South Park Ranger District

320 Highway 285 Fairplay, CO 80440 719-836-2031 Fax: 719-836-3875

 File Code:
 2810

 Date:
 December 3, 2020

Phillip Brueggeman Claimant/Operator 5521 Majestic Drive Colorado Springs, CO 80919

Dear Mr. Brueggeman,

The reclamation of mined sites on National Forest System (NFS) lands is a requirement of Federal law and USDA Forest Service regulations. The Forest Service is legally responsible for ensuring that operators perform reclamation to a standard that allows the land to be productive again. The Forest Service will inspect and approve reclamation work performed by the operator. This will be in addition to any inspection which the State of Colorado might conduct on any mining claim. Operators should be aware that until reclamation is approved by the Forest Service it is not considered complete.

On October 15, 2020, Forest Service Minerals Staff conducted an annual compliance inspection of the unpatented mining claim(s) associated with your Steel Rose Mine Plan of Operations (**#2810-021210-MPO-2016-003**). I am enclosing the Inspection Report for your records. Several problems were cited during the inspection. These problems are outlined below, and explained in detail in the report:

- 1. *Roads/Access* The only access permitted is the use of FSR 226. Non-system access across the meadow, through the gate on the southwest side of the operation, is not permitted. Prior to these activities recommencing, a plan modification and an appropriate reclamation bond increase must be approved.
- 2. *Signs and Markers* Signs posted to the gates of the operation contain erroneous and/or problematic information (e.g. "Private Property", "You are Trespassing: Deadly Force Will Be Used").
- 3. *Bond Adequate* The bond held for this operation has not been reviewed since 2014 and must be recalculated/adjusted to adequately cover the existing disturbances.
- 4. Following MPO (1) No tree cutting is permitted under this MPO yet numerous trees have been felled within the operation that do not appear to be reasonably incidental to exploration, and therefore must cease immediately; (2) off-site hauling without a permit must cease immediately until the necessary permits have been secured & the cattle guards upgraded, as previously discussed; (3) long-term overnight occupancy nor any structures are not currently permitted under this MPO; and (4) hazardous materials outside of secondary containment systems is not permitted under the current MPO. See the report for more details.

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- 5. On Site Waste Trash and an oil spill were observed.
- 6. On Site Facilities No structures were approved under this current MPO.

You will need to immediately cease:

- 1. <u>Accessing the operation using non-system means (Item 1)</u>. Only FSR 44.2A and FSR 226 may be used to enter and exit the work site. Absolutely no off-road travel is permitted whatsoever.
- 2. <u>Felling and/or cutting trees (Item 4)</u>. Such activities are not permitted under the terms of this MPO and, given their distal nature to the only active pit, do not appear reasonably incidental to the exploration activities.
- 3. <u>Hauling without necessary permits (Item 4) across roads (FSR 44.2A)</u> <u>and cattle guards not designed for that weight capacity may be causing</u> *unreasonable, undue, and avoidable damage to forest resources.*

Within 5-days of receipt of this notice:

1. Remove all garbage and clean-up the oil spill (Item 5).

You will need to remedy the following by January 31, 2021:

- 1. Remove problematic signage (Item 2). Although the signs stating "You are Trespassing: Deadly Force Will Be Used" have, as of this writing, be removed, the remaining "Private Property" signs must also be removed.
- 2. Remove the travel trailer (Item 6). *No structures, as well as any long-term occupancy, are not currently permitted under this MPO.*

In order for you to bring your mining operations into compliance, you need to address the above issues within the timelines presented. Failure to comply with your terms and conditions in your Mine Plan of Operations is cause for an Authorized Officer to issue you a citation and/or a Notice of Noncompliance under 36 CFR § 228.7 and 36 CFR § 261.10.

Lastly, my office is calculating an updated reclamation bond estimate based on the data collected during the October 20, 2020 inspection (**Item 3**). The cost estimate will be provided to you *within 15 days*.

If you have any questions, please contact me or Geologist Amy Titterington at the South Park Ranger District at (719) 836-2031.

