STATE OF COLORADO

Cazier - DNR, Tim <tim.cazier@state.co.us>

RE: M-2007-003 / Yevoli Cobblestone Pit: TR-1 Adequacy Review

1 message

Ben Langenfeld <benl@lewicki.biz> Thu, Mar 9, 2023 at 5:40 PM
To: "tim.cazier@state.co.us" <tim.cazier@state.co.us>

Tim

Please see the attached adequacy response for Yevoli Cobblestone's technical revision.

Ben Langenfeld, P.E.

Lewicki & Associates

benl@lewicki.biz

Office: (720) 842-5321

Cell: (303) 960-5613

From: Support Silvercrown <support@silvercrown1.com>
Sent: Tuesday, March 7, 2023 2:11 PM
To: Ben Langenfeld <benl@lewicki.biz>
Subject: Fw: M-2007-003 / Yevoli Cobblestone Pit: TR-1 Adequacy Review

Silver Crown Landscape Materials

12185 N Dumont Way

Littleton, CO 80125

303-683-0200

From: Cazier - DNR, Tim <tim.cazier@state.co.us>
Sent: Tuesday, March 7, 2023 12:44 PM
To: Support Silvercrown <support@silvercrown1.com>
Subject: M-2007-003 / Yevoli Cobblestone Pit: TR-1 Adequacy Review

Mark, Kristi:

Attached for your records is a copy of the subject adequacy review letter. Please contact me if you have any questions or concerns.

Tim Cazier, P.E.

Environmental Protection Specialist III - Engineering

Mobile: 303-328-5229

COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

P 303.866.3567 x8169 | F 303.832.8106 | C 303.328.5229

Mailing Address: Division of Reclamation, Mining & Safety, Room 215, (optional: c/o: Tim Cazier), 1001 E 62nd Ave., Denver, CO 80216

Physical Address: 1313 Sherman St., Room 215, Denver, CO 80203

tim.cazier@state.co.us | https://drms.colorado.gov

Yevoli Cobblestone TR Adequacy Response.pdf
386K

Lewicki & Associates
ENGINEERING | GEOLOGY | ENVIRONMENTAL

March 8, 2023

Timothy Cazier
Colorado Division of Reclamation, Mining, and Safety
1313 Sherman St, Rm 215
Denver, CO 90203

Delivered Via Email
RE: Yevoli Cobblestone Pit, Permit No. M-2007-003
TR-01 Adequacy Response

Mr. Cazier

Yevoli Cobblestone, Inc. submits the attached documents to address the adequacy comments raised in your March 7, 2023 letter. A revised Exhibit D is attached that lists the same overall disturbance limit of 15 acres as Exhibit L. Exhibit L has been corrected to show the appropriate total time frame. A revised copy of the Technical Revision form is also attached that lists the disturbance area as 15 acres, in order to be consistent with the permit exhibits.

Feel free to contact me with any further questions.

Regards,

Ben Langenfeld, P.E.
Lewicki & Associates, PLLC
(720) 842-5321, ex. 1
benl@lewicki.biz

Attachments

Exhibit D

Exhibit L

Technical Revision form

EXHIBIT D MINING PLAN

1. General Mining Plan

The property boundary has been surveyed on site and the permit area will be surveyed prior to any additional acreage site disturbance. Map C-2 shows the mining plan. Mine access will be via Siloam Road/County Road 19, 15 feet wide, as it has been to this point.

The gravel zone is estimated to be 6-13 feet thick in an alluvial deposit and is overlain by roughly 1-10 feet of overburden and topped by 12-49 inches of topsoil. Mining operations are expected to stop at or before a depth of 20 feet.

In general, the site is mined from north to south as shown on Map C-2. The northeastern most extent of the site, just south of Hard Scrabble Creek, is already mined. Mining north of Hard Scrabble Creek represents the last phase of mining. Mining in undisturbed areas will begin by excavating topsoil and overburden with front end loaders and will be stockpiled separately. Stockpiled overburden will be used to backfill and cover the slopes of mined out areas to a 3H:1V slope during Reclamation as shown on Map F-1. The raw gravel material will be loaded into a portable crusher/screen plant where various sizes of product will be made and placed in separate stockpiles. Dozers may also be used to move topsoil/overburden or gravel. Once mining is complete in an area, it will move to the stockpiling area located near the site access in the central-eastern portion of the site. Only 11 acres will be mined at any given time with another 4 acres being used in the stockpiling area, for a total of 15 acres of current disturbed area. A breakdown of the mining areas and the mining direction are shown on Map C-2.

