



October 14, 2021

Mr. David Felderhof  
Zephyr Gold USA Ltd.  
1959 Upper Water St. Suite 1300  
Halifax, Nova Scotia, CA B3J 3N2

**Re: Dawson Gold Mine, Permit No. M-2021-046;  
Preliminary Adequacy Review**

Dear Mr. Felderhof:

The Division of Reclamation, Mining and Safety (Division) has completed its preliminary adequacy review (PAR) of your Dawson Gold Mine 112d-2 Reclamation Permit Application. The application was received on July 2, 2021. On July 15, 2021 the Division determined that the permit application was “filed” as that term is defined in Rule 1.1(20.1) of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board (MLRB). Our July 15<sup>th</sup> letter also notified you that we determined the Application was complex and **set the decision date for the application to December 13, 2021**. It should be noted the public comment period ended September 1, 2021 and the Division received 263 timely comments.

Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, it will be your responsibility to request an extension of the review period. If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the Division will deny this application.

The review consisted of comparing the application content with specific requirements of the Hard Rock Act, 34-32-101 et seq., C.R.S. (the Act) and the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard rock, Metal and Designated Mining Operations (Rules). The Division is formally requesting the Applicant provide a cover letter responding to each adequacy item as well as providing appropriate replacement pages/sections/exhibits/etc. for each response. This will allow the Applicant and the Division to work towards having a “living document”.

The following adequacy questions are arranged by first addressing the Application Form, followed by Rule 3 and Rule 6.4 Exhibits, respectively for convenience and organization.

## **APPLICATION**

The Application is adequate as submitted.

## **RULE 3.1 - RECLAMATION PERFORMANCE STANDARDS**

### **3.1.6 Water - General Requirements**



1. Mine pool: Rule 3.1.6(1) tasks the Division with protecting water quality. The mine plan indicates the mine will need to be dewatered and that pumped water may require treatment prior to release. Furthermore, House Bill 19-1113 (copy attached) does not allow the Division to approve a permit where perpetual water treatment is expected. As required by House Bill 19-1113, please demonstrate, by substantial evidence, a reasonably foreseeable end date for any water quality treatment necessary to ensure compliance with applicable water quality standards.
2. Potential seepage treatment: Paragraph 2.5.7 states "...seepage will be monitored and treated if necessary to meet water quality standards of the State of Colorado. Once demonstrated to no longer be necessary for water quality monitoring, the contact water pond will be decommissioned, re-graded to original topography, and re-vegetated." If treatment will be required, please demonstrate, by substantial evidence, a reasonably foreseeable end date to such treatment.
3. Water rights: Paragraph 2.7.6 indicates the mine will need approximately 130 gallons of water per minute during operations, or 200 acre-feet annually. Paragraph 2.4.3.4.2 states "Fresh water for the mill process water and mine operations will be supplied from groundwater wells...". Exhibit M states the Colorado Division of Water Resources (DWR) will be contacted to obtain a well permit for dewatering the mine. Is it expected all water needs will be met from the mine dewatering effort, or are additional sources of water needed? As required by Rule 6.4.7(4), please identify all sources of water to supply the project water requirements for the mining operation and reclamation.

### **3.1.7 Groundwater – Specific Requirements**

4. Groundwater protection: Groundwater comments are presented under the Exhibit G section below.

### **3.1.9 Topsoiling**

5. Vegetative piles: A majority of the proposed affected area is covered by pinyon and juniper trees. Rule 3.1.9(8) requires Vegetative piles shall be removed from the area or utilized in accordance with the Reclamation Plan. Additionally, Rule 3.1.9(2) requires the Operator to make a reasonable effort to ensure that existing vegetation is put to a beneficial use such as firewood, mulching, lumber, etc. What is the proposed disposition of the trees that will need to be removed?

### **3.1.10 Revegetation**

6. Weed control: Exhibit J states "Noxious weeds have not established because very little disturbance exists". Provided the Application is approved, disturbance will follow. It is recommended that a weed control plan is established prior to creating disturbance so that implementation of weed control measures can commence immediately upon observation of any state-listed noxious weeds. The weed control plan should account for any noxious weeds which are common to the area of the proposed mine. Please provide a weed control plan addressing how noxious weeds will be monitored for and treated.

## **RULE 6.4 - SPECIFIC EXHIBIT REQUIREMENTS - 112 RECLAMATION OPERATION**

6.4.1 EXHIBIT A - Legal Description

7. Entrance Location: Pursuant to Rule 6.4.1(2), please provide the coordinates of the primary mine entrance. The applicant will need to specify coordinates of latitude and longitude in degrees, minutes and seconds or in decimal degrees to an accuracy of at least five (5) decimal places (e.g., latitude 37.12345 N, longitude 104.45678 W). For UTM, the operator will need to specify North American Datum (NAD) 1927, NAD 1983, or WGS 84, and the applicable zone, measured in meters.

6.4.2 EXHIBIT B - Index Map. The Exhibit is adequate as submitted.

6.4.3 EXHIBIT C - Pre-mining & Mining Plan Map(s) of Affected Lands

8. Map requirements: Pursuant to Rule 6.2.1(2), maps shall show: a) name of the Applicant; b) be prepared and signed by a qualified person; c) show the date prepared; d) identify and outline the area that corresponds with the application; and e) presented with a scale not be larger than 1 inch = 50 feet nor smaller than 1 inch = 660 feet, with a map scale, appropriate legend, map title, date and a north arrow included. Exhibits C.3.1 and C.3.2 are not signed by the preparer (initials only), do not show the Applicant's name ("Zephyr Minerals" instead of "Zephyr Gold USA Ltd"), and Exhibit C.3.1 does not have a date prepared. Please resubmit Exhibits C.3.3 and C.3.2 with the preparer's signature (electronic is acceptable), date prepared and with the corrected Applicant's name.
9. Type of vegetation: Rule 6.4.3(e) requires the type of present vegetation be portrayed on a map of the affected lands. No vegetation is portrayed on either Exhibit C map. Please resubmit either of the Exhibit C maps portraying the present type of vegetation in the proposed affected area.
10. Open Process Water Channels: Several dashed lines on either side of the laydown, overburden storage and topsoil stockpile areas on Exhibit C.3.2 are labeled Process Water Channel. If these are intended to convey process water, they should be pipes and not open channels. Please describe the purpose of these channels and explain why they are open to the environment.
11. Overburden storage pile: There is a discrepancy in the proposed height of the overburden storage pile. Exhibit C.3.2 indicates it is to be 27 feet high, whereas Exhibit U indicates it will only 15 feet high. Please clarify the intended height and make the appropriate corrections to Exhibits C and/or U.
12. Filtered Tailings Storage Facility: Exhibit C.3.2 is missing the label for the both the proposed tailings facility and the contact water pond. Please resubmit Exhibit C.3.2 with the FTSF and contact water pond labeled.
13. Contingency Tailings storage Area: Section 7.0 of Foster Wheeler's FTSF Design Report states "a contingency tailings impoundment will be located near the process plant for temporary storage during times when the tailings filter plant is off-line for maintenance or operational problems". Please locate the contingency tailings storage area on Exhibit C.3.2.
14. Utilities and roads: Exhibit C.3.1 shows no utilities. Exhibit C.3.2 does not differentiate between new and existing roads. Please:

- a. Confirm there are no known buried utility lines (gas, electric, fiber optic, etc.) along Temple Canyon Road (CR 3) or within 200 feet of the affected area boundary “new access road” (specifically related to the Keller residence to the east).
- b. Indicate on Exhibit C.3.2 which roads are existing; and which are existing, but plan to be substantially improved or are new roads.

