May 19, 2022

Sent via email to: clayton.wein@state.co.us

Attn: Clayton Wein, Environmental Protection Specialist
Minerals Regulatory Program
Colorado Division of Reclamation, Mining and Safety
Department of Natural Resources
1313 Sherman Street, Rm. 215
Denver, CO 80203

Re: Second Adequacy Response
Burton Farms Gravel Pit, File No. M-2022-012 (110c Construction Materials Application)

Dear Clayton:

On behalf of Burton Farms LLLP, the Applicant, we hereby provide the Applicant's response to DRMS' Second Adequacy Review letter dated May 19, 2022. Below, we have copied the text of the remaining issue identified in the Second Adequacy Review. The Applicant's response is provided in blue.

Rule 6.3.4(2) – Reclamation Cost Estimate

Division's Second Adequacy Review Response dated May 19, 2022: The use of a portable truck scale at the site is acceptable. Please revise any sections of Exhibit C (Mining Plan) and Exhibit D (Reclamation Plan) to reflect the change from a truck scale with a concrete pad to a portable scale.

Applicant's Response: Exhibits C and D (attached) have been revised to address the use of the portable scale and reclamation of the portable scale site, rather than a truck scale with a concrete pad.

Please advise as to any other information needed.

Kent Holsinger, *Manager*
Jack Silver, *Of Counsel*
David L. Kueter, *Of Counsel*
Terry Jo Epstein, *Of Counsel*

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Thank you,

HOLSINGER LAW, LLC

Sarah Ostby

Sarah Ostby, *Paralegal*

Encl.

cc: Tony Waldron
Kent Holsinger
Burton Farms, LLLP

EXHIBIT C
Rule 6.3.3
Mining Plan

(a) Commencement and Duration of Gravel Pit Operation:

The Extraction Site was previously part of Permit No. M-1987-013 (Burton Pit), a 112(c) permit which covered 13.44 acres and was located on two separate properties, Burton Farms LLLP on the south and Rio Grande Canal Water Users Association on the north. The Burton portion contained approximately 9.99 acres and the Rio Grande portion covered approximately 3.44 acres. This application will re-permit the 9.99 acre Burton Property under a new 110(c) permit while leaving the remaining 3.44 acre area under the existing permit, M-1987-013. Upon approval of this application, the Burton property will be released from Permit M-1987-013 via an acreage and surety release request.

This location appears to have been a historically mined site and by the time Permit M-1987-013 was issued, it is surmised that significant mining had already occurred at this location. The location and surrounding topography suggest that the mining location was a small butte or basalt dike that contained very competent and hard rock. At this point in time, the crown of the butte has been mined out to a depth of approximately 40 feet leaving a crater type structure radiating out from the center point of the old butte and what is now the current pit floor. Beginning at the pit floor and heading east and south, the elevation remains relatively constant and daylights out to the proposed permit boundary except for the various raw product stockpiles, product stockpiles and topsoil or growth medium stockpiles that are located in various locations along the east and south sides of the permit area. Going North and West from the pit floor is a highwall (approximately 40 feet high) covered with loose rubblized material from the most recent blasts used to dislodge the solid rock. Of particular note is the location of the highwall along the north side which straddles the property boundary. The land on the south side of this boundary is owned by Burton Farms and the north side is owned by the Rio Grande Irrigation District. The operators of both sites have agreed to work together across this common boundary to reduce this highwall to a 3H:1V or flatter slope in order to facilitate proper reclamation of the site. It should be noted that topsoil is very limited on this site and due to the historic mining, which occurred pre-law, little to no growth medium was salvaged for use during reclamation.

No mining operations are currently occurring at the Extraction Site until Applicant has obtained all necessary permits. The mining operations will commence upon receipt of approval from the Division of Reclamation, Mining, and Safety and receipt of other necessary permits. As gravel excavation and processing will be seasonal, this operation is intended to be an intermittent operation and used for less than one hundred and eighty days per year pursuant to the provisions of C.R.S. § 34-32.5-103(11)(b). The operation will last approximately 10 years from commencement.