Sincerely,

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JOSHUA S. VOORHIS District Ranger

Enclosures:

1) Forest Service Inspection Report dated October 15, 2020

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2) The Steel Rose Decision Criteria signed on June 1, 2016

cc: Elliott Russell; Sheila Cross

Forest Service United States Department of Agriculture Pike and San Isabel National Forest South Park Ranger District Forest Phone: 719-836-2031



MINE PLAN OF OPERATIONS

MINE NAME:		CLAIM NUMBER(S):	INSPECTOR(S):				
St	eel Rose	CMC285386	A. Titterington, C. Baker, M. Holahan			r, M. Holahan	
TOWNSHIP:	RANGE:	SECTION(S):	COUNTY: T		TYPE OF OPERATION:		
0110S	0730W	21	Park		Mine Plan of Operations		
OPERATOR(S):		OPERATOR(S) PRESENT:		INSP. DATE:		INSP. TIME:	
Phillip Brueggeman, Eric Mountain		Yes: Eric Mountain		in October 15, 2020		14:00	

REASON FOR INSPECTION:			DATE OF LAST INSPECTION: 18-Jul-19			JOINT INSP. AGENCY: N/A		
Monitoring								
STATUS:	PLANEX	PIRATION DATE: MINERAL:			BOND AMOUNT:			
Current		12/31/2021 Lode			1-1	DRMS: \$12,600.00		
DRMS PERMIT NUMBER:		COUNTY SUP (Y/N):		PALS NUMBER:				
M-2006-031			N/A 2			28	810-021210-MPO-2016-003	
ACREAGE PERMITTED: ACREAGE 4.30 (DM 5/23/16)		DISTURE Approx. 3			and the second sec	CONTACT: Brueggeman: (719) 464-0638		
FOLLOW UP REQUIRED: INSPECTO Yes		OR'S SIGN	ATURE:	1		SIGNATURE DATE: 12/3/2020		

GENERAL INSPECTION FOCUS

The following chart outlines the focus of the inspection and evaluates each area based on their status.

ROADS/ACCESS	PC	BACKFILL & GRADING	NA	FOLLOWING MPO	РС
SIGNS AND MARKERS	РС	REVEGETATION	NA	ON SITE WASTE	РС
MACHINERY ON SITE	Y	RECLAMATION ADEQUATE	NA	ON SITE FACILITIES	РС
PROCESSING WASTE/TAILING	NA	BOND ADEQUATE	PC	OLD DIG SITES	NA

Y = Inspected and is satisfactory / NA = Not applicable / PC = Problem Cited

BACKGROUND

The Steel Rose mine, which is found the southeast portion of Section 21, T11S, R73W, 6th Principal Meridian approximately 13.0-miles west-northwest of Hartsel, Colorado, has a 25-year history encompassing multiple owners, claims, and Mine Plan of Operations (MPOs). A brief summary detailing this history follows:



<u>Howarth - 1995</u>

The South Park Ranger District (SPKRD) first received a mine Plan of Operations (MPO) for the Steel Rose operation from operator Bill Howarth on February 9, 1995. This plan proposed a one-month exploratory operation in search of "gold or high grade ore". The operator planned to use a backhoe to dig a hole about 30' to 40' deep and was bonded for \$300.00. This plan was authorized by Clint Kyhl for District Ranger Johnny Hodges on February 13, 1995.

A letter was sent to the operator on September 21, 1995, informing him that his disturbance level had exceeded his existing reclamation bond and that an additional \$600.00 was required for the operator to continue.

A letter was sent to the operator on July 31, 1997 to request an update of the Steel Rose operations, but no response is recorded on file.

According to BLM LR2000 records, the Steel Rose claims that belonged to Howarth closed on August 31, 1995, and no further documentation regarding Bill Howarth exists in our records.

Brueggeman - 1997

BLM LR2000 records show that the earliest Steel Rose unpatented mining claim (CMC249721) registered to Phillip Brueggeman was located on September 16, 1997. No documentation exists regarding the change in ownership of the operation, and that claim was closed in July the following year.

Philip Brueggeman located another unpatented mining claim named Steel Rose (CMC251125) on February 25, 2000 and submitted his first MPO to work the claim on August 18, 2000 in search of "high grade specimen". The operator proposed to continue digging the 40' deep pit using mechanized equipment and did so under several different MPOs over the years (see Fig. 1). It is of note that after the 2000 MPO submittal, the operations' target is only specified as "known rock" until the lastest MPO submittal (i.e. the 2016 submittal, 2810-021210-MPO-2016-003), which simply states "minerals within the existing hole".