#### 6.4.4 EXHIBIT D - Mining Plan

15. Mine dewatering to surface pond: Section 2.4.3.2 describes utilizing “dirty water sumps” and “cleaner water being pumped in stages, to the surface for clarification and reuse.” A Surface settling pond appears to be the ultimate destination. Please address the following:
  - a. How will this pumped water be either contained or monitored for potential petroleum product or mineral/ARD contamination when pumped to the surface?
  - b. Is the “surface settling pond” the same as what is labeled “Sedimentation Pond” on Exhibit C.3.2?
16. Underground backfill: Section 2.4.4.1 states “Waste rock will be used for underground backfill”. This practice may be subject to EPA underground injection control (UIC) requirements. Do you have a determination from the EPA as to whether a UIC permit may be required?
17. Blasting: Section 2.4.4.7 mentions blasting conditions. The closest residence belongs to Randy and Jean Keller, approximately 0.7 miles from the proposed vent raise. Rule 6.5(4) requires “At sites where blasting is part of the proposed mining or reclamation plan, the Applicant shall demonstrate through appropriate blasting, vibration, geotechnical, and structural engineering analyses, that off-site areas will not be adversely affected by blasting.” Please provide a blasting plan and an appropriate analysis for the proposed blasting.
18. Ventilation raises: Section 2.4.4.4 “Raise Development” discusses a network of 8ft x 8ft ventilation raises will be developed to provide fresh air ventilation to the underground workings, however the provided maps and figures show only one vent raise located near the Mill and Portal Area. Please clarify the number of vent raises to be constructed, and depict their locations on a revised Mine Plan Map. Also, please submit information, supported by drawings if necessary, detailing what infrastructure will be installed at each of the vent raises. If the vent raises are to be located outside the Affected Lands Boundary or the Permit Boundary, an Amendment to the Application may be required pursuant to Hard Rock and Metals Mining Rule 1.8. The information regarding the reclamation of the vent raises should be addressed in Exhibit E- Reclamation Plan. Please note that acceptable methods for reclaiming vent raises can be found in the Inactive Mine Reclamation Program’s General Bid Specification handbook (see Comment No. 26).
19. Mill Design secondary containment: Section 2.4.5 discusses the Processing Mill including its various details and is supported by Appendix C- Mill Design. The information contained in this section however, did not provide details regarding secondary containment structures or features within the Mill Building, sumps and pump-back systems or provide details of the building construction. Please provide detailed information, supported by drawings where necessary, of the construction of the Mill Building including civil plans, concrete thickness and rebar details, weight ratings, any coatings to be applied, a QA/QC program established

for the superstructure construction and installation of the milling equipment, discussions and calculations of the maximum volume of slurry and or material contained in the mill at any given time, the secondary containment structures to be installed, sumps and pump-back systems to be utilized. Details regarding secondary containment should include volumetric demonstrations that the secondary containment structure of any given area possess enough capacity to contain 110% of all chemicals, slurry or materials that may be discharged in the event of a catastrophic failure of milling equipment.

Please note that given the use of Designated Chemicals and the presence of sulfide bearing ore with acid generating potential, the Mill Facility is considered to be an Environmental Protection Facility (EPF) and pursuant to Rules 7.3 and 7.4 will require an approved QA/QC plan, construction schedule, and incremental inspections during construction and final certification prior to use. This information should also be duplicated in Exhibit U-Environmental Protection Plan (EPP), Section 6.4.21(7) Facilities Evaluation. It is understood that a construction schedule may be pre-mature at this time, therefore the Division requests the Operator commit to providing written notification to the Division prior to construction of an EPF so that a construction and inspection schedule may be established.

20. Mill final certification: Pursuant to Rule 7.3.2, a final certification is granted for all proposed EPF's once the QA/QC has been reviewed and accepted and after incremental inspections have been conducted. Please note, the Mill Facility will require certification which will include QA/QC of equipment installation, results of pressure tests, stop lock testing, process water characterization and final tailings characterization. The tailings characterization generated during the commissioning process will be compared to the Tailings Geochemistry Characterization and Seepage Quality Estimate Report, Appendix B to ensure consistency, and the process water characterization will be used to ensure proper handling, treatment if necessary and to ensure an accurate Reclamation Cost Estimate. It is understood that this information will not be available until after construction of the Mill Facility, but will be required prior to production.
21. Features external to the Mill Facility: In addition to the details regarding the Mill Facility, information contained in Appendix C- Mill Design depicts several features to be installed outside of the Mill Facility Building. Those features include but are not limited to the Fine ore Bin; Tailings Filter Feed Stock Tank, Tailings filter cake storage, process water tank and an un-named tank located at the top of drawing 15561-3000-GAD-100. Any tank located outside of a greater secondary containment structure which will contain material mixed with Designated Chemicals or contain potentially acid generating material must have individualized secondary containment structures for each tank. Please provide details regarding the features outside the Mill Facility, depicted in Drawing 15561-3000-GAD-100 and identify the material to be stored in each one. Please provide detailed information regarding the construction of the secondary containment structure including civil plans, concrete thickness and rebar details, weight ratings, any coatings to be applied to the structure, volumetric calculations of the material contained within the tank and the demonstration that the secondary containment structure possesses adequate capacity to contain 110% of all materials stored in the tank. Please note that if these tanks and secondary containment structures are not self-contained, inputs from precipitation will need to be included in the volumetric demonstration. Also, secondary containment will be required for delivery and

return lines that convey material to the Mill Facility. Please submit information regarding the delivery and return lines and their secondary containment where applicable.

As is the case with the Mill Facility, each tank that will contain material mixed with Designated Chemicals or contain potentially acid generating material will be considered an Environmental Protection Facility and will require secondary containment. Pursuant to Rules 7.3 and 7.4, these EPFs will require an approved QA/QC plan, construction schedule, and incremental inspections during construction and final certification prior to use. This information should also be duplicated in Exhibit U- Environmental Protection Plan, Section 6.4.21(7) Facilities Evaluation. It is understood that a construction schedule may be premature at this time, therefore the Division requests the Operator commit to providing written notification to the Division prior to construction of an EPF so that a construction and inspection schedule may be established.

