



May 11, 2026

Kelli Bergh
Vice President Environment and Permitting
BMC Minerals Ltd.
kelli.bergh@bmcm minerals.com

Re: Implementation of the Independent Review Board Recommendations

Dear Kelli Bergh,

In August 2024, Government of Yukon commissioned an Independent Review Board (the “Board”) to review the failure event and identify the technical cause(s) of the Eagle Gold Mine heap leach facility failure. The Board was also requested to provide recommendations that would reduce the likelihood of a similar failure event happening again in the future. The Board was enabled to make recommendations on regulatory and licensing processes, compliance and enforcement activities and industry practices.

A final report was published by the Board on June 30, 2025, and is available on the PricewaterhouseCoopers website for the Victoria Gold Corp. receivership processes¹. On July 02, 2025, the Board provided a technical briefing to stakeholders on the findings and recommendations contained in the report, this briefing was following by a technical media briefing that is publicly available on [News | Yukon.ca](https://news.yukon.ca)².

While the report prepared by the Board is specific to what caused the heap leach failure at the Eagle Gold Mine, the recommendations apply broadly to mining practices and the regulatory and enforcement oversight of mining in the Yukon. Although implementation of the recommendations is underway, it will be some time before the guidelines, policies and legislation for mine development and operations fully reflect the recommendations. As such, Yukon has determined that it is prudent to implement recommendations within existing regulatory processes to ensure all mining operations in Yukon are managed in a responsible manner.

¹ <https://www.pwc.com/ca/victoriagold>

² <https://yukon.ca/en/victoria-gold-updates/news#Technicalbriefings> and <https://youtu.be/a-D72tMcg4g>

Outlined below are the IRB recommendations, with details on how Government of Yukon intends to address these recommendations during the review of the project, expectations for BMC to provide additional information to confirm project design and the timing when additional information for each recommendation would be expected in the regulatory review process.

Please review this information and provide a response to **Monica Nordling, A/Manager of Major Mines Licensing**, monica.nordling@yukon.ca, on how the recommendations have been addressed in BMC's application or will be addressed. If BMC is of the opinion that certain recommendations do not apply to the Kudz Ze Kayah Mine Project, provide a detailed description as to why and, where applicable, the alternative practices that are in place which meet the same intent of the IRB recommendations.

Sincerely,

A handwritten signature in black ink, appearing to be 'EDN' with a stylized flourish at the end.

Erin Dowd

Director, Major Mines & Technical Services Branch

CC:

Scott Whitehead, Assistant Deputy Minister, Mineral Resources and Geoscience Services

Karen Clyde, Director, Yukon Waterboard Secretariat

Monica Nordling, A/Manager of Major Mines Licensing

Independent Review Board Recommendations		Action Required	Timeframe
1	Class II and III facilities according to the Yukon Mine Waste Management Guidelines (2023) should have independent technical review boards (ITRB) from design through closure	BMC to confirm establishment of ITRB and its ongoing oversight	It is expected that the independent review board remains engaged throughout the life of the project.
2	Ensure clarity of roles and responsibilities within the organization; organizational charts and clear descriptions of roles and responsibilities (e.g., Responsible, Accountable, Consulted and Informed (RACI) matrix) should be available	BMC to confirm governance structure and provide RACI for key roles.	Required for submission prior to licensing.
3	Have an Accountable Executive Officer (AEO) who is knowledgeable about the current risk profile of the facility, has sufficient authority to verify the site has adequate resources, staff, and budget to manage these assets safely	BMC to ensure project governance includes personnel to fulfil this role for all aspects of the project	Operational requirement throughout life of project
4	Have a Responsible Person (RP) to monitor the activities on site and ensure good coordination between the different groups involved in the design construction, operation, and surveillance of the facility	BMC to ensure project governance includes personnel to fulfil this role for all aspects of the project	Operational requirement throughout life of project
5	Have a Designer of Record (DoR) responsible for producing a design that meets the current practice in this field and the specific requirements of the Yukon Government, and who is involved in its construction and follows its operation and closure. The DoR should be informed and be allowed to comment on any deviances observed during the construction and operation of the facility	BMC to ensure project governance includes personnel to fulfill this role for all aspects of the project. BMC to ensure DoR role is clearly outlined in OM&S manual.	Operations, Maintenance and Surveillance manual and change management process to be included in license application.
6	Have an Engineer of Record (EoR) aware of the site history who can confirm that the design meets the current practice, permit requirements, is constructed and operated according to the design intent, and the overall facility is behaving according to the design intent and meets the regulatory requirements. The EoR should also be made aware of any deviances that are identified during	BMC to ensure project governance includes personnel to fulfil this role for all aspects of the project	Operations, Maintenance and Surveillance manual and change management process to be included in license application.

