

RECLAMATION PLAN AND TIMETABLE

Amendment 01. The amendment to the Reclamation Plan involves the five (5) changes that were listed in the Mining Plan, and as explained in further detail below.

The methods described and approved in the original Reclamation Plan will remain unchanged unless discussed in this text. Where appropriate, the Reclamation Plans and Timetables have been revised to reflect the proposed changes and update the current conditions at the mine.

The amendment will follow MLRB Rule 1.8 and Colorado Revised Statutes, 1992, Section 34 32 112(8).

EXPANSION - The addition of the areas in Phase 1 and Phase 2 will not increase the reclamation responsibility in either stage. The 18.72 acres added along the west side of both phases was to move the permit boundary to a location that uses a land form (existing landowner's berm) which will be an easily definable boundary line that is not be crossed. The small area that covers where the under drain enters the river corridor was sized to leave access to the drain and outlet if needed. If any portions of this area are disturbed, it will be reclaimed.

PHASE 2A REMOVAL - this has no effect on the reclamation plan as it is incorporated into Phase 2 and will be reclaimed with that Phase.

The 7.90 acres of conveyor corridor added to Phase 3's total area, and located between Phases 3 and 4 is on land owned by Cannon Land Company. The disturbance will be confined to an existing access road and small areas around the conveyor facility support columns and footings. Of the 7.90 acres, less than 1.0 acre will be disturbed during construction and removal of the support pilings. The existing dirt road will remain when the area is reclaimed.

UNDER DRAIN - The under drain is contained in the areas to be reclaimed in Phases 1 and 2, except for the small area west of those stages. This area has been graded and seeded so no reclamation is needed. The clean out and inspection hatches located on the drain pipe will remain to facilitate maintenance of the drain by the reservoir owners (Cannon Land Co.).

RESERVOIR RECLAMATION CHANGE - The change to the reclamation of the reservoir perimeters is to change the reclamation practice of resoiling and revegetation on the land between the high water line and the slurry wall. Instead, gravel will be placed in the area from the high water line to the slurry wall. The reservoir access road will also be in these areas since no resoiling or vegetation will be done. No soil cover will be put on the armored areas but the voids between the riprap will be filled with natural pit run material.

On the areas around the reservoirs, from the slurry wall out, any disturbed area will be resoiled and seeded as currently approved.

OVERVIEW

The proposed future use of this site is to create 6 to 8 developed water storage reservoirs with a gravel band around them that covers the area from the high water lines to the slurry wall. The area outside the slurry wall to the permit line or disturbed areas will be resoiled and seeded on each reservoir. The issue with revegetating areas inside slurry walls is that the fluctuation of the reservoir level leaves the upper layers of soil dried out and they will not support vegetation in the long term. With a gravel band being left the area is stable, chances of erosion are reduced or eliminated, and bank maintenance is reduced. It also allows faster release from the Reclamation Permit so the reservoir development can begin sooner. Each of the proposed reservoir areas will be sealed with a slurry wall liner. In addition, there are 4 Phases that will be backfilled and used as cropland areas to match the existing land use. Cannon Land Company, the landowner, will be responsible for the construction of any additional reservoir operations facilities (pump houses, inlet/outlet structures, etc.) on each reservoir once L.G. Everist, Inc. has reclaimed perimeters and released a Phase from the DRMS permit.

The reclamation methods and plans described below will apply to all Phases but may require minor variation depending on the natural conditions found in each Phase. Reclamation will run concurrent with mining so it will commence as soon as enough area is available to reclaim and not be redisturbed. The setbacks and side slopes from the water's edge to the slurry wall will be left as a gravel surface or band needing only grading to reclaim. The area from the slurry wall to the setback limit will be resoiled and revegetated using the methods described in the following plan. On-site generated inert material will be placed in backfill areas or will be recycled/sold.

The applicant proposes bonding to cover the amount of disturbance throughout the mine (350 acres), including a sufficient length of liner and sloping, acres of seeding, backfilling, etc. If the applicant determines that the amount of disturbance at the mine may exceed the bonded amount, the applicant shall submit a bond revision to the Division.