22. Reagent Storage: Section 2.4.5.6 discusses the reagents proposed to be imported, stored and used on site. The details suggest that the tanks used for storing and mixing the reagents will not be housed in a building and secondary containment will be achieved by constructing a bermed area with a plastic liner. Given the hazardous nature of the chemicals the Division finds open air storage to be insufficient. Reagent storage and mixing operations should be conducted inside of an enclosed or semi enclosed structure complete with secondary containment i.e., an area within the mill building or separate ancillary facility. Please submit details, supported by drawings, depicting the reagent storage area as an enclosed ancillary facility or contained within the mill building. Details should include construction information such as civil work, concrete or liner information, number of tanks to be utilized, if separate tanks will be used for storage and mixing, and reagent delivery method to the Mill Facility. If the reagents are to be delivered via pressurized piping system, please indicate the flow path from the tank to their designated destination within the mill and ensure that all sections of the pipe that are not within a greater secondary containment structure, possess adequate secondary containment should a rupture of the pipe occur. Please also indicate if the mixed chemicals will be delivered directly to the mill process or if the mill will utilize day tanks. If day tanks are to be used please include that information in the details of the Mill Facility. Secondary containment details should include the type of secondary containment to be utilized, i.e. HDPE or concrete, a demonstration that the chosen material is sufficient to withstand chemical spills, volumetric demonstrations of the maximum amount of reagents to be stored within the area and the ability for the secondary containment structure to contain 110% of all materials in the event of a catastrophic failure. Please also indicate if the secondary containment will be one large unit or if separate designated areas will be constructed for each of the chemicals to be stored in that area. If the structure is to be one large unit, please provide information demonstrating that the chemicals stored together in that area will not react negatively if mixed.

Please note that the reagent storage area is considered an Environmental Protection Facility and pursuant to Rules 7.3 and 7.4 will and require an approved QA/QC plan, construction schedule, and incremental inspections during construction and final certification prior to use. This information should also be duplicated in Exhibit U- Environmental Protection Plan, Section 6.4.21(7) Facilities Evaluation. It is understood that a construction schedule may be premature at this time, therefore the Division requests the Operator commit to providing

written notification to the Division prior to construction of an EPF so that a construction and inspection schedule may be established.

23. PAG waste rock: In section 2.4.6 it is stated that during the second year of mine development PAG waste rock material will be generated and managed accordingly. Please describe how samples will be collected to characterize the waste rock to determine NAG vs PAG, provide additional detail what is meant by managed accordingly, and what are the long term hydrologic effects of PAG material used as backfill within the mine working and subsequently inundated by groundwater after the mining has completed. If PAG is hauled to the FTSF how will spills of PAG material be cleaned up if it is spilled between the mill and the FTSF?
24. Underdrain protection: Section 2.4.6.4 describes an underdrainage system that will be constructed to capture seepage from the FTSF foundation. Drawing 120 (Foster Wheeler's FTSF Design Report, Appendix F) shows a three-foot thick pile of "underdrain material" placed on a prepared subgrade or bedrock. How will the proposed underdrain be protected from significant movement or damage while placing the filtered tailings in the FTSF on and around the underdrain?

#### 6.4.5 EXHIBIT E - Reclamation Plan

25. Growth Medium Materials: Section 2.5.1 describes salvaging growth media during mill development, implying growth media will only be salvaged from the mill area. Please confirm growth media will be salvaged from all other proposed disturbed areas (including the FTSF, laydown area, overburden and growth media/topsoil stockpile footprint, substation area, etc.)
26. Mine Portal and Ventilation Raise Closing: Section 2.5.3 discusses using concrete debris and rockfill to close the mine portal and vent raise. The Division's Inactive Mine Program (IMP) has vast experience in closing all types of mine openings and has developed specifications for this purpose. Please commit to following IMP specifications for closing the portal and vent raise. A copy of the specifications can be downloaded from our website: [https://drive.google.com/file/d/1BE90x3fV4sIskYDkg\\_q0ZiO5s2m\\_GG7m/view](https://drive.google.com/file/d/1BE90x3fV4sIskYDkg_q0ZiO5s2m_GG7m/view)
27. Sediment ponds and drainage structures: Section 2.5.4 states "Sediment ponds and drainage structures not necessary in post-mining land use will be backfilled and graded." Please indicate which Sediment ponds and drainage structures won't be reclaimed on Exhibit F and explain why they will remain.
28. Revegetation: Section 2.5.6 references "Table 10.2.5" for the proposed seed mix. The Division could not locate a Table 10.2.5. Please confirm the reference should be to Table 2.5.6-1.

#### 6.4.6 EXHIBIT F - Reclamation Plan Map

29. Map requirements: Pursuant to Rule 6.2.1(2), maps shall show: a) name of the Applicant; b) be prepared and signed by a qualified person; c) show the date prepared; d) identify and outline the area that corresponds with the application; and e) presented with a scale not be larger than 1 inch = 50 feet nor smaller than 1 inch = 660 feet, with a map scale, appropriate legend, map title, date and a north arrow included. The map following the Exhibit F: Reclamation Plan Map tag sheet is numbered "C1/1", is not signed by the preparer, does not

show the Applicant's name ("Zephyr" instead of "Zephyr Gold USA Ltd"), and contains an unclear legend (stormwater channel lines and roads are absent from the legend; lines for "Pond", "Major Proposed Contours", "Minor Proposed Contours", and "Reclaimed Area Boundary" all have identical looking lines in the legend). Please resubmit this map labeled as Exhibit F with the preparer's signature (electronic is acceptable), clear and complete legend, and with the corrected Applicant's name.

30. Reclamation slope length: The east slope of the reclaimed FTSF has a slope length segment exceeding 400 feet at a 3H:1V slope. This distance without cross-slope stormwater controls is very likely to experience ongoing, long-term erosion problems. Please evaluate erosion protection for this slope to ensure it is erosionally stable and provide the analysis; or incorporate cross-drainage stormwater controls.
31. Reclamation grading of FTSF: There are no contour labels on the top of the FTSF making it difficult to determine slope direction. Also, there are jagged contour lines suggesting ditches or swales are incorporated into the grading plan of the FTSF top. Please revise Exhibit F to include contour labels and either smooth out the grading or designate the swales as stormwater conveyance structures and provide detailed designs and analyses as requested in Comment No. 67.
32. Closure stormwater controls: Roads on C1/1 are shown crossing existing drainages and possibly final diversion channels. However, no culverts are shown. Also, several diversion channels appear to divert stormwater into existing drainages that are likely to significantly increase the peak flows experienced to date by these drainages. Please address the following:
  - a. Show existing and proposed culverts on a revised Exhibit F (provide sizing and analyses for all new culverts and existing culverts in drainages that will experience higher peak flows due to upgradient diversions as requested in Comment No. 67)...culverts, existing drainage capacity.
  - b. Provide a demonstration that existing drainages within the permit boundary that receive higher peak flows due to upgradient diversions have the capacity and erosional resistance to handle the additional flow requested in Comment No. 67.
33. Existing vs new roads: Existing roads do not need to be reclaimed, if not substantially improved. If they are substantially improved and are not intended to be reclaimed, a demonstration for future need of these roads needs to be provided. Similarly for new roads, a demonstration for future need of these roads needs to be provided if there is no intent to reclaim them. Please provide a revised Exhibit F showing all existing roads within the affected area boundary; and show which new roads will remain and which will be reclaimed.
34. Contact water pond: No proposed contours are shown in the contact water pond area. Furthermore, the double dark lines around the perimeter imply the embankment and perhaps the liner will remain. Please indicate on a revised Exhibit F the intended reclamation grading for the contact water pond and that the liner will be removed.
35. Process water channels: The lines labeled as Process Water Channel on Exhibit C.3.2 are still shown on C1/1. Are they intended to be there after reclamation? If so, what is their purpose?