Mining activities are expected to occur approximately 12 months per year as well as processing operations including screening/crushing and washing can occur any time of the year. Mining of the deposit will occur to the limits shown on Map C-2 and will be mined to a near vertical slope to maximize gravel recovery. Backfilling with overburden will create shallower 3H:1V reclaimed slopes.

The Yevoli Cobblestone Pit mines using a near vertical slope on active mining faces. Highwall mining will progress to an offset line from the crest line, which marks the mid-slope of the 2H:1V mining slope. This offset serves two purposes. First, the volume of material left in the highwall will allow the crest to be pushed towards the toe for the final mining slope of 2H:1V while maximizing gravel recovery and will reduce the required backfill material to bring the slopes to a 3H:1V slope. Secondly, this offset provides additional slope safety. A failure would be governed by the internal angle of friction of the material. This would limit the failed slope to an angle of 34 degrees or ~1.3H:1V. This failure would not only stay within the permit area, it would stay within the final slope envelope. Such a failure is unlikely given that only the active slope is near vertical. All mining slope will be 2H:1V or shallower once they are within 200 feet of the permit boundary.

The expected annual average production is 10,000 tons. Actual production rates will fluctuate based on market conditions. The raw material will be sold as crushed rock and sand. A breakdown of the anticipated product tonnages and mined tonnages can be seen in **Table D-1**. A breakdown of the estimated areas is included in **Table D-2.**

Topsoil will be stored in a berm along the western and southern edges of the property and will not exceed 20 feet in height or 80 feet in width (2H:1V). Overburden will be stored along the western edge of the property in berms that will not exceed 30 feet high and 120 feet wide (2H:1V). Both topsoil and overburden may be sold on an as needed basis; however, Yevoli Cobblestone Inc. commits to keeping enough material onsite to be able to reclaim the site. Estimates on reclamation required topsoil and overburden will be calculated on an ongoing basis as reclamation will occur concurrently with mining. Therefore, surplus material estimates will become readily apparent as mining and reclamation progresses from area to area. The amounts of topsoil and overburden sold are secondary commodities and are not therefore included in the table below or the annual tonnage sold from the site.

No pit dewatering will take place, as the groundwater table is below the bottom of the pit. Depth to groundwater is variable and shallows near the western and northern extents of the site with proximity to Hard Scrabble Creek. The depth of excavation will be adjusted to avoid exposing groundwater. Three test holes drilled and monitored by the Fremont County Engineer March 26, 2007 were drilled to a depth of approximately 17 feet and no groundwater was encountered at this depth. However test pits excavated in 2005 encountered groundwater at roughly 15 feet of depth. Excavation in the past exposed groundwater and was immediately reburied at depths below 20 feet. Given the variability of water depth, the operator will monitor the pit bottom throughout the mining process and ensure that if any grounwater is encountered, it is backfilled and buried to a depth of two feet. For the purpose of this application, the pit floor is shown at a depth of 20 feet in Map C-2. This is the absolute maximum depth assuming no groundwater.

Mining will progress through the areas in numerical order moving from north to south. Topsoil and overburden from a new area will be used to reclaim the previous area. This will reduce material moving as well as reduce the maximum area to be reclaimed. A table of expected mining lives for each area is included in **Table D-1**. The life of each pit is based on the anticipated annual average tonnage.

No explosives will be used in conjunction with the mining operation.

2. Mining Timetable

The following timetable is a best estimate of the sequence of operations for the life of the mine after June 2018 and is based on mining 10 feet of gravel and selling 10,000 tons of total product per year. Area locations are shown on Map C-2, Appendix 2.