Notably, on July 18, 2014, the State of Colorado approved the operator's request to increase the size of his permit area from 3.39 acres to 9.9 acres. After a review of the new permit area, the bond was calculated to be \$12,600.00. The reclamation bond was paid for on November 18, 2014 and remains the current bond amount for the operation.

The most recent MPO was submitted on April 12, 2016 and authorized by District Ranger Joshua Voorhis on June 6, 2016 – under which the operator is authorized for 4.3 acres of disturbance.



According to BLM LR2000 records, the Steel Rose unpatented mining claim listed on the 2016 MPO (*i.e.* CMC251125) was officially closed on September 1, 2017 and listed as "ABANDONED/FORFEITED" as a result of the 2018 maintenance fee going unpaid. One year later, on September 3, 2018, Brueggeman relocated the claim under the same name (CMC290798). Additionally, Eric Mountain located 8 more claims (entitled Steel Rose 2, Steel Rose 3, Steel Rose 4, Steel Rose V, Steel Rose VI, Steel Rose 7, Steel Rose 8, and Steel Rose 9; CMC293444, CMC293445, CMC293446, CMC293442, CMC293443, CMC293447, CMC293448, and CMC293449, respectively) adjacent to the Steel Rose on June 1, 2019.

The 2016 MPO is set to expire on December 31, 2021; it is noted in previous inspection reports that the operator confirmed that they intend to refill the northern portion of the site before the MPO expires should funding for further exploration become unavailable, however, this may no longer be the case as of this writing – as suggested by plans for future development and MPOs discussed with the operators during the visit detailed in this report.

OBSERVATIONS

I, Physical Science Technician Christian Baker, Physical Science Technician Margaret Holahan, and Forest Service Geologist Amy Titterington conducted a compliance inspection on the Steel Rose unpatented mining claim on October 16, 2020. We accessed the operation from Harstel, CO via US Hwy 24, CR 23, CR 23A, CR 44, FSR 44.2A, and FSR 226 (see Fig. 2).

We were met by Mr. Eric Mountain and some of his staff, including operator Rick Carvill, an assistant named Lacey (sp?) whose last name we did not get, and another unidentified woman. Mountain briefly discussed his general plans for expansion pursuant to the December 20, 2017 Executive Order entitled "Presidential Executive Order on a Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals" (Exec. Order 13817, 2017), the modifications that would be required to achieve said expansion, and the status of his progress towards gaining relevant permits from Park County. He also provided a binder of materials including maps and location certificates for the new Steel Rose claims (see Fig. 3; it is important to note that these claims are not reflected in the other maps included in this report as they have not formally been provided in an MPO modification or an altogether new MPO), some photos of the operation, an assay report dated December 20, 2005 from an undiscernible/undisclosed source, copies of said Executive Order (and subsequently related documents), and a few other miscellaneous documents such as a letter of correspondence between Mr. Mountain and one Nino Marcantonio – the Deputy Director of Defense Technology Innovation Program LLC. Afterwards, Rick Carvill provided us a tour of the operation.



In the vicinity of the now-closed Steel Rose unpatented mining claim (see Fig. 2 & 3), we observed the large-scale pit described in the MPO ("P1" through "P3", Photos 1-7), a drainage trench ("T1", Photo 8) roughly 900 ft in length, the two gates and their signs ("M1" and "M2", Photos 9-13), a camper trailer ("S1", Photo 14), and a campsite/staging area for equipment ("C1", Photos 15-17), and some felled trees ("F1" and "F2", Photos 18-20).