As noted in the **MINING PLAN**, we are proposing two options for reclaiming the site. The methods used to develop the reservoirs in each option have minor differences. The differences being in how Phases 4, 5 and 6 are developed around existing oil/gas facilities that may be relocated or removed in the near future. Please refer to **TABLE E-1 RECLAMATION TIMETABLE-OPTION A** or **TABLE E-2 RECLAMATION**

TIMETABLE-OPTION B for information on each Option and Phase changes for the Reclamation.

The areas of the mine site that are not currently involved in the mine operation are primarily irrigated agricultural land, which is broken into 5 different use areas. The uses are, irrigated crop areas; non-irrigated pasture; ditch and return flow corridors; and also oil/gas operations areas with some high capacity gas pipeline ROW's. The agricultural uses will continue in areas where mining operations have not yet begun. There is very little native vegetation present on the agricultural areas because of the intensive agricultural practices that have taken place on the land. In most cases, the oil/gas operations areas have little vegetation and the high pressure gasline ROW's have been farmed for many years and the vegetation cover on those areas is consistent with farmed areas. The narrow bands along the Cannon return flow ditch, the Platte Valley Canal and the Platteville Ditch have been consistently disturbed by ditch maintenance. This leaves only isolated areas around the permit area with vegetation that may be considered native. The typical vegetation descriptions in **EXHIBITS I & J** will not match the actual current vegetation since the practice for the agricultural activities are that crops are rotated from year to year.

RECLAMATION PLAN FOR RESERVOIR AREAS

This section covers reclamation on the developed water storage reservoirs in Phases 1 thru 6. As discussed in the Mining Plan text, reclamation will run concurrent with mining. Initially this will happen when the reservoir slopes area is being mined and graded. The plan is to leave undisturbed natural sand and gravel at 3v:1h slopes in each reservoir phase. The 3h to 1v slope of natural, undisturbed materials will need no other reclamation except minor grading to dress the slope. On the armored areas a dirty sand and gravel (unprocessed) will be spread over the armoring to fill most of the large voids.

Since the perimeter of the reservoirs will be mined to their final (3H to 1V) slopes, only minor amounts of slope work will be necessary as mining ends. This will also insure, that if mining ceases before the resource is exhausted, only a minor amount of work would have to be done to finish reclamation on the disturbed area. At this time, the final reservoir levels are estimated to be at the lowest crest elevation around any given reservoir. The temporary topsoil stockpiles in the various mining phases will be available for reclamation needs.

When grading and shaping is completed on the section of reservoir banks and slopes inside the slurry walls, reclamation

will be complete for that area. For areas outside the slurry walls, they will be resoiled and then seeded during the next seasonal planting window. The **MAP EXHIBIT F RECLAMATION PLAN MAP OPTION A** and **OPTION B** show the sloping plan and how the areas around the reservoirs will be handled in this plan. The cross section on the Reclamation Maps, show the relationship between the gravel band, reservoir slope and revegetated areas.

All reservoir bank sloping will be completed to the stated 3:1 slopes or flatter. All areas that are above the high water line, and are not being reclaimed as graveled areas or access roadways, will have an average of 6 12 inches of topsoil placed and prepped for seeding. All top soiled areas will be seeded with the seed mix described in this plan, and effective weed control measures will be implemented until the Phase is released from the permit area. As mentioned in the Mining Plan, if the reservoir phase acreage is not released from the DRMS permit, and the landowner constructs developed water storage facilities that are not in this Reclamation Plan, then L.G. Everist will file a Technical Revision to incorporate the changes prior to asking for release of the area.

RECLAMATION PLAN FOR BACKFILL AREAS

This section covers reclamation on the developed water storage reservoirs in Phase 1A, 4A, 4B, AND 5A. The 4 areas have commercial deposits of gravel but are too small or too shallow to develop as water storage reservoirs. The Mining Plan calls for leaving the side slopes of these areas graded 3h to 1v when mining ends to leave a stable slope during backfilling and so they would not have to be graded if backfilling does not fill them completely. The backfill material will be excess overburden, and site generated inert materials, including the fines generated during processing of the raw sand and gravel. At any given time, backfilling may be taking place on 2 or more Phases as shown on the **MAP EXHIBIT C-1 - MINING PLAN MAP**.

The intent is to fill Phase 1A, and 4B to their existing elevations. Phases 4A and 5A may be filled above the original grade in some areas to dispose of excess overburden.