Table D-1 Mining Timetable

Area	Mining Time		Material Quantity	
1	0	Years	Mined out	Tons
2	8	Years	78,100	Tons
3	10	Years	96,600	Tons
4	14	Years	143,900	Tons
5	13	Years	127,000	Tons
6	13	Years	125,400	Tons
7	8	Years	81,600	Tons
Total	66	Years	652,600	Tons

The mining schedule is planned to minimize disturbance by reclaiming areas as additional mining is undertaken. Note: If large contracts are awarded to the site, production could increase to the permit maximum, thereby curtailing the life of the pit. On the other hand, if contracts are less than anticipated, the life of the pit could be extended. This table is based on a reasonable projection of average production rates.

3. Mine Facilities and Operation

The site will contain the following facilities, it is noted where applicable whether or not the facility is portable and whether it will have any fuel storage associated with it. A summary of equipment and related tanks is shown below.

- Truck scales
- Mine office trailer
- A portable crusher with associated tanks
- A portable wash plant with associated tanks
- Portable wash plant recycle pond
- 500 gallon off highway diesel fuel tank in secondary containment (110% of tank capacity)
- Portable lights (downcast) with a generator for emergency after hours maintenance support

The following list is the best estimate as to the equipment that will be used onsite throughout the mine life:

- 1 wheel loader
- 2 screening plants
- 1 excavator
- 1 stacking conveyor
- 1 D-8 Bulldozer
- 15 and 24 ton on-road haul trucks (number will depend upon production needs)

All fuel tanks will have secondary containment and are located within metal tub containment that will hold 110% of the volume of the largest stored tank. All such tanks will be kept at the office area immediately west of the sole site access point. See Map C-2.

No night mining activity is scheduled for the operation; however portable lighting may be used within the pit from time to time. The portable lights will only be used at the bottom of the pit for the purpose of after hour equipment maintenance and crushing activities within the permitted hours in the winter months while the days are shorter. A permanent drop toilet will be used by employees and is located just south of the office trailer. All mining structures on site are shown on Map C-2. Portable mining equipment such as loaders, dozers, trucks and excavators will be serviced on an as-needed basis onsite. Upon reclamation, all portable equipment will be removed from the site.

The entire site is surrounded by a perimeter fence of 3-strand barbed wire and the permit boundary is marked with stakes surveyed on site. No problems are expected with vandalism. It is extremely unlikely that any toxic or acid-producing materials will be encountered during the mining operation since past mining shows that the material is alluvial in nature. However, in the event that such materials are encountered, they will be covered with overburden and topsoil from the stockpiles to the same depths outlined in the reclamation plan and no more mining will occur in this area.

The site will use all existing roads to haul the product to its final destination. It is planned that the material may be used to re-surface existing roads, make concrete aggregate or provide new road base for any new roads within an economic distance to the site.

Several hazardous materials will be stored and used onsite throughout the project. These materials include products associated with diesel motors and gravel processing equipment.

4. Topsoil and Overburden Handling

Topsoil is highly variable and ranges from depths of 12 to 49 inches. Overburden depths are also highly variable and range from 1 to 10 feet with an average depth of 5 feet expected. Both topsoil and overburden will be used on site for reclamation of mined out areas. Topsoil will be stored along the western and southern edges of the property and will not exceed 20 feet in height or 40 feet in width (2H:1V). Overburden will be stored along the western edge of the property in berms that will

not exceed 30 feet high and 60 feet wide (2H:1V). Any topsoil or overburden stockpile that is to be in place longer than 180 days will be vegetated to prevent wind erosion.

Anticipated topsoil and overburden quantities based on known and average anticipated depths. 163,148 cubic yards of topsoil are anticipated to be recovered and stockpiled from Areas 2-7 while 326,296 cubic yards of overburden are available to be excavated and used in reclamation.

5. Water Information, Rights and Augmentation

All water rights issues such as availability of water for this operation, consumption rates, dust control, etc. is presented in Exhibit G - Water Information.

6. Schedule of Operations

Mining operations will only occur as dictated by demand up to the maximum rates described earlier in the mine plan. Mining, screening and processing will be conducted with portable equipment at various times of the year. Product will be sold from this activity throughout the year, although little is expected to be sold in winter months. The operator will not have night gravel mining operations, although minor truck activity or repairs may occur after hours. Mining, processing and trucking will take place no more than 8 hours per day, between the hours of 7 am and 3 pm, Monday through Friday.

