



TRAPPER MINING INC.

P.O. Box 187

Craig, Colorado 81626

(970) 824-4401

October 8, 2020

Ms. Robin Reilley
Environmental Protection Specialist
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Trapper Mining Inc., Permit No. C-1981-010

Permit Revision PR-10, Response to Adequacy Review No. 2

Dear Ms. Reilley:

Enclosed are two copies of our response to your Adequacy Review #2 letter of October 1, 2020 to Trapper's Permit Revision PR-10 application. We have used your original letter as the base format, with our responses following each of your comments. Only the remaining outstanding items have been included in this response.

The following revised permit narrative pages are enclosed: None

The following revised permit tables are enclosed: None

The following revised maps are enclosed: M45

The following new appendix information is enclosed: App A, Bond Addendum Summary; App K, Section XVIII and App K TOC page 2.

Map M45 has been included with updated boundaries of current archeological surveys conducted during the summer of 2020 in response to requests from SHPO to update surveys in the proposed areas involved with this permit revision. Appendix K Section; XVIII contains the archeological report for the survey conducted in the area of the I and J pit proposed disturbance.

Rule 3.02.2: Performance Bond Determination DRMS August 2020

The PR10 application requests 155.0 acres of new disturbance and 51.7 acres of redisturbance of Phase III bond released lands. This, according to DRMS amounts to 206.7 acres of new disturbance. Trapper's Appendix A, submitted with the PR10 application only accounts for 80.72 acres of reclamation located in J Pit. It appears that TMI is only bonding for a fraction of the area of requested disturbance.

3. Please clarify and justify the cost estimate submitted with the application.

Trapper Response:

The overburden removal/mining sequence in I and J pits utilizes the waste material from one pit to backfilled into another pit. The waste material from the initial pit must be placed in an out of pit spoil dump. Spoil material from subsequent pits is hauled back to the prior mined out pit. This results in the prior pit being backfilled as the new pit is being developed. Therefore the assumption was made that before the Worst-Case Bond Year occurs, most of the I and J pit complex would be backfilled, topsoiled and revegetated to the Worst-Case Bond Year of 2022.

	2020 Acres	2021 Acres	2022 Acres	Total Acres
Disturbed Acres				
I Pit Middle	31.9			31.9
I Pit East		37.7		37.7
J Pit Middle		56.5		56.5
J Pit East	28.4	51.5		79.9
OB Pile	0.9			0.9
Total Disturbed	61.1	145.6	-	206.7
Reclaimed Acres				
I Pit Middle		31.9		31.9
I Pit East			23.4	23.4
J Pit Middle			56.5	56.5
J Pit East			14.2	14.2
Total Reclaimed	-	31.9	94.1	126.0
Net Open Acres	61.1	174.8	80.7	

The table above anticipates having 80.7 acres of open lands at the end of the permit term that ultimately needs to be reclaimed. It is anticipated that there will be 126 acres of reclaimed land that will not be Phase Bond Released as yet. Trapper submitted the PR10 application prior to the final approval of the PR9 application, in which corrections were made regarding this assumption that, lands assumed to be graded topsoiled and revegetated, prior to the Worst Case Bond Year would require additional work, (see CIRCES Task RNYBR). Utilizing this premise, the Bond Estimate for PR10 has been revise to include these 126.0 acres in I and J pits. A separate task/line item was inserted into the Direct Cost portion of the PR10 Appendix A Summary Table (Table A-1), which includes the additional costs of topsoil placement and revegetation for the entire 206.7 acres, 80.7 acres to be fully reclaimed and 126.0 acres of RNYBR. The same unit costs and methodology used for CIRCES PR9 bond RNYBR adjustment was also employed in the PR10 cost adjustment. The revise PR10 bond estimate is included.

DRMS October 2020

Trapper's response is adequate with the exception of:

3a. Please submit Table 1.4-1 Open Acreage Table as part of this permitting action.

Trapper Response:

Upon further discussion with Ms. Reilley updates to table 1.4-1 will not be necessary. The requested information has been included on the "Appendix A Bond Addendum Summary," with the additional bonding amount added for PR-10 and included in this response.

Rule 4.09.1(7): Disposal of Excess Spoil DRMS August 2020

The Division of Reclamation, Mining and Safety (DRMS), has reviewed Evaluation of I and J Pit Spoil Pile Stability Report by Agapito Associates, Inc. dated May 26, 2019 for the Trapper Mine Permit Revision PR-10.

- 1. In the Conclusion and Recommendations section of the report, the Operator states the spoil piles will be constructed in small lifts (20-40 feet) to allow for better compaction of the spoil particles. Pursuant to Rule 4.09.1(7), please explain how the spoil piles will be concurrently compacted to ensure mass stability and prevent mass movement.*
- 2. Please provide the Rockscience Inc. slope stability analysis data for the Agapito Associates, Inc. geotechnical evaluation of the I and J Pits Spoil Piles to allow the Division to duplicate the analysis with Clover Technology's Galena software for verification purposes. Please include the profile geometries and the material properties used in the stability analysis, preferably in paper and electronic forms.*

Trapper Response to Comment 4:

The spoil piles will be dumped in 20-foot lifts for the most part with the large overburden trucks providing the required compaction for the layers of fill. To sort the rock required for the underdrain, taller dump faces, up to 40 feet tall, will be utilized to collect the rock. Even allowing for this taller face, the compaction provided during this process allows for safety factors above 1.75 at the worst case, exceeding the 1.5 criterion.

DRMS October 2020

Trapper's response is adequate.

Trapper Response to Comment 5:

The profile geometries are included separately as DXF files so that they may be opened as digital files and measurements taken from them. They are called A Section through D Section and their material properties are included in Table 1, Summary Numerical Model Input Parameters, Page 4 of Agapito Associates, Inc. report 'Re: Evaluation of I and J Pit Spoil Pile Stability, Trapper Mine.

DRMS October 2020

Trapper's response is adequate with the exception of:

5a. Please export the x,y coordinates from the DXF file crosssections A-D into an excel file and submit the excel file to DRMS.

Trapper Response to Comment 5a:

Trapper has provided the information it can in regard to the drawings and model data used in the Agapito study of spoil pile analysis for the I and J Pits. Trapper was unable to provide the exact information requested above as it does not exist within the supplied drawings. After further discussions with DRMS personnel the issue has been resolved.

Please get back to us with any questions, comments or concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read "Graham Roberts", followed by a horizontal flourish.

Graham Roberts
Environmental Supervisor
Trapper Mining Inc.

c PR-10 binder
File 109.2.3.4