(b) Topsoil replacement depth:

It is believed that approximately 4 inches of topsoil was removed from the site and stored on the boundaries of the site as shown on Exhibit C-1 (Mining Plan Map). This material will be replaced during reclamation.

All removed topsoil will be seeded as necessary to protect from erosion if it remains in place for more than 180 days. Any necessary seeding will utilize the seed mix below. Topsoil stockpiles will be stored in places and configurations to minimize erosion and located in areas where disturbance by ongoing mining operations will be minimized. Once stockpiled, the topsoil shall be rehandled as little as possible until replacement on the regraded slopes and floor of the disturbed area. As this site is presently under a mining and reclamation permit, some topsoil/growth medium has already been removed and placed in stockpiles as shown on the mining plan map. As most of the site is currently disturbed it is not anticipated that additional topsoil will be available for salvage, however, topsoil and/or growth medium from any currently undisturbed areas that could be affected as a result of this mining or reclamation plan will be properly salvaged and stockpiled for use during future reclamation. This salvaged material will be placed in strategic positions around the perimeter of the pit so as to be out of the way of any mining activities and readily available for use in reclamation.

Kind	PLS Lbs / Acre
Indian Ricegrass	3 lbs/Ac PLS
Western Wheatgrass – Arriba Variety	1.0 lbs/Ac PLS
Streambank Wheatgrass – Sodar Variety	1.5 lbs/Ac PLS
Sand Dropseed	0.1 lbs/Ac PLS
Totals	5.6 lbs/Ac PLS

Seeding will be accomplished by grassland drill equipment, where feasible, and broadcast in other areas. As the rate specified in the table above applies to drill seeding, Applicant will double the rate should the broadcast seeding method be used.

(c) Thickness of overburden:

There is little to no overburden available at this site as the mining target has been fully opened for extraction. However, through the processing of the mined material, it is anticipated that some amount of unmarketable fines will be generated during the crushing and screening process. These fines will be placed over the re-graded rock slopes and used as a sub-base prior to re-applying topsoil and/or growth medium. It is anticipated that there will be enough of this material available for placement of 4-6 inches on the re-graded slopes and pit floor.

(d) Thickness of deposit to be mined:

The Applicant currently estimates that the deposit to be mined may be approximately 25-40 feet thick.

(e) Major Components of Mining Operations:

It is planned to continue mining the rock outcrop in a north and west direction. Track drills will be used to drill blast holes to varying depths so as to achieve a final slope of approximately 3H:1V. Mining will be done using a series of benches with the depth of each bench not exceeding 25 feet. Shot material will be pushed to the east and south where it will be processed and stockpiled. Equipment used will include rock drills, track dozers, rubber-tired loaders, grizzlies and crusher plants. Excavation of the rock outcrop will remain higher than surrounding ground so the natural drainage will be maintained to the east and south. Shot slopes will be approximately 1/2 H: 1V. The highwalls will be backfilled to 2H:1V and the benches will be out sloped so as to create a gently undulating down sloping final topography of 3H:1V slopes from the crest of the crater or butte to the pit floor.

i) The operation of this mine will not be carried out in phases. The operation of this pit does not lend itself to a phased operation, however it will be benched as mining occurs which is the phase portion of this mine. Each phase will repeat the steps below.

The initial preparation of the surface before extraction of the rock is nil as stated previously due to the nature of the rock outcrop being mined. Any available topsoil (growth medium) will be salvaged and stockpiled for use later during the reclamation process. Front - end loaders, and dozers or any other suitable surface equipment will be used.

Extraction of the resource will be accomplished with front end loaders, dozers, track excavators, or any surface mining type of equipment that is economically feasible for this site.