7. Fremont County Impacts and Environmental Impacts

The impacts to Fremont County will be limited and will be unchanged from the original award of the pit permit in 2007. No dust is expected from the operation due to low production projections and the pit and roads being watered as needed. In the event that airborne dust is observable, immediate action to mitigate dust via roadway wetting and a slowdown of production will be initiated and sustained until airborne dust has been mitigated. Magnesium chloride and gravelling of haul roads may also be done, if necessary, to control dust.

Noise from operations will be limited as mining progresses down below grade in each area. Traffic from the operation is expected to be in the range of 8 to 10 trucks a day. Siloam Road is already used by truck traffic from the Yevoli Cobblestone Pit. Due to the relatively small scale and production of this operation, the impacts to Fremont County will be minimal.

EXHIBIT E RECLAMATION PLAN

1. General Reclamation Plan

The total disturbed area to be reclaimed under this permit is 83.5 acres. Reclamation plans can be viewed on Map F-1. The post-mining land use will be rangeland. All slopes will be reclaimed to 3H:1V or shallower. No more than 500 feet of highwall will remain unbackfilled at any time. As described in the mining plan, reclamation will occur concurrently with mining. Three areas will be in operation at any time: the active mining area, the mining area being reclaimed, and the main processing area in Area 1.

Topsoil and overburden from the current mining area will be used to reclaim mined out areas. 12-15 inches of topsoil will be replaced on all graded areas. Prior to overburden placement, 1H:1V mining slopes will be knocked down to 2H:1V slopes. Overburden will be replaced at an average depth of 4 feet beyond attaining a 3H:1V slope. By reclaiming concurrently, the distance that the topsoil and overburden will have to be transported as well as the amount of material that will have to be rehandled will be minimized. Additionally, the acreage that is unreclaimed will be minimized and will make the worst-case reclamation smaller and thus, the bond will be smaller.

An internal road will be left in place for the property owner to access and use the site following mining. The currently existing access to the property will be left in place for the landowners use as well.

2. Reclamation Timetable

The time for reclamation is shown below – Table E-2. Exhibit L: Reclamation Costs describes the worst case bond scenario.

Table E-2 Reclamation Timetable

Task	Description	Reclamation Time	
1	Mine Area 1 (mined out)	0	Years
2	Mine Area 2, reclaim portions of Area 1	8	Years
3	Mine Area 3, reclaim Area 2	10	Years
4	Mine Area 4, reclaim Area 3	14	Years
5	Mine Area 5, reclaim Area 4	13	Years
6	Mine Area 6, reclaim Area 5	13	Years
7	Mine Area 7, reclaim Area 6	8	Years
8	Reclaim Area 7 and Processing Area	1	Years
Total		67	Years

3. Revegetation Plan

For each area of reclamation, soil will be disked to loosen the soil. Due to the mild grade, seed can be drilled in both regions; broadcast seeding will be utilized where reclaimed perimeter slopes do not allow drilling such as on topsoil stockpiles. Seed mixes listed below will be used to revegetate the site. Certified weed free mulch will be crimped into the surface at 2000 lbs. per acre. Fertilizer may be added as determined by a soil test at the time of seeding. Heavy furrows will be left in the tilled topsoil to provide moisture concentration and shade areas in order to promote better conditions for successful vegetation establishment. Seeding will take place during the fall following retopsoiling of slopes. Slopes will be regraded, backfilled, and retopsoiled as soon as they are able to be reclaimed.

3.1. Rangeland Seed Mix

Species	**Pounds of pure live seed per acre (drilled)**
Western wheatgrass (Arriba)	11.2
Blue Gramma (Lovington)	2.1
Neeleanthread grass	3.3
Praire junegrass	0.2
Sanfoin	2.0
Total	**18.8**

Broadcast seeding will be done at double the drill rate.

4. Post-Reclamation Site Drainage

Map F-1 shows arrows indicating the approximate direction of drainage throughout the pit. The reclaimed pit areas will all drain internally. Runoff will infiltrate and evaporate. Pit setbacks from the creek can also be seen on Map F-1.