Estimates show that it is possible to complete the backfilling in these Phases as shown on **MAP EXHIBIT F - RECLAMATION PLAN MAP - OPTION A** and **OPTION B** if the suspected amount of overburden is present. At a minimum, each backfilled Phase will be backfilled to a level at least 2 feet above the highest ground water elevations if there is not sufficient material to bring them back to their original elevation. Once backfilling is complete in a Phase, an average of 6-12 inches of topsoil will be spread over

the disturbed area and it will be seeded as cropland during the next planting season.

Optional Reclamation Plans

Note that all changes connected with the following optional plans will take place within the permitted boundaries, therefore not affecting (increasing) the overall acreage of the permitted area and guaranteeing the allowed use of the Technical Revision process for these changes.

RESERVOIR AREAS

We are submitting two options for a final configuration of the reservoir areas. These are based on the current and future status of various oil/gas facilities located in the permit area.

OPTION A - The reservoir configurations for Option A are shown on the large map on **MAP EXHIBIT F - RECLAMATION PLAN MAP - OPTION A** and the areas are shown on the Reclamation timetable for Option A.

OPTION B - The reservoir configurations under Option B are shown on **MAP EXHIBIT F - RECLAMATION PLAN MAP - OPTION B** and the areas are shown on the Reclamation timetable for Option B. In general, the optional changes in Option B could be caused by oil and gas facility changes, other utility and ROW changes, and changes by the landowner. Changes by the landowners could include their construction of developed water storage facilities prior to acreage release in a reservoir phase, or transforming a backfill phase into a wetland area, for wetland banking by the landowner.

The methods used to reclaim the reservoirs will be the same for both options as previously discussed. The difference may be an increase/decrease in the volume of developed water storage and an increase/decrease in the amount of revegetation necessary.

We do not know when Mining Option B or Reclamation Option B or some part(s) of either or both will be implemented, but we are including these optional plans to increase the flexibility of this permit and account for inevitable changes when mining the site. Whenever any part(s) of the Option B plans becomes feasible, we will file a Technical Revision(s) to the Division to provide revised Mining and/or Reclamation Map(s) that will show the changes. The Technical Revision(s) will discuss any changes needed to implement the optional changes, including a discussion on changes in disturbed areas, slurry wall lengths and revegetated areas.

GENERAL DISCUSSION

There are sufficient amounts of topsoil on the site so the disturbed areas between the slurry wall and the permit line can be resoiled to an average depth of 6 12 inches. Sufficient topsoil will be saved for use in reclamation. The available topsoil to be salvaged from the stripping process will preclude having to haul additional soils onto the site for revegetation. In Phase 1 and 2, a topsoil berm is being placed along the outside edge of the slurry wall so when reclamation begins it can be spread over the area disturbed adjacent to the slurry wall. As discussed in other parts of the Reclamation Plan the area from the slurry wall in, to the highwater line will be a gravel band. The existing soils on the property have been capable of producing healthy crops and grasses and are expected to work for use on mined areas that will be revegetated. The vegetation information was obtained from site visits and data provided in the vegetation information obtained from the NRCS soil survey web page. A copy of that report is in **EXHIBIT I AND J** and describes the current soils and vegetation on the properties.

As outlined in the **EXHIBIT D - MINING PLAN**, approximately 510 to 514 acres of the permitted area will be disturbed as a result of mining activities, depending on Option A or B. The plan calls for bonding to have 350 acres " disturbed at any one time and the disturbed area may be divided between as many as two (2) Reservoir Phases and 2 3 Backfill Phases and any one time. As mining progresses across the property some parts of the property will remain undisturbed while other areas will be either, stripped, mined, partially reclaimed or totally reclaimed. The **MAP EXHIBIT C 1 MINING PLAN MAP** shows how the pit will look as if all area have been mined and the slopes have been graded. The **MAP EXHIBIT F RECLAMATION PLAN MAP OPTION A** and **OPTION B** show how the area will look when reclamation is complete. The area will be returned to at least its present vegetative condition when reclamation is complete.