6.4.7 EXHIBIT G - Water Information

36. Sedimentation and stormwater ponds: Section 2.7.5 references “Secretary of the Interior” as well as DRMS rules to “to prevent unnecessary degradation of the property and adjacent lands”. The second paragraph states there will be both a stormwater detention pond and a sedimentation pond. Only the sedimentation pond is shown on Exhibit C.3.2. Please address the following:
  - a. As Department of Interior rules are referenced, please describe where Federal lands might be impacted.
  - b. Describe all locations of both stormwater detention ponds and a sedimentation ponds, and include them on Exhibit C.3.2.
37. Figure 2: Figure 2 needs to be updated to reflect the fractures mapped and shown on Figure 2.4.1-1 in Exhibit D Mining Plan.
38. Well screen intervals: Are the north and south wells screened in the same formation?
39. Boring logs: Please provide the boring logs for the north and south wells along with well construction details.
40. Monitoring well network: The current monitoring well network is insufficient to quantify groundwater flow across the proposed site. Please propose a monitoring well network that may be able to accurately quantify groundwater flow across the site.
41. Compliance well: Please identify one or more point-of-compliance well locations that meet the requirements of Rule 3.1.7(6).
42. Quality Assurance Project Plan: Please provide a Quality Assurance Project Plan (QAPP) for sampling groundwater and surface water for the proposed permit. The plan should be consistent with EPA guidance and provide mitigation steps if there is an exceedance at a groundwater or surface water monitoring location. Potential impacts to quality and/or quantity of the nearby domestic wells should also be addressed.
43. WQCC Regulation 41: Please note, all groundwater sample results need to be compared to the Water Quality Control Commission’s (WQCC) Regulation No. 41 – The Basic Standards for Groundwater (Reg 41) and the most conservative values in Tables 1 thru 4 for all analytes listed for minimum of five consecutive quarters.
44. Baseline Groundwater Quality: Pursuant to Rule 6.4.21(9)(b) please provide five consecutive quarters of baseline groundwater quality data that adequately characterizes baseline conditions at the site. The baseline data shall be sufficient to provide for the proper design of facilities, to serve as a basis for the evaluation of reclamation performance standards, and to ensure the adequacy of Environmental Protection Facility design, maintenance and operation.
45. Domestic well 73772: The location of domestic well, number 73772, should be verified. During the site visit the actual presence of the well was in doubt.
46. Mine pool: Please address the following related to mine pool water quality:
  - a. How will the mine pool water quality be monitored during mining activity?

- b. When activities at the mine cease, how will the mine pool water quality be monitored for potentiometric level and quality?
- 47. Grape Creek flow: Is the projected bottom elevation of the mine below the elevation of Grape Creek closest to the mine? If the bottom of the mine is below Grape Creek please address the following; is there a possibility, during mining and pumping, Grape Creek could be affected by diminished flow?
- 48. Fracture system: How might mining affect the local fracture system in such a way that could result in a change in groundwater flow in the area?

#### 6.4.8 EXHIBIT H - Wildlife Information.

- 49. Townsend big-eared bat: On page 47, the Applicant states CO DWP performed a bat survey in 2013 and permanently sealed the adits where Townsend big-eared bat roosting evidence was observed immediately following the CO DPW site survey in order to prevent re-habitation. This is based on 2013 documentation from CPW provided in Appendix G. The subject 2013 letter from Jim Aragon (CPW) states “There are six mines that have been gated to protect Townsend’s big-eared bats within the proposed project vicinity.” The Division’s Inactive Mine Program (IMP) typically gates such sites to allow bats to access these types of habitat, but keep people out. In a telephone call with IMP staff, they confirmed these six gates should allow bats to access the mines. A map of these six locations, with UTM coordinates, is attached to the 2013 letter in Appendix G. Based on these coordinates, site D-1 is less than 200 feet from the proposed adit; sites D-3, -4, and -5 are within a quarter mile of the proposed adit; and site D-11/12 is within a half mile of the proposed adit. If the Applicant has evidence these six sites were plugged rather than gated, please provide appropriate documentation. Otherwise, describe how the mining operation will be protective of these sites by addressing CPW’s recommendation of maintaining a buffer or restricting activities.
- 50. Raptors: Also on page 47, the Applicant states “no raptor nesting sites are present in the Project area.” The 2013 CPW letter in Appendix G states “Transitory wildlife, such as raptor nesting sites, is highly probable within the project area” and recommends “recommends a pre-construction survey of the area to identify and avoid disturbances to protected nest sites.” Will the Applicant commit to performing annual nest surveys?

#### 6.4.9 EXHIBIT I - Soils Information.

The Division noted Exhibit I is referenced for the soil descriptions, where it should be Appendix H. No response is necessary.

#### 6.4.10 EXHIBIT J - Vegetation Information. The Exhibit is adequate as submitted.

#### 6.4.11 EXHIBIT K - Climate.

The Division noted Appendix G is referenced for the weather data, where it should be Appendix I. No response is necessary.

6.4.12 EXHIBIT L - Reclamation Costs

51. Omitted tasks: A review of the detailed tasks 1 through 12 in Exhibit L, suggests the following tasks were omitted:

- a. Reclamation of the FTSF,
- b. Removal of the contact water pond liner and embankment,
- c. Construction of the required EPF area diversion channels

Please revise Exhibit L to include these tasks, or explain where they are covered in the provided Exhibit L.

6.4.13 EXHIBIT M - Other Permits and Licenses. The Exhibit is adequate as submitted.

52. Water rights and EPA UIC: Depending on your responses to Comments 3 and 16 above, Exhibit M may need to be revised.

6.4.14 EXHIBIT N - Source of Legal Right to Enter. The Exhibit is adequate as submitted.

53. Patented claims: Included in Exhibit N is a list of seven patented claims, for which there are corresponding BLM GLO records in Appendix J. The records in Appendix J do not appear to tie the claims to Zephyr Gold USA. Please clarify the purpose of including these records, and if appropriate how they are tied to Zephyr Gold USA.

54. Fremont Co Assessor Schedule 3943000000021: It is not clear from the documents provided in Appendix J how legal right of entry is demonstrated for this parcel. County Assessor records are confusing listing Mary Louise Adamic as the owner, Randy V. Keller as the sale grantor and Zephyr Gold USA Ltd as the sale grantee. Please clarify which of the documents in Appendix J demonstrates legal right of entry for Assessor Schedule 3943000000021.

55. Fremont Co Assessor Schedule 17000040: It is not clear from the documents provided in Appendix J how legal right of entry is demonstrated for this parcel. County Assessor records list Lonnie J & Mary Louise Adamic as the owner. Please clarify which of the documents in Appendix J demonstrates legal right of entry for Assessor Schedule 17000040.