5. Weed Control

Measures will be employed for the control of any noxious weed species. The objective of this weed management plan is to control undesirable plants on the Yevoli Cobblestone Pit property. Plants identified through the Colorado Noxious Weed Act (C.R.S. 35-5.5) and the Fremont County Noxious Weed List as undesirable and designated for management within the county will be removed. These plants identified as noxious weeds will be managed by control measures. A Weed Control Plan will be utilized as follows:

1) Each April, a weed survey will be taken of the permit area.
2) If any patches or plants have been identified, they will be sprayed by backpack sprayer or 4-wheeler using chemicals approved for use by the weed control staff of Fremont County.

3) After reclamation, weed surveys and spraying will continue until the perennial cover and production of the site have met DRMS requirements and bond release has been obtained.

The Division and Fremont County staff will be consulted regarding any weed infestation areas and any control measures prior to their initiation. The plan does not contemplate total weed removal on the property. Past experience has shown that some initial weed cover in the first year following the retopsoiling is beneficial to the reclamation effort in rangeland sites. Annual non-noxious weeds tend to provide shade for new grasses, are a means of holding snow on the seedbed longer, and protect seedlings from wind and water erosion until the planted species have firmly taken hold.

During all phases and areas of the mining operation the permit area will be monitored closely every year, through which the operator may determine if any additional weeds have grown. If any new species of weeds are found, Fremont County and the Division will be consulted in order to formulate the best plan for the new infestation.

6. Revegetation Success Criteria

These areas will be deemed adequate when vegetation has been established in order to control erosion and noxious weeds are not present in any significant amounts and all of the conditions of Rule 3.1.10 have been met.

7. Monitoring Reclamation Success

Monitoring reclamation on an ongoing basis will allow minor revisions to assure efficient and successful reclamation. The operator plans to use the local NRCS office to assist in determining the ability of the reclaimed land to control erosion. If minor changes or modifications are needed to the seeding and reclamation plan, revision plans will be submitted to the Division as required. It is hoped that the Division will provide assistance in evaluating the success of ongoing reclamation process. All areas disturbed and reclaimed and any other important items regarding reclamation will be submitted in the annual reports to the Division.

EXHIBIT L BOND CALCULATION

The worst case reclamation scenario at the Yevoli Cobblestone Pit will be when roughly 15 acres of disturbance area present onsite and when 500-ft of highwall need reclaiming. Mining operations will move through the site, staying in the active area. A truck scale and office trailer will be located near the entrance and will need to be removed. A detailed breakdown of reclamation tasks can be seen below.

1. Reclamation Tasks and Costs

- Remove truck scale and office trailer = $6,000
- Active highwall area knockdown (dozer work) = 500 ft of 0H:1V to 2H:1V slope (cross section area of 156.25 sq. ft) at 27 CF/CY = 2900 CY at $0.50/CY = $1450.
- Active highwall area backfilling (loader work) = 500 ft of 2H:1V to 3H:1V slope (cross section area of 312.5 sq. ft.) at 27 CF/CY = 5800 CY at $1.50/CY = $8700.
- Topsoiling of 15 acres of disturbance (loader work). 15 acres at 12 inches deep (24,200 CY) at $1.50/CY = $36,300.
- Rangeland seeding and mulching of disturbed area. 15 acres at $850/acre = $12,750.

Table L-1 Phase 2 Reclamation Task and Cost Estimate

Activity Description	Time (Months)	Cost ($)
Remove truck scale and office trailer	0.5	6,000
Active highwall knockdown	2	1450
Active highwall backfilling	2	8700
Topsoilings of all disturbed areas	2	36,300
Revegetation of disturbed areas. Includes seeding and mulching.	3	12,750
Subtotal	**9.5**	**$65,200**
DRMS Costs (28% x direct costs)		$18,256
Total Bond Amount		**$83,456**

COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- 2007-0003 Site Name: Yevoli Cobblestone Pit

County Fremont TR# *(DRMS Use only)*

Permittee: Yevoli Cobblestone

Operator (If Other than Permittee):

Permittee Representative: Mark Yevoli

Please provide a brief description of the proposed revision:

Expand disturbance area to 15 acres and increase the maximum highwall length to 500'.

As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered "filed for review" until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

Permit Type	**Required TR Fee**	**Submitted** (mark only one)
110c, 111, 112 construction materials, and 112 quarries	$216	☑
112 hard rock (not DMO)	$175	☐
110d, 112d(1, 2 or 3)	$1006	☐