Earthen berms will be constructed along the east and south permit boundaries where needed to keep any stormwater from exiting the site uncontrolled, thereby preventing sedimentation in the historical water drainages. Water diversions and impoundments will be done in a way to prevent erosion and sedimentation. This will be part of the stormwater management plan. During all phases, Best Management Practices must and will be followed.

Mining and construction equipment designed for open pit mining will be used for all the earth moving and extraction of materials. Mining excavation will move north and west in the pit area. The mining will be done in such a manner as to minimize any high walls. The pit highwalls will be left at a 1/2 H: 1V or flatter if the terrain permits followed by backfilling at 2H:1V against the highwalls without sloping benches so as to create an overall 3H:1V gently undulating slope from the crest of the pit down to the pit floor. This should provide for a final topography that could be easily traversed by wildlife and livestock.

Gravel materials will be placed into semi-trailers and/or dump trucks for transportation. A rented portable toilet may be present at the site if needed. The only other structure on site will be a portable scale. Setup of the scale will only require a shallow excavation to place the scale, along with minimal dirt approach ramps constructed out of excavated material. No concrete foundations will be necessary.

(f) Dimensions of Significant Land Disturbance:

The approximate dimensions of the Extraction Site (including excavation area, stockpiles, etc.) are shown on Exhibit C-1.

(g) Road Dimensions:

The dimensions of the Existing Access Road are shown on Exhibit C-1. This road will not be included in the permitted acreage as it is a pre-existing structure and will remain for the landowner's use after mining. There will be no new drainage and runoff conveyance structures associated with the Existing Access Road.

(h) Operation Water Use:

As necessary, Applicant will purchase water for dust suppression and other nonsubstantive industrial uses on the site. Applicant estimates that it may use approximately 2000 gallons of water per operating day for these purposes when mining and or trucking is occurring.

(i) Groundwater/Surface Water Disturbance:

Groundwater will not be exposed by the mining activities. The Applicant expects that there will be no impact to groundwater from the proposed operation. In addition, the proposed operation will not result in any impact to surface waters. Stormwater runoff from disturbed areas will drain into the gravel pit and will seep into the ground within 72 hours. The gravel pit floor will be graded as extraction occurs at a 1-2% slope in order to direct runoff into the bermed sediment trap at the southeastern end of the Extraction Site. Applicant plans to manage storm water by utilizing best management practices based on guidance from the Colorado Department of Transportation Erosion Control and Storm Water Quality Guide.[1] Sediment transport from storm water will be minimal. Management practices can be found in Exhibit C-2, Storm Water Management Plan.

(j) Existing Water Rights:

Existing water rights will not be affected by the mining activities.

(k) Refuse and Acid or Toxic Materials:

There are no known refuse, acid, or toxic- producing materials in the area of the proposed gravel pit. If they are encountered, operations will cease and the materials will be contained in accordance with applicable laws and regulations.

(l) Measures to Minimize Disturbance to Hydrologic Balance, Off-Site Damage, and Provide for a Stable Configuration of the Reclaimed Area Consistent with the Proposed Future Land Use:

[1] https://www.codot.gov/programs/environmental/water-quality/documents/erosion-storm-quality.

Hydrologic Balance – The proposed operation's impacts on the hydrologic balance will be minimal. Groundwater will not be encountered and surface water will be managed as outlined in the previous section and in the stormwater management plan.

Off-site Damage – The boundaries of the site will be clearly marked to prevent off-site damage during the excavation activities.

Stable Configuration –Mining is occurring in very competent rock. During mining, side slopes to the pit will be managed for stability and safety of the equipment operators. Upon final reclamation, slopes will be revegetated to the extent possible to provide for a stable post-mining configuration.

(m) On-Site Processing:

A portable crusher/screening unit will be used to process the raw mined material into several salable products including boulders, rip-rap of varying sizes, and 1 inch, ¾ inch/ ½ inch and smaller fraction rock products.

(n) Commodities to be Extracted and their Use:

Riprap along with structural fill/construction aggregates (crushed rock) are the primary commodities to be mined. There are no other commodities to be mined. Products from this mine site will be used for construction materials.