6.4.15 EXHIBIT O - Owner(s) of Record of Affected Land and Substance to be Mined.

56. Mineral owners: Depending on your responses to Comments 52, 53 and 54 above, Exhibit O may need to be revised.

6.4.16 EXHIBIT P - Municipalities within Two Miles. The Exhibit is adequate as submitted.

6.4.17 EXHIBIT Q - Proof of Mailing of Notices to Board of County Commissioners and Conservation District. The Exhibit is adequate as submitted.

6.4.18 EXHIBIT R - Proof of Filing with County Clerk and Recorder. The Exhibit is adequate as submitted.

6.4.19 EXHIBIT S - Permanent Man-made Structures. The Exhibit is adequate as submitted.

6.4.21 EXHIBIT U – Designated Mining Operation Environmental Protection Plan

57. EPP for Waste Rock: Section 6.4.21(1)(c)(iv) states “Waste rock, primarily granite, will be temporarily stockpiled during initial underground mine development in the north end of the footprint of the FTSF”. Please clarify if this will be the NAG-PAG storage area or a different area.
58. Jurisdictional Agencies: Section 6.4.21(3) may need to be revised to include the EPA depending on your response to Comment 16.
59. Disposal, decommissioning, detoxification: Rule 6.4.21(6)(a) requires a description of the procedures for the disposal, decommissioning, detoxification or stabilization for all designated chemicals and toxic or acid-forming materials. This does not appear to be addressed under Section 6.4.21(5) and (6). Please describe how the PAX, MIBC and emulsion flocculent will be dealt with during operations, periods of cessation, and closure.
60. Secondary containment: Section 6.4.21(5) and (6) states “secondary containment will be designed to contain 100% of the largest tank plus the precipitation from a major rain event as determined by the drainage engineer”. The Division’s experience has shown that secondary containment is often partially utilized by other storage, poor housekeeping, or by damaged containers that caused the release. For this reason, we require secondary containment be design for 110% of all the storage containers within a given area. In other words, if each tank has individual containment, that is acceptable. However, if there is more than one tank in a given area without individual secondary containment, the secondary containment for that facility must be designed for a 110% of the combined storage of all the tanks within that facility. Please commit to 110% secondary containment capacity and redesign the facility accordingly.
61. Pumped mine water: Section 6.4.21(6)(c) states “During mine development, groundwater will be pumped to the natural drainage that discharges into the Arkansas River.” How will the Applicant verify this water meets appropriate water quality standards prior to discharge?
62. SPCC: Section 6.4.21(7) of the application discusses that a spill prevention, control and countermeasure plan (SPCC) will be prepared upon approval of the application. The Division requests a copy of the SPCC plan prior to approval for any fuel/oil to be stored onsite.
63. Environmental Protection Plan: The summary portion of the Environmental Protection Plan (EPP) indicates that no Designated Chemicals, toxic or acid forming materials will be used as processing agents however details in Exhibit D and further details in Exhibit U state that Methyl Isobutyl Carbinol and Potassium Amyl Xanthate will be used as reagents in the mill process. The Division has determined that Methyl Isobutyl Carbinol and Potassium Amyl Xanthate are designated chemicals as defined by Rule 1.1(19). The requirements of Rule 6.4.21(6) have not been addressed. Please revise the Designated Chemical Evaluation and Handling section of the EPP to address all portions of Rule 6.4.21(6).
64. Environmental Protection Facilities: As stated in Comment 19, the Division has determined the Mill Facility and Reagent Storage Area are Environmental Protection Facilities as defined by Rule 1.1(21). In addition, the Division has determined the following facilities are EPFs:
  - a. All storm water control structures and surface water diversion channels;
  - b. Filtered Tailings Storage Facility Including;

- i. Underdrain System;
- ii. Starter Buttresses in both Zone 1 and Zone 2;
- iii. Contact Water Pond;

For each of these facilities please address all portions of Rule 6.4.21(5) Facilities Evaluation. Details included in the evaluation of each facilities should include Drawings and Maps depicting designs, discussions of secondary containment or liner systems to be utilized, specified QA/QC Programs to be employed during construction for each facility, discussion of design criteria, construction timeline, and proposed incremental inspection points for each facility. It is understood that a construction schedule may be pre-mature at this time, therefore the Division requests the Operator to commit to written notification to the Division prior to construction to establish a detailed construction schedule and finalize the incremental inspection points. Please note that specific concerns related to each facility will be addressed in future Adequacy Review's after the requested information has been reviewed.

65. Contact Water Pond transfer: Section 6.4.21(1)(c)(iii) discusses hauling water from the Contact Water Pond to the Mill for use in the Mill Process, and states that "Non-neutral pH water will be neutralized before returning to the plant. Furthermore, throughout Appendix E-FTSF Design Report it is stated that water contained within the Contact Water Pond may require treatment prior to use. Please provide more details regarding the potential pH neutralization of the contact water pond, how that may be accomplished, what standards are being used to determine if neutralization is required, and what the target pH is for the water to be reused. Also please provide more information if treatment of the water will be required, including analysis of the water. If the water is to be treated, please describe what treatment method will be utilized, describe any facilities, chemical storage tanks or equipment needed to achieve treatment and provide a timeline on the duration of treatment operations. In addition, please provide more details on how the water from the Contact Water Pond will be delivered back to the Mill Facility for reuse. If the water is to be transported prior to treatment, the transportation method will need to have secondary containment to prevent the release of untreated contact water e.g., if the water is to be piped and pumped from the Contact Water Pond back to the mill, the piping and pumping system will need to have secondary containment.
66. Emergency Response Plan: Section 8.3 states that the Emergency Response Plan is being drafted prior to ground breaking of Mine Development. The Division understands that personnel and hierarchy are yet to be established, however please submit the complete Emergency Response Plan for review. The plan should also address, if necessary specific protocols needed for specific chemicals. I.e. handling a spill of Potassium Amyl Xanthate may be different than a spill of Methyl Isobutyl Carbinol.
67. Stormwater Management: Rule 6.4.21(10)(a) requires surface water control and containment facilities design specifications be provided and certified by a licensed professional engineer (Colorado P.E.) for all Environmental Protection Facilities intended to convey, transport or divert surface water around or away from acid mine drainage or toxic or acid-forming material; or capture and/or retain surface water run-off from areas affected by the Designated Mining Operation prior to its release from the mine-site into the natural water drainage system. Rule 7.3.1(3) requires such facilities be appropriately designed for their intended purpose and consider site specific conditions and on or off-site impacts to human health,

property and the environment. For this operation, the Division requires the 100-year, 24-hour storm event be used in the design of all diversions (and appurtenances) to be constructed for the purpose of diverting runoff away from the mill facility, FTSF and Contact Water Pond. In addition, stormwater controls within the environmental protection facilities (mill, FTSF, and Contact Water Pond) also need to be designed for the 100-year, 24-hour storm event. Finally, pursuant to Rule 6.4.21(13)(a), EPFs that depend on evaporation and/or infiltration require, or have an open to the atmosphere storage component (e.g., the FTSF and contact water pond) require a water balance analysis to ensure they will function under operating conditions and periods of cessation while accommodating the 100-year, 24-hour storm event. Please provide the requisite analyses, design drawings and specifications and stamped by a licensed Colorado professional engineer.