Careful analysis of the growth medium and salvageable soil will permit the operator to carry out a soil additive program and to monitor the prescribed seeding plan to determine if the plan requires revision. Under normal weather conditions, an adequate moisture reserve will be present for establishment of the proposed seed mixture. Irrigation is assumed for the backfilled phases that will be reclaimed as crop areas. Irrigation will not be used for the reservoir perimeters. No revegetation will take place on undisturbed areas, roads or oil/gas operations access roads or facilities.

The reclamation timetables show the types and amount of land use in each Phase when reclamation is complete. Approximately 16%

of the area in the permit will not be disturbed by mining, either because it is setbacks around well facilities, gaslines, ROW's and easements along the ditches and areas too small to mine that will be kept in their natural state.

REVEGETATION PROGRAM

The revegetation program to be implemented on the areas to be seeded with grass by L.G. Everist is detailed below. The topsoiling plan presented above and this revegetation program are devised after careful review of the existing soil conditions and present vegetation, both on the site and in the NRCS report. "Revegetation will be carried out in such a way so as to establish a diverse, effective and long lasting vegetative cover that is capable of self regeneration without continued dependence on irrigation, soil amendments or fertilizers." The plan is designed to create a vegetative cover around the reservoirs that is at least equal in extent to the cover of natural vegetation before mining. The use of species native to the area is included in the mix. Since the intended use of the reclaimed land along the reservoirs is rangeland, any slopes created will be commensurate with this final land use.

Seed will be drilled wherever possible, when drilling is not possible, the seed will be broadcast. The revegetation plan provides for the greatest probability of success in plant establishment and vegetative development by considering environmental factors such as seasonal patterns of precipitation, temperatures and wind. Other considerations, such as soil texture, fertility, slope stability and the direction in which slopes face, have been considered. A weed control plan was submitted for this permit in the original permit application.

Graveled maintenance roads will be built around each reservoir and around each gas/oil well where no seeding or resoiling will take place. This will provide room around each well or reservoir to service it as needed by the well or reservoir owners. The access roads are shown on the MAP EXHIBIT F RECLAMATION PLAN MAP OPTION A and OPTION B.

SEEDBED PREPARATION

When mining on an area is complete or there is room to begin reclamation, any compacted areas disturbed will be ripped and scarified to create a deeper root zone under the resoiled areas. Once this is complete, the stockpiled soils will be spread. If tests show a fertilizer is needed, it will be broadcast spread on the seedbed at an adequate rate suggested by NRCS or a seeding/revegetation contractor. On the areas where seed is

broadcast, the surface will be left fairly rough to trap the seed and keep it from being affected by wind.

SEEDING TIME

The grass seed mixture will be planted from early fall through spring (November through May). The time of planting will be controlled by when the resoiled areas are ready for planting. If fall planting is convenient, the seeding will be done before the first freeze (about the time Winterwheat is planted). If spring planting is called for, it will be done in March or April, weather permitting, after the last frost. Both periods assure there will be adequate residual ground moisture available for the newly planted seeds. For areas that will be planted with crops, the crops planted will be determined by the Landowners or farmers who handle crop planting now.

GRASSES

The following approved seed mix was developed by the NRCS office in Brighton many years ago and is used on all L.G. Everist mining operations in Weld County. It has proven to be very reliable. This mix will place approximately 41.2 seeds per pound per sq-ft as prescribed by the NRCS planting guidelines. If the seed is broadcast, the amount will be doubled and spread on a rough surface. The seeded areas will then be dragged or raked thoroughly to set the seed. Under normal conditions, the operator will strive for a 30 to 40 percent cover rate on the grass revegetated areas when reclamation is complete.

No trees will be planted, because they are not compatible with reservoir development as their root systems affect the liners. It is expected some natural invasion from adjoining areas will occur.

PROPOSED SEED MIX

Species	Lbs. PLS/Acre
Western Wheatgrass (Aribba)	5.0
Big Bluestem (Champ)	2.5
Blue Grama (Hachita)	0.6
Switchgrass (Blackwell)	1.75
Total	9.85

It has been our experience on other operations, that the seeded area will have a heavy cover of weeds after the first year.

The second year, there are fewer weeds as the grasses start to take hold. By the third year the weeds are mostly gone and the grass has established itself so it will grow in future years. These weeds also tend to shade the seedbed, retain snow in the winter and act as a wind break for the newly emerging grasses. The area will then be monitored for success of revegetation until it is released from the permit area by the Division of Reclamation, Mining and Safety.