(o) Incidental Products:

Crushed and screened rock are the only products expected to be produced at this site.

(p) Explosives:

Explosives will be used during mining or reclamation. This site has been mined in this fashion from the beginning with no adverse effects and blasting has been found to be suitable and necessary to extract this rock outcrop. At this time the applicant requests that DRMS place a condition on this permit to require that a Technical Revision incorporating a blasting plan be submitted and approved before any future blasting may occur. Presently there is enough blasted and stockpiled material to carry on production without blasting for some time. This will allow the operator to assess the site and prepare a more detailed plan for Division review and approval.

Attachments:
Exhibit C-1: Mining Plan Map
Exhibit C-2: Stormwater Management Plan

EXHIBIT D
Rule 6.3.4
Reclamation Plan

As the previously attached maps and images show, and according to the Rio Grande County Assessor's property record, the Subject Property is currently zoned Agricultural and consists of rangeland with light native grasses and minimal shrub vegetation. Applicant does not intend to change the current land use.

As noted previously, the site is currently permitted under DRMS Permit M-1987-013. Presently the 9.99 acres of this site that is slated for permitting under this application are mostly disturbed as part of the extraction area or for various stockpiles and associated roads. From reviewing the history of this site, it appears that very little topsoil or growth medium were salvaged by the previous operators. There are a few small stockpiles of coarse soil type material that will be used as growth medium during reclamation. Historical documents suggest that what little soil or growth medium present in the extraction area was salvaged to the extent possible given the very rocky outcrop nature of the deposit. In the lower areas it appears that the approved plan was to not salvage the very thin layers of growth medium prior to using these areas as product stockpile locations and associated roads. The plan during reclamation was to remove the piles back to original grade followed by shallow ripping of the underlying and relatively undisturbed native material to create a suitable seedbed for revegetation efforts.

As stated in the mining plan, and essential to successful reclamation of this mine, is a cooperative plan between the adjacent landowners and permitted sites to reclaim the highwall that currently straddles the property boundary. The butte that was the original target of this mining operation straddled the property line with about two-thirds of the butte residing on the south side of the line. Mining appears to have initiated from the south end of the butte and progressed north and west. What now remains are the outer flanks of the butte heading mostly west on the southern property (Burton Farms LLLP) and mostly north on the northern property (Rio Grande Canal Water Users Association). Successful reclamation will require both sides to advance mining through the remaining flanks of the butte while leaving a 3H:1V slope from the crest of the highwalls on both the west and north sides down to the pit floor. This advancement will slightly expand the pit floor which will then straddle the property line along the property boundary, except on the west side of the pit which will be a 3H:1V slope that curves from the south to the north and then back east just past the property line. This is illustrated on the reclamation plan map. The final details of this plan will likely come in the form of a technical revision to both permits.

The Applicant's Reclamation Plan Map is attached as Exhibit D-1. Reclamation of the Extraction Site will return the site to a post-mining land use of rangeland which is consistent with the surrounding area. Grading will be done, as necessary, to create a grade that conforms to the adjacent topography and natural landforms. Grading will also be done in a manner to control erosion and siltation of the affected lands, and to protect areas outside the affected land from slides and other damage.

What little topsoil that was salvaged from the site will be replaced on all 3H:1V slopes and the pit bottom. These areas will be reseeded as needed with a mixture of native grasses to conform with the condition of the site prior to the operation. Seeding will occur during the first favorable season following topsoil replacement.

No timber is present on the permitted site.

Applicant will take into account the safety and protection of wildlife on the site, at the processing site and along all access roads.

The Existing Access Road will continue to be used by the landowner and other entities during and after the mining activities, and thus need not be reclaimed (*see* section 1(d) below).

The majority of the reclamation will commence immediately upon final extraction of the materials and prior to permit expiration.