	the construction and operation of these facilities. Note that for many projects the DoR and EoR positions are represented by the same company and individual; while the DoR and EoR typically work for an engineering consulting company, they can also be on staff with the mining company		
7	The EoR should perform Failure Modes and Effects Analyses (FMEA) and risk assessments on a regular basis that include workshops with stakeholders. These analyses should be updated when there are material changes to the facility, or at least every three years	BMC has completed the FMEA for licensing and is responsible for performing future FMEA's in accordance with the MWMF Guidance and IRB recommendations	Requirement throughout the life of the project in accordance with the MWMF guidance until revisions are published.
8	Conduct periodic third-party inspections comparable to those for tailings storage facilities. The DoR and EoR should review site conditions at least two, but ideally four, times each year	No immediate actions required	Operations, Maintenance and Surveillance manual is required to outline the inspection schedule. Regulatory instruments will also outline inspections requirements including independent inspections.
9	Develop and implement a records system for tracking design and operational data and material changes to design or operating procedures	BMC to ensure project governance includes personnel to fulfil this role for all aspects of the project	Operational requirement and reporting expectations throughout life of project.
10	Adequately consider the variability in materials, including ore, liner, and drainage systems; verify the design values through routine (annually or more often) and statistically valid testing for the crucial design parameters, including drained and undrained shear strength parameters, loaded saturated permeability, and soil-water characterization curves	BMC to confirm that this recommendation has been met or is being considered in project designs.	Required as part of license application – will form a part of the application review process
11	Identify any potentially liquefiable or contractive materials and carefully considered same in the analyses as well as during operations, and such material must be buttressed by non-liquefiable, dilatant materials	BMC to confirm that this recommendation has been met or is being considered in project designs.	Required as part of license application – will form a part of the application review process

12	Design and implement a detailed monitoring and surveillance system to confirm design assumptions are constantly satisfied, or, if deviances are observed, they are promptly corrected	BMC to confirm that this recommendation has been met or is being considered in project designs.	Required as part of license application – will form a part of the application review process
13	Ensure that a calibrated and verified water balance model is utilized that considers the influence of climatic conditions and incorporates the licensing requirements in the design provisions to facilitate drainage within the heap if material variation in ore properties is to be expected. These could include dewatering systems to promote additional drainage if less pervious sectors could potentially affect its performance	Not applicable to KZK Project	
14	Adopt monitoring requirements consistent with The Mining Association of Canada (MAC) Developing an Operation, Maintenance, and Surveillance Manual for tailings and Water Management Facilities, ver. 2.1, March 2021, or any subsequent updates in an up-to-date Operation, Maintenance and Surveillance (OMS) manual	BMC to confirm that this recommendation has been met or is being considered in project designs.	Required as part of license application – will form a part of the application review process
15	Design and implement a robust monitoring program to follow geotechnical performance, including solution levels and saturation within the heap, temperature and freezing of the ore and solutions	BMC to provide equivalent for mine waste management facilities.	Required as part of license application – will form a part of the application review process
16	Develop a critical control system with trigger action response plans (TARPS), and periodically verify their effectiveness for geotechnical behavior, heap and solution freezing, and water management. Geotechnical monitoring should include both ground-based and airborne systems (e.g., LiDAR-equipped drones), with routine reporting and analyses	BMC to provide equivalent for mine waste management facilities.	Required as part of license application – will form a part of the application review process
17	Monitoring should include routine testing of the ore placed on the heap. For ore subject to geochemical degradation (such as acid leach facilities) in situ sampling and testing should be performed with a statistically valid frequency	Not applicable to KZK Project	