PROBLEMS CITED

Several problems were identified during this inspection:

- 1) Roads/Access
 - The only access permitted is the use of FSR 226. Non-system access across the meadow, through the gate on the southwest side of the operation, is not permitted and must immediately cease. Prior to these activities recommencing, a plan modification and an appropriate reclamation bond increase must be approved.
- 2) Signs and Markers
 - The "PRIVATE PROPERTY" signs must be removed as unpatented mining claims remain the property of the United States until such time that they become patented, and therefore are still public land.
- 3) Bond Adequate
 - The bond held for this operation has not been reviewed since 2014 and must be recalculated/adjusted to adequately cover the existing disturbances.
- 4) Following MPO
 - Absolutely no tree cutting is permitted under this MPO and only allowable when proven to be reasonably incidental to exploration of mineral deposits (as per the 1872 Mining Law, *as amended*). The distal nature of the felling to the pit, combined with the stockpiling exhibited in Photos 19 & 20, suggests the cutting is not, in fact, related to exploration and therefore must cease immediately.
 - Hauling off-site without the necessary permits must cease immediately and cannot commence until said permits are acquired and the cattle guards are upgraded as previously discussed.
 - Long-term overnight occupancy is not currently permitted under this MPO. As per the agreed to 8/3/2016 Decision Memo, overnight stays and leaving vehicles on the Forest are limited to a maximum of 14 consecutive days and no more than 28 days in a 60-day continuous period.



- A 55-gallon drum was observed on site (see Photo 16) that is not labelled and has no secondary containment. As per the agreed upon 8/3/2016 Decision Memo, no fuel is permitted to be stored on site, and any hydraulic fluid or 5-gallon gas tanks must be stored in the bed of a truck.
- 5) On Site Waste
 - Trash is present and must be removed immediately. Additionally, an oil spill was observed and must be cleaned up according to the terms in this MPO.
- 6) On Site Facilities
 - No structures were permitted under the terms of this MPO, and therefore the travel trailer must be removed from NFS lands.

RECOMMENDATIONS

Address the issues listed above within the requested timeframes.

It is important to note that without the approval of any modifications or extensions, no further operations may proceed beyond the terms of this MPO, which is set to expire on December 31, 2021. Pursuant to 36 C.F.R. § 228(g), operators then have one calendar year to complete all reclamation. Failure to do so may affect, in part or in full, the release of any remaining bonds. If the agreed upon timeline is unlikely to be met, the operator will need to notify the South Park Ranger District and establish one that may.

A follow-up inspection will be conducted to verify compliance with these recommendations.

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MAPS AND FIGURES

MPO SUBMITTED	MPO RECEIVED	RECEIVED BY	NEPA	MPO APPROVAL APPROVED B			
February 7, 1995	February 9, 1995	Forester Clint Kyhl	CE; 06/07/95	February 13, 1995 Clint Kyhl for Di Ranger Johnny H			
August 18, 2000	September 20, 2000	Forester Megan Kabele		Circa Oct. 12, 2000 District Ranger I Cosby			
September 14, 2002	November 20, 2002	Forester Todd Phillipe		ADDT INFO REQ SENT: OCTOBER 30, 2			
November 17, 2004	November 19, 2004	Jeffrey J. Hyatt					
August 17, 2005	August 18, 2005	N/A	BE; 10/13/05 CE; 03/20/06	June 2, 2006	District Ranger Sara Mayben		
March 6, 2007	March 8, 2007	Wendy Dobrowolski	CE; 05/31/07	November 13, 2007	District Ranger Sara Mayben		
April 17, 2009	-	-					
February 13, 2014	February 20, 2014	1		ADDT INFO REQ SENT: DECEMBER 3, 2014			
December 15, 2014	December 17, 2014	Geologist	N/A	-			
January 20, 2015	January 27, 2015	Amy	IN/IX	ENT: MARCH 27, 2015			
Resubmittal of Jan. 20, 2015	December 21, 2015	Titterington		ADDT INFO REQ SENT: JANUARY 15, 2			
April 12, 2016	April 15, 2016		CE; 05/23/16	June 1, 2016	District Ranger Joshua Voorhis		

Fig. 1. MPO timeline created from documents in the Steel Rose case file.

Forest Service United States Department of Agriculture





Fig. 2. Forest Visitor Map showing the general location of the Steel Rose operation.