WEED CONTROL

The revegetated areas is monitored closely each spring to determine if noxious weeds are invading the area. L.G. Everist, Inc. will implement a weed monitoring and control plan that covers the areas actively used by their operations.

Weed control on the agricultural use areas is done by the landowner or farmer using the land.

Weed control in the mining and reclamation areas will be initiated if the problem becomes serious or if an excessive weed cover is still present at the end of the second year. In no way should this be taken to mean that L.G. Everist will try to eradicate all the weeds from the site. Some weeds are beneficial to the upland game species in the area, they provide important protection from the elements during winter, and nesting sites during the spring. Total eradication of weeds from the site is not necessarily desirable or possible, so we will be using stronger controls on the noxious weeds and controlling the rest as needed. Weed control may be done through mowing or chemical means. Control of noxious weeds is important to the state, so we will follow USDA Extension Service recommendations to control them. The Weed Control Plan is working as designed and no changes have been made to it.

IRRIGATION

No irrigation is planned for the revegetated area around the reservoirs. It makes the vegetation dependent on water and does not promote a vegetation cover that is diverse and capable of self regeneration. On cropland areas, irrigation may be used by the landowners.

RECLAMATION PERFORMANCE STANDARDS

(The following information is presented to address specific parts or Rule 3 as required by the MLRB Rules and Regulations.)

The operator intends to mine the property in compliance with the **RECLAMATION PERFORMANCE STANDARDS OF RULE 3**. Grading will be done to

create a final topography that is compatible with the intended final land use. The slope in the developed water storage reservoirs will be mined to their final slopes. These slopes will be 3:1 and on the backfilled areas we will attempt to retain the present drainage pattern across the property.

A mine entrance sign that conforms to the requirements in Rule 3.1.12 (1996) has been installed at the entrance to this facility.

The material used to create the slopes will be native material found on the site. It will consist of sand, gravel, overburden and topsoil. The Phases will be reclaimed so that a suitable grade for drainage exists. All surface runoff will be directed into the excavated area or natural existing drainages around the site.

All grading will be done in a manner to control erosion and to protect areas outside the affected lands. All backfilling and grading will be completed as soon as feasible after mining is completed. All refuse will be hauled away or disposed of in a manner that will control unsightliness and protect drainage systems from pollution. There are no acid forming or toxic materials inherent in the sand and gravel deposit. If petroleum products stored at the site for mining equipment and operations, is being stored as prescribed by applicable laws. Any storage tanks will be surrounded by a berm or be of the latest construction, and is adequate to contain any fluid spilled, should a tank rupture. In addition, there is adequate absorbent materials on site to contain any spills that would occur. There are no drill or auger holes on the land. Maximum slopes will be within the limits set forth in the Rules and Regulations of the Board and will be capable of being traversed by machinery. The operator does not expect prevailing hydrologic conditions to be disturbed.

L.G. Everist will comply with applicable Colorado water laws and regulations (as the operator understands them) which govern existing water rights. The operator does not expect to adversely affect the prevailing hydrologic balance of the affected land and surrounding areas. Nor does the operator expect to affect the quality of water in surface and ground water systems both during and after the mining operation and during reclamation. In addition, the operator shall comply with applicable Federal and Colorado water quality laws and regulations. Any water used in the mining operation and the processing plants will come from water owned or leased by L.G. Everist and legally suitable for use in mining operations. **EXHIBIT G WATER INFORMATION** contains specific

information concerning impacts and uses of water at this mining operation.

No dredging takes place at this facility, there are no temporary siltation structures involved in this operation and no mining will be done in a river or waters of the United States. A U.S. Army Corps of Engineers Permit is not required for this operation because no jurisdictional wetlands will be disturbed by mining or other activities on the site.

Settling ponds will be constructed on the site to collect water from the material washing at the processing plant(s). The fines in the wash water settle out in the ponds and the water is then recirculated to be used again in the processing plant. Groundwater collected from dewatering trenches may be discharged from the site, after any natural fines have settled out.. The discharged groundwater quantities shall be measured and sampled as per the requirements under a CDPS Sand and Gravel Mining Process Water and Stormwater Combined Permit. There will be no earthen dams on the mined area.

