



STATE OF
COLORADO

Girardi - DNR, Chris <chris.girardi@state.co.us>

Passiflora NOI Project, P2024011- Adequacy Review #3 Letter and Cost Estimate

1 message

Girardi - DNR, Chris <chris.girardi@state.co.us>

Tue, Dec 17, 2024 at 3:36 PM

To: HARALD HOEGBERG <geohoeg@comcast.net>

Cc: "Pike, James D" <jpike@blm.gov>, Jared Ebert - DNR <jared.ebert@state.co.us>, Sara Stevenson-Benn - DNR <sara.stevenson-benn@state.co.us>

Hello Harald,

Attached to this email is a copy of the Division's Adequacy Review #3 Letter and Cost Estimate.

A hard copy will not be mailed unless requested.

Please let me know if you have any questions.

Thanks,
Chris

Chris Girardi

Environmental Protection Specialist Intern



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

P: (720) 793-3041

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PassifloraNOIAdequacyReview#3_UpdatedCostEstimate.pdf
427K



December 17, 2024

Viscount Colorado Holdings
Attn: Harald Hoegberg
1805 Turnbridge Dr.
Richmond, VA 23238

RE: Passiflora Project, DRMS File No. P-2024-011, Notice of Intent to Conduct Mineral Prospecting, Adequacy Review #3

Dear Mr. Harald Hoegberg,

On September 10th, 2024, the Colorado Division of Reclamation, Mining and Safety (“DRMS” or “Division”) received a Notice of Intent to Conduct Prospecting Operations for Hard Rock/Metal Mines (“NOI”) form. The Division sent an adequacy review letter on October 28, 2024, and on November 5, 2024 the Division received the response submitted by Viscount Colorado Holdings (VCH) for the Passiflora Project NOI. The Division sent an adequacy review #2 letter on November 13, 2024, and on December 6, 2024 the Division received a response by VCH. In addition, the Division received another response from VCH on December 16, 2024. The following adequacy items in the NOI application need to be addressed before the application can be approved.

Project Description:

1. Item 6(G)- Please clarify where chemicals and fuel containers will be stored and containment measures in the event of a spill.
 - a. **VCH Response:** Please see attachment 1.
 - b. **Division Response:** The Applicant clarified spill containment measures that will be employed but failed to clarify the location of chemicals and fuel containers at the drilling operation. Please clarify this.
 - c. **Division Response:** This item was not addressed in the most recent response or in the revised application pages. Please clarify the location of chemicals and fuel containers during drilling activities.
2. Item 6(H)- The Applicant indicates the disturbed area will be less than 0.25 acres. See item #10 below regarding drill pads. If each of the drill pads will be affected based on the dimensions provided on topographic gradient calculations page provided by with the application, then about 0.5 acres will be affected. Please clarify and update the NOI application accordingly.
 - a. **VCH Response:** The drill pad calculation was prepared to show the general



gradient combined with the “before” photographs, to see if the drillers thought we needed to construct pad. None of the drillers thought the pads were necessary, and that the drill could be levelled using the drills hydraulics system. The “before” photographs and gradient calculations was attached to the NOI to conduct exploration for the DRMS reviewer to add support to item 5, in the application. It seems that the disturbance of 0.5 acres was calculated and includes the 5 drill pads, since drill pads will not be needed the 0.25 seems more accurate.

- b. **Division Response:** It appears the applicant is arguing that a “drill pad”, will not need to be constructed since the natural grade of the area does not require it for the drilling operation. The Division understands this, however the drill rig, water truck, rod truck, pickups (3), mud pits, light plant, and backhoe proposed to be used will certainly disturb the ground and affect the land during the operation. These areas will need to be reclaimed in accordance with the approved plan that conforms to the performance standards of Rule 3. Topsoil must be salvaged and stockpiled prior to the drilling operation and then replaced after the drilling operation. The affected land will then need to be revegetated. Please clarify the area that will be affected by the drilling operation, including access route/roads created, topsoil storage areas, equipment storage, parking, work areas, etc.
 - c. **VCH Response:** The top 6-8” of soil will be stockpiled in the area of the mud pits and will be returned after the completion of the hole. The area will then be re-seeded with the approved seed mix.
 - d. **Division Response:** Please clarify, using a figure, to depict the location of the borehole, topsoil stockpiles, mud pits, equipment storage, parking, etc. In addition, the Applicant included pictures of topsoil and the surrounding area labeled as PF-3A. Please clarify if PF-03 will be the sole borehole location drilled as per the revised submittal. Please submit a revised map showing the location of the drill hole location in accordance with Rule 5.1.2(v).
3. Item 6(C)- The Applicant states the depth of the mud pits will 4 feet. However, Item 5 indicates the depth of the mud pits will be 8 feet. Please clarify this discrepancy and update the NOI application accordingly.