Forest Service United States Department of Agriculture



	756843 756843 7/8/2019 12:28 PM 7 of 7 R\$39.50 D\$0.00 Debra A Green Park County Clerk
0	(THIS MAP MUST BE ATTACHED TO LOCATION CERTIFICATE) MAP OF <u>Steel Rose</u> 2,3,4,7,8,9
	attached to and hereby made a part of the Location Certificate, which map is prepared from an actual field survey of said Claim.
* ::	1. Name and Address of Discoverer of Claim: Eric Mountain E
× .,	Name Chilip. Edward Broeggoman Address 333 Ruxton Ave unit 10, Manitou Stess 80829
	2. Legal Subdivision of the land upon which the claim is located, if such land is surveyed:
	Quarter of Section $2($, Township 115 , Range 730 of the 64 , PH Meridian, in the County of $PAPI_5$, State of Colorado.
4.	3. The claim pattern with courses and distances of the boundary lines is as follows:
	148% 2 2 12 a 1/2
v o	- 2 2 12 W/2 Sw/14 Sw/14 52 14 NE14 NE14 NE14
	2 4 12 EY2 W/2 N 15 1/4 NW 1/4 NE 1/4
	NW 1/4 NW 1/4 NE 1/4 52 1/4 52 1/4 52 1/4
	W/2 51/2 W1/2
	560 14 51014 52 14 52 14 52 14 52 14 52 14
-	
	Scole: 1 inch equals 500 feet. Dated at, Colorado, this property of July 817

Fig. 3. Map of the new Steel Rose claims (not on MPO), as submitted in the binder provided by the operators during this inspection's visit. The circled number indicates which Steel Rose claim it is.

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Fig. 3. Topographic map showing the Steel Rose operation. Points of interest include the largescale pit described in the MPO ("P1" through "P3", Photos 1-7), a drainage trench ("T1", Photo 8) roughly 900 ft in length, the two gates and their signs ("M1" and "M2", Photos 9-13), a camper trailer ("S1", Photo 14), and a campsite/staging area for equipment ("C1", Photos 15-17), and some felled trees ("F1" and "F2", Photos 18-20).

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Fig. 4. Satellite imagery showing the Lakeview Lode claim. Points of interest include the largescale pit described in the MPO ("P1" through "P3", Photos 1-7), a drainage trench ("T1", Photo 8) roughly 900 ft in length, the two gates and their signs ("M1" and "M2", Photos 9-13), a camper trailer ("S1", Photo 14), and a campsite/staging area for equipment ("C1", Photos 15-17), and some felled trees ("F1" and "F2", Photos 18-20). Imagery from NAIP 2019.

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PHOTOS



Photo 1. An overview photo of the main pit as seen from the north atop the collar around the pit (Taken at "P1" on Fig. 3 & 4). Alternate views taken from this point in Photos 2 and 3.

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Photo 2. The road exiting the main pit looking south (Taken at "P1" on Fig. 3 & 4).

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Photo 3. The road entering the main pit looking southwest (Taken at "P1" on Fig. 3 & 4).

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Photo 4. An overview photo (Taken at "P2" on Fig. 3 & 4) of the main pit as seen from atop the collar around the pit – looking northeast – showing the road seen in Photos 2 and 3. Alternate views taken from this point in Photos 5 and 6.

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Photo 5. An overview photo (Taken at "P2" on Fig. 3 & 4) of the main pit as seen from atop the collar around the pit – looking east – showing the heavy equipment on site.

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Photo 6. An overview photo (Taken at "P2" on Fig. 3 & 4) of the main pit looking south – as seen from atop the collar around the pit.

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Photo 7. An overview taken from inside the pit ("P3" on Fig. 3 & 4) looking southwest.

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Photo 8. The drainage trench ("T1" on Fig. 3 & 4), as seen from its western terminus looking southeast. This photo is representative of the trench along the entirety of its length, which is roughly 900'.

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Photo 9. The western entrance gate ("M1" on Fig. 3 & 5) and its signage. Close ups of the problematic signs in Photos 10 & 11.

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Photo 10. A sign zip-tied to the western entrance gate ("M1" on Fig. 3 & 4) that has, as of this writing, been removed.

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Photo 11. Another sign zip-tied to the western entrance gate ("M1" on Fig. 3 & 4) that must be removed.

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Photo 12. The signage posted on the northern entrance gate ("M2" on Fig. 3 & 4), including another "PRIVATE PROPERTY" sign that must be removed.

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Photo 13. More signage posted on the northern entrance gate ("M2" on Fig. 3 & 4).

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Photo 14. A camper trailer ("S1" on Fig. 3 & 4) that is used as an office, according to one of the maps included in the binder provided to us during this visit.