18 The regulator should be reassured that a solid governance system is in place within the owner's or operator's organization as set forth in Table 8.1. Such a governance system should follow generally accepted guidelines like MAC Towards Sustainable Mining (TSM), Global Industry Standard on Tailings Management (GISTM), International Council on Mining and Metals (ICMM) Tailings Management: Good Practice Guide, and the Large Open Pit Project (LOP) guidelines on waste dumps and heap leaching	No action necessary – to be demonstrated by responses to recommendations 1 through 9.	
19 A detailed Design Basis Memorandum should be incorporated into the application review and license conditions, capturing all key design assumptions and criteria, with summaries of all the relevant analyses	BMC is expected to submit a design document for all mine waste management facilities that is consistent with the expectations outlined in the Guidelines for Mine Waste Management Facilities and that addresses the technical recommendations included in this table.	Required as part of license application – will form a part of the application review process
20 Regulators should either (i) have access to ITRB reports during the design, construction, and commissioning phases and the follow-up reports by the owner or (ii) adopt an approach similar to that used by the B.C. regulators (Mines Act, Part 10, 10.4.3) to require annual summaries of the ITRB activities, a statement whether the work reviewed meets the ITRB expectations of good practice, and includes a signed acknowledgement by the ITRB members.	Regulatory considerations, no action from BMC needed.	
21 The licensing documents should expressly address monitoring systems and other critical controls	Regulatory considerations, no action from BMC needed.	
22 Regulators should have clear enforcement authority for all important licensing provisions, as well as deviations from design, specifications, operating and other protocols which forced part of the licensing process	Regulatory considerations, no action from BMC needed.	

23	Ensure that the needed legislative changes are in place to enable these recommendations	Regulatory considerations, no action from BMC needed.
24	Streamline the compliance reporting process to provide more frequent but less bulky submittals, with a focus on deviances from the design, critical controls, standard operating procedures, and licensing criteria. Key areas might include ore stacking periods, water balance and available pond capacity, irrigation rate, and performance monitoring systems. These reports should be short and include mitigation measures or summary analyses if performance deviates from the original intent	Regulatory considerations, no action from BMC needed.
25	Such periodic reporting should include the construction phase, with summary documents detailing any deviances or unexpected conditions	Regulatory considerations, no action from BMC needed.
26	Staffing levels and technical skill sets should be matched to demands	Regulatory considerations, no action from BMC needed.
27	Consider placing subject matter experts (SME) on retainer that staff, including the enforcement teams, can draw upon as needed	Regulatory considerations, no action from BMC needed.
28	Implement regular training for the enforcement officers to keep them abreast of the potential failure modes, critical controls, and the early warning signs	Regulatory considerations, no action from BMC needed.
29	Assemble a committee, panel, or individual SMEs to reconsider these guidelines in light of the 2024 failures at Eagle Gold Mine and Çöpler (Türkiye), the pending publications of the LOP Stability Rating and Hazard Classification System (Q3 2025), and the Guidelines for Heap and Dump Leach Design & Operations (early 2027), as well as the planned CIMM heap leach standards based on the LOP Guidelines. Table 8.3 provides suggested changes for consideration	Regulatory considerations, no action from BMC needed.
30	Consider giving the guidelines more authority, such as requiring an applicant to demonstrate an equivalent or	Regulatory considerations, no action from BMC needed.

	better approach where the project deviates materially from the guidelines		
31	Class I facilities should undergo independent peer review for the technical issues and cost estimate	No action required.	Third-party review of cost estimates is being performed by Government of Yukon's as part of license application review.
32	Class II and III facilities should have the closure plan (technical and costs) reviewed by an ITRB	BMC to confirm if independent board has reviewed closure costs for the tailings facilities facility or other critical project components.	Response required to inform application review process
33	Develop a robust and detailed closure plan at the design stage that includes the final rinsing strategy and the transition of the HLF into a landform	Not applicable to KZK Project.	
34	Closure plans and cost estimates should be updated at least every three years or when there is a material change to the project	Regulatory considerations, no action from BMC needed.	
35	Set standards or guidelines for what is to be included in the cost estimate	Regulatory considerations, no action from BMC needed.	
36	Cost estimates should include the possibility that the owner failed or walked away, and that closure also includes some unplanned activities like environmental contamination, slope failure, etc. Include Yukon Government costs to implement closure and the higher costs of contractor-performed work rather than mining company performed	Regulatory considerations, no action from BMC needed.	
37	Valley leach facilities and any HLF with winter ore stacking should be Class III	Not applicable to KZK Project	
38	Dams or any slopes of the heap that can impact dams should be designed in accordance with the applicable requirements of the MAC Guidelines for Tailings Management Facilities, the Canadian Dam Association, or ICOLD guidelines	Not application to KZK Project	