Financial Warranty:

4. Enclosed is the reclamation cost estimate for the proposed operation. Please review the estimate. DRMS must seek concurrence with the Bureau of Land Management (BLM) on the proposed financial warranty amount. In the meantime, please review the estimate and provide feedback on specific items if there are disagreements.
- a. **VCH Response:** We have reviewed your reclamation cost estimate, and we do not concur. It is over 420% higher than the cost estimate calculated by BLM’s Daniel Pike, with which we agree. Our calculations, based on our experience

since 2016, were around \$12,000.

- b. **Division Response:** The Division is required to hold a financial warranty sufficient to complete the reclamation plan in accordance with Rule 4.2.1. The reclamation cost estimate provided is what it would cost the Division to, plug and seal the drillholes proposed with this project and reclaim the land affected by the operation. The Division has consulted with the Bureau of Land Management regarding this, and we agree with this requirement. However, it seems there may be a discrepancy in the scope of the project in terms of number and depth of drill holes. As the applicant is proposing five drill holes at a depth of 5,000 feet each and with drill holes being 12 inches in diameter, the Division must hold a financial warranty to plug and seal these holes which is a substantial cost. If the applicant would like to revise their plan by reducing the number of drill holes, drill depths, etc. that would reduce the required financial warranty amount. The applicant will need to post the required financial warranty and receive DRMS authorization to proceed prior to conducting the prospecting operation.
- c. **VCH Response:** Based on our experience working in this area, we estimate that the reclamation will cost \$4,000 or less.
- d. **Division Response:** The Division is required to hold a financial warranty in the amount it would cost the State to complete reclamation in accordance with Rule 4.2.1 and Rule 5.3.3. Based on the revised NOI application provided, enclosed is the Division's cost estimate. The Division finds the reclamation liability for the project to be \$70,640. Please submit a financial warranty in this amount.

Pursuant to Rule 5.1.3(c) of the Hard Rock/Metal Mining Rules and Regulations, all adequacy items must be addressed by **December 27, 2024**. If this date arrives and the adequacy concerns have not been addressed and/or the additional financial warranty has not been submitted and accepted by the Division, the NOI will be denied. Please note that prospecting operations may not begin until authorized by the Division and until the Plan of Operations has been approved by the Bureau of Land Management.

If you have any questions, please contact me at chris.girardi@state.co.us or at (720) 793-3041.

Sincerely,



Chris Girardi
Environmental Protection Specialist Intern

EC: Daniel Pike, BLM, jpike@blm.gov
Jared Ebert, DRMS jared.ebert@state.co.us
Sara Stevensen-Benn, DRMS sara.stevenson-benn@state.co.us

COST SUMMARY WORK

Task description: Reclamation of Boreholes

Site: Passiflora Permit Action: Passiflora NOI Permit/Job#: P2024011

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 10/21/2024 County: Custer Filename: P011-000
User: CMG

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Sealing of Boreholes	BOREHOLE	1	52.00	\$48,023
001B	Backfilling of Mud Pits and Spreading of Topsoil	DOZER	1	2.20	\$193
002	Revegetation	REVEGE	1	1.00	\$134
003	Mobilization to site	MOBILIZE	1	6.17	\$4,786
<u>SUBTOTALS:</u>				61.37	\$53,136

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	<u>\$1,073</u>
Performance bond:	1.05	Total =	<u>\$558</u>
Job superintendent:	30.69	Total =	<u>\$2,432</u>
Profit:	10.00	Total =	<u>\$5,314</u>
		TOTAL O & P =	<u>\$9,377</u>
		CONTRACT AMOUNT (direct + O & P) =	<u>\$62,513</u>

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	<u>\$0</u>	Total =	<u>\$0</u>
Engineering work and/or contract/bid preparation:	<u>8.00</u>	Total =	<u>\$5,001</u>
Reclamation management and/or administration:	<u>5.00</u>		<u>\$3,126</u>

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$17,504

TOTAL BOND AMOUNT (direct + indirect) = \$70,640

BOREHOLE SEALING WORK

Task description: Sealing of Boreholes

Site: Passiflora Permit Action: Passiflora NOI Permit/Job#: P2024011

PROJECT IDENTIFICATION

Task #:	001	State:	Colorado	Abbreviation:	None
Date:	10/21/2024	County:	Custer	Filename:	P011-001
User:	CMG				