The site will be monitored seasonally on a monthly basis to determine revegetation success and to evaluate the site stability, as necessary. All necessary steps will be taken to control soil erosion and repair damaged lands. If after one season the seeding looks to be a failure, reseeding will be done in accordance with this plan.

Trash will be removed from the site. Vegetation cleared from the site will be properly disposed of or dispersed.

(1) Details of the Reclamation Plan are as follows:

(a) Overburden Replacement:

It is anticipated that some crusher fines will be generated during crushing, screening and processing of the mined rock. Soils and waste rock unsuitable for construction materials will be separated from the gravels and will be stockpiled at the site for use as a sub-base over the regraded slopes. These stockpiles may also be utilized for excavation and highwall backfill as site reclamation proceeds.

(b) Reclaimed slope gradient:

The extraction site currently exists as a roughly 1H:1V slope where disturbance has already occurred. During reclamation, and as required by Rule 3.1 5(1), Applicant will grade the site to conform with the natural gradient and contours of the slope and the surrounding area in order to ensure that the site complies with the intended post-reclamation use as rangeland. Applicant will mine and grade the site so as to leave the overall gradient at no more than a 3H:1V on the side slopes.

Applicant will follow stormwater management best practices published by state and local authorities. The Applicant anticipates that any stormwater will collect at the bottom of the extraction pit and be directed to the southeast corner of the site. Site grading will be developed so

that concentrated drainage that could result in scour does not occur. A collection/filter berm will be constructed along the very east and south corner of the permit area to treat any water that reports there. This berm will be constructed to intercept and reduce overland flow velocities and allow water to slowly weep through the berm as treatment for sedimentation. No water will be held for more than 72 hours.

(c) Revegetation Measures to Reclaim the Site

Applicant has consulted with Tony Waldron, former supervisor of the DRMS Minerals Program regarding recommendations and specifications for reseeding disturbed ground.

(i) Since very little topsoil/growth medium was salvaged, reclamation will be very challenging on this site. Any topsoil previously removed has been placed in two small stockpiles along the northeast side of the permit area. This will be replaced as plant growth medium once all grading has been completed. Prior to placement of this growth medium, waste fines from product processing will be used as a sub-base over as much of the extraction area as possible. It is anticipated that 3-6 inches of this material will be placed over the extraction area. Applicant then expects approximately 4 inches of topsoil will be available for placement, as practicable. All topsoil will be evenly distributed over the areas from which it was removed in thicknesses equal to the original topsoil depths found at the site. No replacement topsoil is planned to be imported for reclamation. On areas that are currently being used for stockpile locations reclamation will proceed as follows: The product stockpiles will be removed down to historic grade elevations. As topsoil was not salvaged from these areas, they will then be shallow ripped to relieve any compaction. If there is any topsoil or growth medium available, it will be replaced as evenly as possible across the area. This area will then be prepared for seeding as described below.

(ii) The site will be seeded upon completion of the permitted mining activities. The seedbed will be prepared to eliminate compacted conditions by discing or shallow ripping followed by harrowing to level and firm up seed bed. Seeding will occur utilizing a grass seed drill or by broadcasting. If broadcasting is utilized, the seed rate will be doubled and the seed will be incorporated by harrowing following seed application. Soil amendments will only be utilized if testing indicates deficiencies but it is anticipated that none will be necessary given the short amount of time the topsoil will be stored. If deemed necessary based upon soil tests, the type, application rate, and soil incorporation methods of fertilizer application shall be as recommended by the CSU Soil Testing Laboratory.

(iii) Trees are not present on the site. The following seed mixture will be used during reclamation:

Kind	PLS Lbs / Acre
Indian Ricegrass	3 lbs/Ac PLS
Western Wheatgrass – Arriba Variety	1.0 lbs/Ac PLS

Kind	PLS Lbs / Acre
Streambank Wheatgrass – Sodar Variety	1.5 lbs/Ac PLS
Sand Dropseed	0.1 lbs/Ac PLS
Totals	5.6 lbs/Ac PLS

(iv) Seeding will be accomplished by grassland drill equipment, where feasible, and broadcast in other areas. As the rate specified in the table above applies to drill seeding, Applicant will double the rate should the broadcast seeding method be used. As the site is not irrigated, reseeding will occur between October 15 to April 15 (e.g., dormant seeding). Applicant will follow general recommendations with regard to reseeding native grasses.