68. Figure 1: The figure showing the locations of proposed groundwater and surface monitoring points is missing critical information. First, the legend suggests both the mill site and the tailings repository are on the figure. Neither is visible at the scale provided. Second, the affected area boundary is not shown on the figure. Please submit a revised Figure 1 showing the affected area boundary and both the mill site and the tailings repository.
69. Climate: Rule 6.4.21(13)(b)(i) requires one set of data for the wettest year on record for the area. This should be considered in the water balance required in Comment 66. Please provide this data set.
70. Exfiltration pond: Section 6.4.21(14) on the top of p. 70 mentions discharge to an exfiltration pond. Where is this pond and what purpose does it serve? Please also show this on Exhibit C.3.2.
71. Construction Schedule: Rule 6.4.21(15) requires a detailed construction schedule. Please provide a schedule with specific tasks, duration and sequencing.
72. Quality Assurance and Quality Control: Section 6.4.21(16) states “Mill development will be supervised by licensed engineers” and “The engineer will prepare a certified report for the installation of the contact water pond, FTSF underdrain, stormwater detention pond, and diversion ditches”. Note the latter does not include the mill. Please include a statement to the effect that “engineering oversight will ensure EPFs are constructed in accordance with approved designs and specifications” and include the mill in the listed EPFs.
73. Wildlife protection: Section 6.4.21(18) mentions the presence of mule deer and bighorn sheep. The Contact Water Pond has the potential to become a wildlife attractant. How will the Applicant dissuade wildlife from using the Contact Water Pond for drinking water?

## 6.5 GEOTECHNICAL STABILITY EXHIBIT

74. Missing stability analyses: Exhibit 6.5 only provides a seismic hazard assessment. No stability analyses are provided, nor are any included in Appendix E for the AMEC FTSF Design Report. There are 10 appendices listed in the Appendix E Design report, several potentially related to the necessary stability analyses, but none were included with Appendix E. The Division requires stability analyses for both the FTSF and the Contact water Pond embankment. Please provide these stability analyses.

75. Blasting: In response to Comment 17, please provide an appropriate analyses demonstrating the proposed blasting will not adversely affect nearby residences.

#### Appendix A

76. Ventilation raise: Figure 1, there is one ventilation raise shown. Is one ventilation raise sufficient for this mine at its maximum depth?
77. Figure 2: Figure 2 is dated June 10, 2015. Is the figure up to date with the current mine development scheme?

#### Appendix B

78. Interim Status: The GEM Services report is an interim report. When can a final report be expected and what are the expected differences between the reports?
79. Development rock: Section 2.1 second to last paragraph needs additional clarification. The development rock is subject to long term metals release through oxidation and therefore did not undergo long-term testing. If the development rock is a potential source of metals release why was it not subject to long-term testing?
80. Geochemistry Sample locations: Table 1 lists eight samples. Please provide a map showing the location of each sample and indicate whether it was from core or a test pit.
81. Long-term seepage: If the long-term testing indicates the FTSE seepage needs to be treated before release, please provide details of potential treatment options and how it meets the criteria of HB19-1113.

#### Appendix E

82. Windy Gulch: Several mentions to Windy Gulch are present in AMEC's design report. Based on the rest of the Application, it appears Dawson Mountain is the only deposit to be accessed under this permit. Please address what other discrepancies are included in Appendix E that are now either irrelevant or require changes in assumptions or mine operations.
83. Technical Specifications: Technical specifications and QA/QC documents are listed in the Table of Contents Appendices and on p. 6, but have not been provided. Please provide these documents.
84. Seepage and Contact Water Management: Section 4.1, p. 11 states "Seepage and contact water from the FTSE will be collected by an underdrain system and channels and routed to a lined contact water pond...". How is it routed?
85. Underdrain System: Section 7.1 states "The underdrains have been sized to convey the estimated seepage from the tailings with a factor of safety of 100, ...". Where is the analyses demonstrating this factor of safety?
86. Underdrain extents: Section 7.1 indicates the drains are extended upgradient in the natural drainages. Drawing 120 shows the underdrains do not extend to the edge of the FTSE footprint. What criteria was used to determine how far up the natural drainages the underdrains need to be extended?
87. Starter Buttress: Section 7.2 states the starter buttresses will be constructed with rockfill. According to Section 6.1, tailings were found to be non-plastic and have 60% by weight

passing the #200 sieve (75µm); fine enough to migrate through a minor coarse rockfill structure. Please provide designs demonstrating how fine particle migration will be prevented.

88. Diversion drop structures: Section 7.5 and Drawing 145 indicate gabion baskets are proposed for stormwater drop structures. Gabions do not last long if acid drainage is present, even in small quantities. Furthermore, it is the Division engineer's experience that gabion baskets begin to fail within 15 to 30 years of installation. As such, gabions are not appropriate for contact water channels or closure channels. Please select a more durable design for steep channel sections.
89. Contingency tailings storage and management: Section 8.2 references a lined contingency tailings storage impoundment; indicates "If tailings are too wet of the optimum moisture content, the tailings may be spread out, and disked"; and "If the weather is unfavorable for drying, tailings may be stockpiled". The lined tailings storage impoundment is only shown on Drawing 160, and nowhere else in the Application. Is the lined tailings storage impoundment still part of the mine plan? If not, where will both latter actions take place?
90. Riprap: Section 8.5.7 states riprap sizing is presented in the design drawings. Only the D50 is provided. Riprap sizing also requires gradation limits. Please provide full riprap sizing designs.
91. Geotechnical Monitoring: Section 10.4 lists five methods to assess the performance of the FTSF. How and when will these be formalized?
92. Instrumentation plan: Drawing 160 shows five proposed monitoring well locations: three to be screened in the alluvial aquifer and two in the Dakota formation. Are these monitoring wells still planned?

#### Appendix K

93. Incomplete groundwater sampling: Groundwater samples were not analyzed for the full list of chemicals of concern and compared to the most restrictive standard as listed in WQCC Reg 41 Tables 1 thru 4. Thus the Division considers these results as baseline samples to be incomplete. The data may be used for comparative purposes in the future.
94. Field sheets: Please provide any field sheets associated with the samples collected to date recording field measurements?
95. Field sampling: Please describe how the wells are sampled.
96. Field QA/QC procedures: What were the QA/QC procedures followed during sample collection?
97. Field filtering and preservation: Please verify if the samples were filtered and preserved in the field or at the lab?
98. Laboratory report Dated October 2014: Samples collected in October 2014 were received by the laboratory outside the required temperature range. Please explain why these samples were analyzed and describe the effects on the results.