Agency or organization name: DRMS

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Seal 1 Borehole with Bentonite from bottom to top 20'	Bentonite seal - 4 in. (labor, equip, materials)	4.5	5000	4,980.00	LF	\$9.61	\$47,848.84
Seal 1 Borehole with Cement at top 20'	Portland cement grout - 4 in. (labor, equip, materials)	4.5	5000	20.00	LF	\$8.71	\$174.26

Job Hours:	52.00	Total Cost:	\$48,023.00
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BULLDOZER WORK

Task description: Backfilling of Mud Pits and Spreading of Topsoil

Site: Passiflora

Permit Action: Passiflora NOI

Permit/Job#: P2024011

PROJECT IDENTIFICATION

Task #: 001B

State: Colorado

Abbreviation: None

Date: 12/17/2024

County: Custer

Filename: P011-001B

User: CMG

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D3K LGP - 3P

Horsepower: 74

Blade Type: Power Angle Tilt

Attachment: 3-shank ripper

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$31.95	NA
Operating Cost/Hour:	\$13.00	50
Ripper own. Cost/Hour:	\$3.31	NA
Ripper op. Cost/Hour:	\$1.21	50
Operator Cost/Hour:	\$38.59	NA
Total unit Cost/Hour:	\$88.06	
Total Fleet Cost/Hour:	\$88.06	

MATERIAL QUANTITIES

Initial Volume: 120

Swell factor: 1.000

Loose volume: 120 LCY

Source of estimated volume: Volume based on dimensions of Mud Pits

Source of estimated swell
factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet

Unadjusted hourly
production: 169.6 LCY/hr

Materials consistency
description: Loose stockpile 1.2

Average push
gradient: 0 %

Average site altitude: 8,010 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

<u>Job Condition Correction Factor</u>		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.600	(FND-SF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6445

Adjusted unit
production: 109.31 LCY/hr

Adjusted fleet
production: **109.31** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.806/LCY

Total job time: **2.20** Hours

Total job cost: **\$193**

REVEGETATION WORK

Task description: Revegetation

Site: Passiflora

Permit Action: Passiflora NOI

Permit/Job#: P2024011

PROJECT IDENTIFICATION

Task #: 002
Date: 10/21/2024
User: CMG

State: Colorado
County: Custer

Abbreviation: None
Filename: P011-002

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluegrass - Sherman	1.00	20.66	\$15.85
Arizona Fescue - Redondo	2.50	28.70	\$37.66
Blue Grama - Native	1.50	24.48	\$31.99
Mountain Brome - Bromar	10.00	16.07	\$60.17
Intermediate Wheatgrass - Oahe	10.00	21.35	\$46.46
Milk Vetch, Cicer - Lutana	6.00	19.97	\$58.73
Western Wheatgrass - Native	8.00	20.20	\$72.05
Totals Seed Mix	39.00	151.43	\$322.90

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$272.56
Total Seed Application Cost/Acre	\$272.56

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres:	0.15	Cost /Acre:	\$595.46
Estimated Failure Rate:	50%	Cost /Acre*:	\$595.46
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$89.32
Reseeding Job Cost:	\$44.66
Total Job Cost:	\$134
Job Hours:	1.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Mobilization to site

Site: Passiflora

Permit Action: Passiflora NOI

Permit/Job#: P2024011

PROJECT IDENTIFICATION

Task #: 003

State: Colorado

Abbreviation: None

Date: 10/21/2024

County: Custer

Filename: P011-003

User: CMG

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day

Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,
400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT
TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

NON-ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Atlas Capco DMM2 - 10-5/8"	0.00	\$324.36	\$59.44	1	\$383.80	\$59.44	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
Cat D3K XL - 3P	9.85	\$26.67	\$59.44	1	\$86.11	\$59.44	\$250.00

Subtotals: **\$570.37** **\$178.32** **\$750.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 7-8 cy, 4x4	\$74.84	3	\$224.52	\$224.52
Water Tanker, 3,500 Gal.	\$53.90	1	\$53.90	\$53.90

Subtotals: **\$278.42** **\$278.42**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: CAÑON CITY

Total one-way travel distance: 47.00 miles

Average Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost *	\$4,204.67
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$581.59
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.04	1.04
Return Time (Hours):	1.04	1.04
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.09	2.09

JOB TIME AND COST

Total job time: 6.18 Hours

Total job cost: \$4,786