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Photo 15. An overview (taken from "C1" on Fig. 3 & 4) of the camping/staging area as seen from the north. Alternate views in Photos 16 & 17.

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Photo 16. Alternate view of the camping/staging area ("C1" on Fig. 3 & 4) looking north. Operators' vehicles, as well as a 55-gallon drum with an attatched hose, are notable.

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Photo 17. Close up of a water container and generator at the camping/staging area ("C1" on Fig. 3 & 4). To the right, obsured in this photo, is a stock pile of aspen logs.

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Photo 18. A flagged and cut tree ("F1" on Fig. 3 & 4).

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Photo 19. A clear-cut area ("F2" on Fig. 3 & 4) looking north.

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Photo 20. A stock-pile of cut limbs ("F2" on Fig. 3 & 4) looking northeast.



FS_Bruegg_InspRep_120220_Final

1 message

Amy Titterington via Adobe Acrobat <message@adobe.com> Reply-To: Adobe Document Cloud <message@adobe.com> To: elliott.russell@state.co.us Fri, Dec 18, 2020 at 3:24 PM

📕 Adobe Acrobat



Amy Titterington has shared FS_Bruegg_InspRep_120220_Final.pdf.

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Reclamation Bond Cost Summary — Bond Update for Brueggeman-West Steel Rose MPO (#2810-021210-MPO-2016-003)

Operators Phillip Brueggeman and Eric Mountain have been operating on the Steel Rose unpatented mining claim since their plan of operations was approved in 2016. A compliance inspection was conducted on October 15, 2020. During this inspection, disturbances were measured with GPS-equipped smartphones. Forest Service direction and policy require that reclamation bonds be reviewed annually for adequacy, considering such factors, for example, as changing site conditions and unforeseen disturbances regulations. The bond may also be adjusted during the term of the MPO in response to changes in the operations or to changes in the economy.

This calculation was created following the Forest Service Guide for Reclamation Bond Estimation and Administration. In order to fairly and equitably calculate the reclamation bond costs, the following assumptions have been made:

- Operators are following their Steel Rose Mine Plan of Operations, as described.
- The Forest Service will need to complete the reclamation work, which will be done through a contractor using heavy equipment.
- Cost estimates are based on Forest Service cost estimate guides and actual contractor bid estimates.
- Costs reflect a combination of equipment/material/personnel.
- The area of disturbance includes the primary pit and a drainage trench, with maximum dimensions of 300' x 40' x 50' (0.275 acres, 600,000 bank cubic feet (BCF)) for the pit, and measured dimensions of 900' x 2' x 1' (0.04 acres; 1,800 bank cubic feet (BCF)) for the trench not including any topsoil and waste rock spoil sites.
- To convert bank cubic feet (BCF) to bank cubic yards (BCY), divide BCF by 27.
- To calculate loose cubic yards (LCY) from BCY, multiply BCY by the swell factor of the material (Decomposed Rock 75% Rock, 25% Earth).
- The Swell or Bulking factor of Decomposed Rock (75% Rock, 25% Earth) is 1.25 or 25%. <u>https://www.nrc.gov/docs/ML0807/ML080700314.pdf</u>
- *Definition of Swell or Bulking Factor* A cubic yard of earth measured in its natural position swells to more than a cubic yard after it is excavated. This occurs because of an increase in **voids**. Swell or Bulk is expressed as a percentage of natural volume.
- Total volume for the excavation is 27,861 LCY. Total acreage is: 0.275 + 0.04 = 0.315.
- The 2-track non-system access roads leading into the operation site from its north and west both coming from FSR 44 are estimated to be 9' wide by approximately 650' long, or 5,850 square feet (SF). Total acreage is 0.134 acres. Hand raking and seeding will be required at final reclamation. Additionally, braids have been created along FSR 44 and FSR 44.2A that will need to be decommissioned and restored; these braids altogether measure approximately 9' wide by 4,110' long (i.e. 36,990 square feet, or 0.849 acres).
- Total disturbance is 1.298 acres (non-system access roads + braids + excavation).
- Location-specific seed mix will be used on site (recommended mix attached).
- Seeding rate is 25 lbs/acre. For 1.298 acres (excavations + roads/braids), 32.45 lbs of seed will be needed. Leave No Trace standards are the basis for the reclamation work.
- Mobilization costs assume equipment will be coming from Wagner Equipment Rental, Colorado Springs, Colorado (990 Meadowbrook Parkway, Colorado Springs, CO 80915; 62.7 miles one way).
- Direct Costs are based upon the details of the reclamation work outlined in the Plan of Operations.
- Indirect Costs are those fees and charges over and above the direct reclamation costs. Indirect costs include contingency costs for the operation, along with the costs of reclamation management (supervision), and/or administration (inspection).

