.494	\$247
				\$0
			Total	\$247.00

#### Ripping of a Pit Floor With a Dozer

Section II.E., Guideline 12A

	Total	\$2,468.34
		\$0.00
15	\$164.556	\$2,468.34
Ripping	(\$/Ac)	<b>Ripping Cost</b>
Acres Needing	<b>Ripping Cost</b>	
D6 Cat Dozer		

#### Scarification of Compacted Surfaces

Section II.G., Guideline 12A Cat 140 Grader (The operator may also use Section II.E., Guideline 12A: Dozer ripping costs)

	Acres Needing	Scarification	
Pit No.	Scarification	Cost/Acre	Scarification Cost
1	15	\$48.26	\$723.92
			\$0.00
		Total	\$723.92

#### **Culvert Removal**

Section II.H., Guideline 12A

This is not typical for most small mining operations.

		Road
Culvert Length		Reclamation
(Ft.)	Cost/Linear Ft.	Cost
0	\$13.20	\$0.00

#### **Road Reclamation**

Section II.K., Guideline 12A	
	Road
	Reclamation
Road Length (Ft.) Cost/Linear Ft.	Cost
0 \$1.10	\$0.00

#### **Topsoil and Seeding Summary**

Grading: Section II.B., Guideline 12A		D6 Dozer/-10% grad	le		
Topsoiling: Section II.A., Guideline 12A		627 Scraper			
Seeding: Section	II.I, Guideline 12A				
		Volume			
	Acres Needing	Topsoil Cu.			
Pit No.	Topsoil	Yds	Haul Distance	Grading Cost/LCY	Grading Cost
1	15	43,427	200	\$0.467	\$20,280.41
					\$0.00
					\$20,280

	\$27,402.44			\$8,250.00
	\$0.00		\$550.00	\$0.00
\$0.631	\$27,402.44	15	\$550.00	\$8,250.00
Cost/BCY	Cost	Seeding	Seeding Cost/Acre	Seeding Cost
Replacement	Replacement	Acres Needing		
Topsoil	Topsoil			

## Seeding Reserve Summary

Soction	117	Guidalina	124
Section	IV,	Guideline	IZA

Reclaimed			Seeding Reserve
Pit No.	Acres	Cost/Acre	Cost
1	0	\$550	\$0
		\$550	\$0
		\$550	\$0
			\$0.00

## **Reclamation Liability Summary**

Backfill	\$13,775
Highwall Reduction CostsTopsoil and Seeding	\$247
Ripping of a Pit Floor With a Dozer	\$2,468
Scarification	\$724
Culvert Removal	\$0
Road Reclamation	\$0
Grading	\$20,280
Topsoil Replacement	\$27,402
Seeding	\$8,250
Seeding Reserve	\$0
Sub-Total	\$73,147

Contingencies	42%	\$30,721.78	
Total Reclamation Liability Existing bond amount		<b>\$103,869</b> \$30,000	
Bond Difference		-\$73,869	

## K. Public Nuisance and Safety

#### Plan to Avoid Constituting a Public Nuisance

#### Nearby Dwellings

There is no occupied dwelling, home, public building, school, church, community or institutional park or cemetery within three hundred (300) feet of the proposed affected area.

#### Normal Operation Hours

Mullinax Inc. will operate processing equipment and/or haul material from 7:00 AM to 5:00 PM on Monday through Friday.

## Water Used in Dust Suppression and Processing

Dust suppression along the access road and in other traveled locations in the processing area will be accomplished using water applied with a water truck. The application of water will depend on the conditions. The water for dust suppression will be imported by truck to the site.

Mullinax Inc. does not anticipate developing a ground water source on the site. Thus, Mullinax Inc. does not have and has not sought groundwater appropriations in support of this mining operation.

Water used in the crushing operation is transported by water truck to the site.

No gravel washing will be conducted at the site.

#### Lighting

No nighttime lighting is anticipated at the site. As required light plants will be utilized during normal working hours for safety and will be directed toward the inside of the pit location.

#### Entrance Sign

Mullinax Inc. will post a permit identification sign along the haul/access road corridor near its junction with US Highway 331. The sign will contain the following information:

Mullinax Inc. PO Box 2044 Sheridan, WY 82801 (307) 674-4466 Owner: Nathan Mullinax LQD Permit No.

#### Fencing

The permit area lies within a vast holding of land owned by W. Cameron Forbes and SunSource LLC.. There are fences throughout the permit area to isolate the various grazing fields.

## Material: Steep Slopes or Escarpments

This portion includes commitments to not push material over steep slopes or escarpments and leave a buffer between highwalls and topsoil stockpiles.

No materials will be pushed over steep slopes or escarpment on any sides of the pit. Berms will be constructed above all high walls. All topsoil piles will be located within a stripped pit and will be located away from the bottom of highwalls.

## Plans for Entering Controlled Highway

A stop sign has been placed at the end of the haul road, entering Highway 331.

Truck drivers are trained regarding safety issues related to access onto and off of Highway 331 into a rural residential area.

## Plans to Minimize Impacts to Wildlife

In a cooperative effort to preserve the wildlife resources of the State and minimize impacts to Sage Grouse, threatened or endangered plants and animal species, Migratory Birds of High Federal Interest or wildlife with crucial or critical habitat, Mullinax Inc. commits to:

- Notify the LQD Sheridan District Office, the WGFD District Biologist, and the USFWS if any of the information in this Appendix is known to have significantly changed as the mining operation progresses.
- In the future, if Migratory Birds of High Federal Importance (MBHFI) are found to be nesting within one mile of the project area or Mountain Plovers are found to be nesting in the permit area it is recommended by the USFWS that their guidelines be implemented.
- The owner will commit to wildlife protection measures recommended by the USFWS and/or the WGF for threatened or endangered species.

<u>Commitment to Prevent the Spread of Designated and Prohibited Noxious Weeds</u> Mullinax Inc. will strive to prevent the spread and/or serious infestations of designated and prohibited noxious weeds within the permit area through the following practices:

- Mullinax Inc. will not disturb future areas until such time as they prepare that area to be mined.
- Mullinax Inc. will broadcast a mixture of quick growing grasses (or crop seed, if the owner desires) on all topsoil stockpiles and select disturbed lands in order to limit the potential for weedy invasions.
- If weed infestations occur, Mullinax Inc. will contract a licensed applicator for the application of chemical herbicides to combat the noxious weeds.