The Applicant will follow the following seedbed preparation standards: The seedbed should be well settled and firm, but friable enough that seed can be drilled at the recommended depth. Soils that have been compacted by traffic or other equipment should be tilled (deep - chiseled or ripped, if necessary) to break up restrictive or compacted layers, and then harrowed and rolled or packed to prepare the required firm seedbed. If the seed is to be broadcast, then the seedbed should be settled and fairly firm, but left rough to catch the seed and allow some coverage by soil when tracked in by heavy equipment or harrowed and packed into the surface. Avoid seedbed preparation when the soil is wet to prevent compaction of the seedbed. Planting depth less than (1) one inch. Drill spacing 8 inches.

(v) If needed, Applicant will use straw mulch to ensure weed control. Applicant will employ the disc crimping method. Mulch shall be applied at a rate of 2 tons per acre.

(vi) As trees and shrubs are not present on the site, no planting of any trees or shrubs need occur during reclamation.

(vii) Noxious weeds are not a problem on this site, however, if noxious weeds do invade this site, a weed control program will be implemented as soon as possible to stop the spread of the noxious weeds. A portion of the reclamation cost will be devoted to this item if that becomes necessary.

(d) Remaining Structures:

As discussed in Exhibit A, the site contains the Existing Access Road. The Applicant (the landowner) owns the Existing Access Road, which is necessary for Applicant to access the subject property. The Applicant has been using, and will continue to use, the Existing Access Road for its private use.

(e) Other:

The only other feature which will be reclaimed is the portable scale. Following completion of mining and removal of all remaining stockpiles, the portable scale will be removed. The approach ramps will be graded back into the shallow excavation followed by grading, ripping

and seeding in conjunction with reclamation of the surrounding area. The cost to reclaim the excavation will be easily absorbed within the existing estimated cost of reclaiming the surrounding area.

(2) Reclamation Cost Estimates:

The site will reach a point of maximum disturbance when rock material to be mined is depleted, however, the site is currently at its maximum liability point since further mining will actually reduce the highwalls and steep slopes that exist in the extraction area. The following tasks, including unit and total costs, may be necessary to accomplish reclamation in its current state.

Reclamation Task and Quantity	Unit Cost	Total Cost
Grading		
Reduce Highwall-Combination of Blasting and Grading	$2.00/yd	$4,000.00
Rough Grading 5 acres (Rough grading will occur once Highwalls are reduced and scale site is graded to prepare site for Overburden/Growth Medium replacement)	$200/acre	$1,000.00
Overburden & Topsoil Replacement		
Overburden-4,000 cu yds over 5 acres of slopes and floor of Pit	$2.00/yd	$8,000.00
Growth Medium -2,700 cu yds over 5 acres (Haul and place using front end loader and truck)	$2.00/yd	$5,400.00
Topsoil Preparation for Seedbed		
Rip 5 acres of roads/stockpile areas w/ dozer or grader	$200.00/ac	$1,000.00
Prepare 10 acres of seedbed with Disc/Harrow etc.	$50/ac	$500.00
Seeding		
Seed Cost-10 acres	$150.00/acre	$1,500.00
Drill Seeding- 10 acres	$50.00/acre	$500.00
%25 Failure rate replacement seeding	$500.00	$500.00
Other		
Mobilization/Demobilization		$1,000.00
Total Direct Costs		$23,400.00
DRMS Indirect Cost	23.5% of Direct Cost	$5,499.00
Total Financial Warranty		**$28,899.00**

Attachments:
Exhibit D-1: Reclamation Plan Map