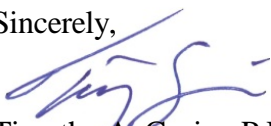


**General Comments**

99. The Division received 200 letters of objection, provided to you via file share. Please provide responses to relevant concerns and comments.
100. Rule 1.6.2(1)(e) Notices: As stated in our July 15, 2021 letter and required by Rule 1.6.2(1)(e), proof of mailing a copy of the notice (identical to that in the newspaper notice published on July 22, 29; August 5 and 12) to all owners of record of surface and mineral rights, holders of any recorded easements, and all owners of record of lands that are within 200 feet of the boundary of the affected land. Proof of these required mailings has not been received by the DRMS. Please submit the required proof of mailing (e.g., Certified Mail - Return Receipt Requested) these notices prior to the decision date.
101. Additional changes to Application: Please be aware any changes or additions to the application on file in our office (including your responses to this letter) must also be reflected in the public review copy which has been placed with the Fremont County Clerk and Recorder. A receipt or other proof of placement will be required with future submittals related to this application.
102. Agency comments: The DRMS received comments from the Fremont Conservation District, the State Historic Preservation Office and the Division of Water Resources. All three comment letters were provided to you via email on August 27, 2021. Please contact me if you did not receive them.

**Please remember that the decision date for this application is December 13, 2021.** As previously mentioned if you are unable to provide satisfactory responses to any inadequacies prior to this date, it will be your responsibility to request an extension of time to allow for continued review of this application. If there are still unresolved issues when the decision date arrives and no extension has been requested, the application may be denied. If you have any questions, please contact me at (303) 328-5229.

Sincerely,



Timothy A. Cazier, P.E.  
Environmental Protection Specialist

Enclosure: HB19-1113

ec: Michael, Cunningham, DRMS  
Patrick Lennberg, DRMS  
Lucas West, DRMS  
DRMS file  
Angela Bellantoni, PhD, EAI

# An Act

HOUSE BILL 19-1113

BY REPRESENTATIVE(S) Roberts and McLachlan, Arndt, Buentello, McCluskie, Titone, Bird, Cutter, Esgar, Exum, Galindo, Gray, Hansen, Herod, Jackson, Jaquez Lewis, Kipp, Lontine, Melton, Michaelson Jenet, Singer, Sirota, Snyder, Soper, Tipper, Valdez A., Valdez D., Weissman, Becker, Caraveo, Duran, Froelich, Hooton, Kennedy, Kraft-Tharp; also SENATOR(S) Donovan, Bridges, Danielson, Fenberg, Ginal, Lee, Pettersen, Rodriguez, Story, Winter, Garcia.

CONCERNING THE PROTECTION OF WATER QUALITY FROM ADVERSE IMPACTS  
CAUSED BY MINERAL MINING.

*Be it enacted by the General Assembly of the State of Colorado:*

**SECTION 1.** In Colorado Revised Statutes, 34-32-116, **amend** (3), (7) introductory portion, and (7)(g) as follows:

**34-32-116. Duties of operators - reclamation plans.** (3) On the anniversary date of the permit each year, the operator shall submit:

(a) ~~a report and~~ A map showing the extent of current disturbances to affected land; AND

---

*Capital letters or bold & italic numbers indicate new material added to existing law; dashes through words or numbers indicate deletions from existing law and such material is not part of the act.*

(b) A REPORT DESCRIBING THE AFFECTED LAND AND THE SURROUNDING AREA, INCLUDING:

(I) CHANGES OVER THE PRECEDING YEAR REGARDING ANY DISTURBANCES TO THE PREVAILING HYDROLOGIC BALANCE;

(II) CHANGES OVER THE PRECEDING YEAR REGARDING ANY DISTURBANCES TO THE QUALITY AND QUANTITY OF WATER IN SURFACE AND GROUNDWATER SYSTEMS;

(III) Reclamation accomplished to date and during the preceding year;

(IV) New disturbances that are anticipated to occur during the upcoming year; and

(V) Reclamation that will be performed during the upcoming year.

(7) Reclamation plans and the implementation ~~thereof shall~~ OF RECLAMATION PLANS MUST conform to the following general requirements:

(g) (I) Disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quality and quantity of water in surface and groundwater systems both during and after the mining operation and during reclamation shall be minimized.

(II) EXCEPT AS SPECIFIED IN SUBSECTIONS (7)(g)(III) AND (7)(g)(IV) OF THIS SECTION, A RECLAMATION PLAN FOR A NEW OR AMENDED PERMIT MUST DEMONSTRATE, BY SUBSTANTIAL EVIDENCE, A REASONABLY FORESEEABLE END DATE FOR ANY WATER QUALITY TREATMENT NECESSARY TO ENSURE COMPLIANCE WITH APPLICABLE WATER QUALITY STANDARDS.

(III) THE BOARD MAY APPROVE A RECLAMATION PLAN THAT LACKS SUBSTANTIAL EVIDENCE OF A REASONABLY FORESEEABLE END DATE FOR ANY NECESSARY WATER QUALITY TREATMENT IF THE NEW OR AMENDED PERMIT INCLUDES AN ENVIRONMENTAL PROTECTION PLAN AND RECLAMATION PLAN ADEQUATE TO ENSURE COMPLIANCE WITH APPLICABLE WATER QUALITY STANDARDS AND UPON MAKING A WRITTEN DETERMINATION:

(A) FOR AN AMENDED RECLAMATION PLAN, EXCEPT AS PROVIDED IN SUBSECTION (7)(g)(III)(B) OF THIS SECTION, THAT THE WATER QUALITY IMPACTS THAT HAVE OCCURRED OR ARE OCCURRING FOR WHICH NO REASONABLY FORESEEABLE END DATE FOR WATER QUALITY TREATMENT CAN BE ESTABLISHED WERE EITHER UNFORESEEN AT THE TIME OF APPROVAL OF THE RECLAMATION PLAN OR EXISTING AT A MINE SITE PERMITTED BEFORE JANUARY 1, 2019; OR

(B) FOR A NEW OR AMENDED RECLAMATION PLAN FOR A PERMIT INVOLVING A SITE THAT WAS PREVIOUSLY MINED BUT WAS NOT PERMITTED AS OF JANUARY 1, 2019, THAT EXISTING WATER QUALITY CONDITIONS DO NOT MEET APPLICABLE WATER QUALITY STANDARDS AND NO REASONABLY FORESEEABLE END DATE FOR WATER QUALITY TREATMENT CAN BE ESTABLISHED.

(IV) THE BOARD MAY APPROVE A NEW RECLAMATION PLAN THAT LACKS SUBSTANTIAL EVIDENCE OF A REASONABLY FORESEEABLE END DATE FOR ANY NECESSARY WATER QUALITY TREATMENT IF A PERMIT APPLICATION IS SUBMITTED AND THE RECLAMATION PLAN IS LIMITED TO RECLAMATION OF ALREADY-MINED ORE OR OTHER WASTE MATERIALS, INCLUDING MINE DRAINAGE OR RUNOFF, AS PART OF A CLEANUP.