The mining and reclamation plans have taken existing wildlife conditions into consideration. The final reclamation will enhance the area for wildlife use. The mining and reclamation plans allow for the safety and protection of wildlife remaining on the mine site, at the processing site and along all access roads to the site. In practice this is done by limiting the amount of disturbance, restricting truck and equipment speeds to 15 mph or less and doing concurrent reclamation. Mine employees are trained to deal with wildlife found on the mine during operating hours to avoiding harming them. See **EXHIBIT H WILDLIFE** for more information.

As mentioned previously, topsoil on the property is of good quality, so it should be a decent growth medium for reclamation. When topsoil is removed, to reach the sand and gravel deposit, it will be segregated and stored in graded stockpiles, generally located in areas where disturbances by ongoing mining operations will be at a minimum, i.e., along setbacks on the pit perimeter. If the topsoil (and overburden) stockpiles remain undisturbed for more than a year, the approved seed mix will be applied to prevent erosion, to control weeds, and to keep them viable for reclamation.

Fertilizer and other soil amendments may be used as discussed in this plan.

RECLAMATION TIMETABLE

Reclamation will begin once enough area has been opened so that any reclamation completed will not be disturbed as mining progresses. This may take 5 or more years depending on the economic conditions in the area and the amount of material mined. The operator anticipates approximately 80% of the total mined land will be reclaimed by the time mining is completed.

If revegetation problems occur before release, an analysis of the problem area will be done and the area will be revegetated again as necessary. The seed mixture and rates may be revised as needed to complete reclamation, if a substantial modification is required, the Division will be notified prior to making the change. This gives us the most flexibility to complete reclamation successfully.

Table E-1: Reclamation Phases -Option A

Area	Years	ACRES ±					
		TOTAL	WATER AREA	GRAVEL AREA	REVEGE- TATION	ROAD	MISC. (DITCHES UNDISTUR BED AREAS, ETC.)
Phase 1A	5 to 14	28.77	0.00	0.00	22.87	0.00	5.90
Phase 1	1 to 3	90.31	62.22	9.36	3.76	2.12	14.97
Phase 2	3 to 5	189.93	137.16	10.01	4.67	2.62	37.99
Phase 3	3 to 5	81.20	59.04	7.19	2.71	2.12	12.26
Phase 4A	3 to 10	40.12	0.00	0.00	32.81	0.00	6.54
Phase 4B	3 to 10	26.50	0.00	0.00	19.58	0.00	13.71
Phase 4	3 to 5	58.97	43.38	9.97	2.18	2.56	3.44
Phase 5A	3 to 10	8.35	0.00	0.00	5.78	0.00	2.57
Phase 5	3 to 5	49.20	27.16	9.56	3.40	3.23	9.08
Phase 6	3 to 5	94.72	75.74	13.57	2.06	3.39	3.35
Totals		667.97	404.70	59.66	93.80	16.04	109.81

Table E-1: Reclamation Phases -Option B

Area	Years	ACRES ±					
		TOTAL	WATER AREA	GRAVEL AREA	REVEGE- TATION	ROAD	MISC. (DITCHES, UNDISTURB ED AREAS, ETC.)
Phase 1A	5 to 14	28.77	0.00	0.00	22.87	0.00	6.60
Phase 1	1 to 3	90.31	62.22	9.36	3.76	2.12	14.97
Phase 2	3 to 5	189.83	137.16	10.01	4.67	2.62	37.99
Phase 3	3 to 5	81.20	59.04	7.19	2.71	2.12	12.26
Phase 4A	3 to 10	40.12	0.00	0.00	33.58	0.00	7.31
Phase 4B	3 to 10	26.50	0.00	0.00	12.79	0.00	6.97
Phase 4	3 to 5	58.97	43.38	9.97	2.18	1.94	3.44
Phase 5A	3 to 10	8.35	0.00	0.00	5.78	0.00	5.04
Phase 5	3 to 5	49.20	29.57	7.04	3.40	2.06	9.08
Phase 6	3 to 5	94.72	78.45	10.02	2.90	2.93	3.35
Totals		667.97	409.93	53.59	94.64	16.62	107.01