Task	Task Description	Unit	Direct	Indirect
			Costs	Costs
			(rounded	(rounded
			to nearest	to nearest
			whole	whole
			number)	number)
1	Backfill 27,861 cubic yards (LCY) of dig	42.86	6,663.00	
	site with D8 crawler dozer w/ 100'	hours		
	average haul distance @ approximately			
	650 LCY/hr maximum production rate @			
	\$155.45/hour.			
2	Recontouring 0.315 acres (13721 SF) at	5.717	889.00	
	2400 SF/hr production rate @	hours		
	\$155.45/hour			
3	Seed rate: 25 lbs/ acre @ 1.298 acres @	32.45	471.00	
	\$14.50/ lb.	lbs.		
4	Seeding application (broadcast) cost	1.298	346.00	
	\$267.22/ acre	acres		
5	Mobilization of D8 Crawler Dozer w/	63	871.00	
	lowboy @ \$13.83/mile to Forest Boundary	miles		
	(carried) from Colorado Springs			
6	Mobilization of D8 to worksite (driven)	1.7	264.00	
	5.0-mile round trip at 3 mph @	hours		
	\$155.45/hr.			
7	Equipment removal w/lowboy @	63	871.00	
	\$13.83/mile round trip to Forest Boundary	miles		
	and back to Colorado Springs			
8	Road Maintenance – Level 2 Roads @	2.5	2,906.00	
	\$1162.20/mile	miles	_,,	
9	Roadway Obliteration, Method 2 @	0.902	3,770.00	
	\$4,179.68	miles	5,770.00	
10	Cattleguard Upgrade Materials	N/A	3,200.00	
10	Cattleguard Upgrade Labor	N/A	4,000.00	
12	Site clean-up: 1 GS5 seasonal @ \$179/day	1 day	4,000.00	
12	(supervision)	1 uay		179.00
13	Site monitoring: 1 GS5 seasonal @ \$179/	3 days		
15	day for 3 years (monitoring)	5 days		537.00
	day for 5 years (monitoring)			
150/ Indine at Casta	Format Compiles administration as ats			
15% Indirect Costs	Forest Service administrative costs			3,638.00
	(contingency costs)			
	Forest Service administrative costs			716.00
Tetal D'act Cert	(supervision and monitoring)		24.251	
Total Direct Costs			24,251	1.054.00
Total Indirect Costs				4,354.00
Total Bond				28,605.00
Minus current bond				12,600
Total Forest Service				
Bond (Rounded to)				\$16,005

Prepared by Amy J. Titterington Geologist/ AML Coordinator South Park Ranger District December 18, 2020 Production costs and volumes calculated by Caitlin Woods, Civil Engineer, and Amy Titterington, Geologist, PSICC. Government Cost Estimates and contractor estimates supplied by the PSICC Engineering Group, 2020 Caterpillar Performance Handbook, and local contractors.



FW: Steel Rose bond revision

Titterington, Amy J -FS <amy.j.titterington@usda.gov> To: "Elliott.russell@state.co.us" <elliott.russell@state.co.us> Fri, Dec 18, 2020 at 3:06 PM

From: Titterington, Amy J -FS Sent: Friday, December 18, 2020 3:00 PM To: Russell - DNR, Elliott <elliott.russell@state.co.us> Subject: Steel Rose bond revision

Hey Elliott,

Attached is the revised calculation for Steel Rose, the avoidance maps for Downing, and the inspection report for Steele Rose.

Please let me know if you have any questions or concerns.

I'd like to get this mailed out by the end of the month.

Amy



Amy Titterington, PG, CMA I Geologist/ AML Coordinator

Forest Service

PSICC, South Park Ranger Distirct

p: 719-836-3871 f: 719-836-3875 amy.j.titterington@usda.gov

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