(V) Nothing in this ~~paragraph (g)~~ shall be construed to allow SUBSECTION (7)(g) ALLOWS the operator to avoid compliance with other APPLICABLE statutory provisions governing well permits, and augmentation requirements, and replacement plans. ~~when applicable.~~

**SECTION 2.** In Colorado Revised Statutes, 34-32-117, **amend** (4)(b)(I), (6)(b), and (6)(c); and **repeal** (3)(f)(VI) and (3)(f)(VII) as follows:

**34-32-117. Warranties of performance - warranties of financial responsibility - release of warranties - applicability - repeal.**  
(3) (f) Proof of financial responsibility may consist of any one or more of the following, subject to approval by the board:

(VI) ~~A certified financial statement for the financial warrantor's most recent fiscal year and a certification by an independent auditor that:~~

~~(A) The financial warrantor is the issuer of one or more currently outstanding senior credit obligations that have been rated by a nationally~~

recognized rating organization;

~~(B) Said obligations enjoy a rating of 'A' or better; and~~

~~(C) At the close of the financial warrantor's most recent fiscal year, his or her net worth was equal to or greater than two times the amount of all financial warranties;~~

~~(VII) A certified financial statement for the financial warrantor's most recent fiscal year and a certification by an independent auditor that as of the close of said year:~~

~~(A) The financial warrantor's net worth was at least ten million dollars and was equal to or greater than two times the amount of all financial warranties;~~

~~(B) The financial warrantor's tangible fixed assets in the United States were worth at least twenty million dollars;~~

~~(C) The financial warrantor's total liabilities-to-net-worth ratio was not more than two to one; and~~

~~(D) The financial warrantor's net income, excluding nonrecurring items, was positive. Nonrecurring items which affect net income should be stated in order to determine if they materially affect self-bonding capacity.~~

(4) (b) (I) In any single year during the life of a permit, the amount of required financial warranties shall MUST not exceed the estimated cost of fully reclaiming all lands to be affected in said year, plus all lands affected in previous permit years and not yet fully reclaimed. For the purpose of this paragraph (b) SUBSECTION (4)(b)(I), reclamation costs shall be computed with reference to current reclamation costs. The amount of the financial warranty shall MUST be sufficient to assure the completion of reclamation of affected lands if the office has to complete such THE reclamation due to forfeiture, Such INCLUDING ALL MEASURES COMMENCED OR REASONABLY FORESEEN TO ASSURE THE PROTECTION OF WATER RESOURCES, INCLUDING COSTS NECESSARY TO COVER WATER QUALITY PROTECTION, TREATMENT, AND MONITORING AS MAY BE REQUIRED BY PERMIT. THE financial warranty shall MUST include an additional amount equal to five percent of the amount of the financial warranty to defray the administrative costs incurred by the

office in conducting the reclamation.

(6) (b) (I) Each financial warrantor providing proof of financial responsibility in a form described in ~~subparagraphs (IV) to (VII) of paragraph (f) of subsection (3)~~ SUBSECTION (3)(f)(IV), (3)(f)(V), or in ~~subsection (8) of this section~~ shall annually cause to be filed with the board a certification by an independent auditor that, as of the close of the financial warrantor's most recent fiscal year, the financial warrantor continued to meet all applicable requirements of ~~said subparagraphs~~ THE APPLICABLE SUBSECTION. Financial warrantors ~~who~~ THAT no longer meet ~~said~~ THE requirements shall instead cause to be filed an alternate form of financial warranty.

(II) (A) THE BOARD SHALL PROVIDE A REASONABLE PERIOD OF TIME, NOT TO EXCEED ONE YEAR AFTER THE EFFECTIVE DATE OF THIS SUBSECTION (6)(b)(II), TO FINANCIAL WARRANTORS THAT, AS OF THE EFFECTIVE DATE OF THIS SUBSECTION (6)(b)(II), HAD PROOF OF FINANCIAL RESPONSIBILITY UNDER SUBSECTION (3)(f)(VI) OR (3)(f)(VII) OF THIS SECTION, AS THEY EXISTED IMMEDIATELY BEFORE THE EFFECTIVE DATE OF THIS SUBSECTION (6)(b)(II), TO FILE AN ALTERNATE FORM OF FINANCIAL WARRANTY.

(B) THIS SUBSECTION (6)(b)(II) IS REPEALED, EFFECTIVE SEPTEMBER 1, 2021.

(c) Each financial warrantor providing proof of financial responsibility in a form described in ~~subparagraphs (IV) to (VII) of paragraph (f) of subsection (3)~~ SUBSECTION (3)(f)(IV), (3)(f)(V), or in ~~subsection (8) of this section~~ shall notify the board within sixty days of any net loss incurred in any quarterly period.


**SECTION 3.** In Colorado Revised Statutes, 34-32-122, amend (2) as follows:

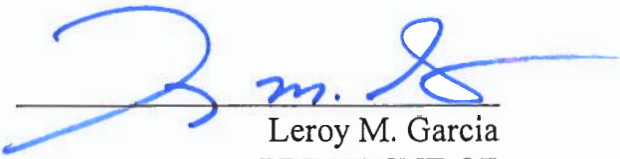
**34-32-122. Fees, civil penalties, and forfeitures - deposit - emergency response cash fund - created - definition.** (2) Any applicant that desires to utilize the self-insurance provisions listed in section 34-32-117 (3)(f)(IV), ~~to (3)(f)(VII) (3)(f)(V), or (8)~~ shall pay an annual fee to the office sufficient to defray the actual cost to the office of establishing and reviewing the financial warranty of the applicant. These funds are hereby annually made available to the office, which shall utilize outside

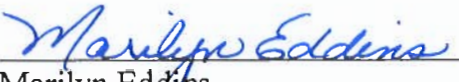
financial and legal services for this purpose.

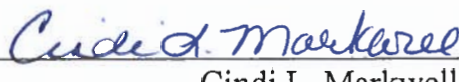
**SECTION 4. Act subject to petition - effective date - applicability.** (1) Section 34-32-117 (6)(c), as amended in section 2 of this act, takes effect August 2, 2020, and the remainder of this act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly (August 2, 2019, if adjournment sine die is on May 3, 2019); except that, if a referendum petition is filed pursuant to section 1 (3) of article V of the state constitution against this act or an item, section, or part of this act within such period, then the act, item, section, or part will not take effect unless approved by the people at the general election to be held in November 2020 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor.

(2) This act applies to conduct occurring on or after the applicable effective date of this act.

  
\_\_\_\_\_  
KC Becker  
SPEAKER OF THE HOUSE  
OF REPRESENTATIVES

  
\_\_\_\_\_  
Leroy M. Garcia  
PRESIDENT OF  
THE SENATE

  
\_\_\_\_\_  
Marilyn Eddins  
CHIEF CLERK OF THE HOUSE  
OF REPRESENTATIVES

  
\_\_\_\_\_  
Cindi L. Markwell  
SECRETARY OF  
THE SENATE

APPROVED April 4, 2019 at 2:10 pm  
\_\_\_\_\_  
(Date and Time)

  
\_\_\_\_\_  
Jared S. Polis  
GOVERNOR OF THE STATE OF COLORADO