39	Perform a hazard classification according to the LOP guidelines (Hawley, 2017), the pending LOP publication of a heap leach specific version of this hazard classification system (Smith et al, 2025), or as otherwise accepted by YG. For the LOP systems, any facility with a hazard classification greater than High Hazard should be redesigned, relocated, or both, such that the hazard is reduced to not greater than high	BMC must demonstrate appropriate hazard classification for all waste management facilities	Required for licensing
40	Make sure water storage capacity on site allows some flexibility if upset conditions both in terms of volume and quality are experienced. Specifically, include severe and robust storm events in the design of the facility	BMC to confirm that this recommendation has been met or is being considered in project designs.	Required as part of license application – will form a part of the application review process
41	Change 24-hr duration to “ <i>critical duration</i> ” with definition (such as, the time required for the process facility to safely consume, store, or treat and discharge the surplus water)	BMC to confirm the assumptions and critical durations used to determine storage criteria in project designs.	Response required to inform application review process
42	The current “ <i>24h-500yr wet period</i> ” needs clarification. More robust criteria should be used for extreme events. A combination of an extreme precipitation event (e.g., 1:1,000 year 24-hour or 1:500 year 72-hour events) with a 1:100 wet year freshet is not uncommon now for design purposes	BMC to confirm the assumptions and critical durations used to determine storage criteria in project designs.	Response required to inform application review process
43	The 3- or 5-day draindown criteria should be supported by risk assessment of extended pumping loss, and the actual drain down rate should include allowances for the actual dynamic storage in the heap and the seasonal variations thereof	Not applicable to KZK Project.	
44	When the system includes an in-heap pond (IHP), ensure through design and operating methods that freshet can safely enter the IHP. That is, provide a combination of adequate freeboard to impound run-in and fill the IHP with durable material of sufficiently high permeability to take the run-in with a robust factor of safety (FoS)	Not applicable to KZK Project	

45	Keep the water balance up to date on a monthly or quarterly basis	Not applicable to KZK Project	
46	The drainage gravel layer and perforated pipes must be compatible in terms of permeability, gradation, and perforation size and spacing	BMC to confirm that this recommendation has been met or is being considered in project designs	Details of the material Specs needed during application review process
47	Pipes should be connected with mechanical fittings (i.e., solution transfer by overlapping pipes should not be allowed for any components critical to heap stability and solution recovery)	Not applicable to KZK Project	
48	Coupled seepage and thermal modelling should be performed as part of design, and the model calibrated annually	BMC to demonstrate appropriate modelling to ensure tailings facilities are performing as designed (e.g., no frozen lenses, etc.)	Modelling must be identified and demonstrated during application review and throughout life of mine.
49	Winter stacking or stockpiling controls, monitoring, verification (solution temperature for average and local or discrete measurements, minimum ore temperatures when stacked, thermistors installed in heap) should be part of the critical controls	Not applicable to KZK Project	
50	Establish verifiable controls to reduce any detrimental freezing within the heap or solution management system	Not applicable to KZK Project	
51	Limit construction season, especially with respect to liner deployment and cover timing to prevent damage to the liner, freezing or pre-hydration of the GCL (if used), and damage to the PLS collection system. Include residual strength behavior in stability analyses for liner interfaces and GCLs	BMC to confirm that this recommendation has been met or is being considered in project designs.	Required as part of license application – will form a part of the application review process
52	Consider prescribed minimum allowable PLS temperatures (average and local or discrete) measurements, including actions to mitigate unacceptably low temperatures	Not applicable to KZK Project	
53	Valley fill heap leach facilities and large ponds, such as events ponds at any heap leach facilities, should adopt operational criteria consistent with the MAC Guide to the Management of Tailings Facilities, ver. 3.2, March 2021	Not applicable to KZK Project	

54	For cyanide leach facilities, a treatment plant for cyanide and decomposition byproducts treatment plant should be commissioned before cyanide is introduced to the heap	Not applicable to KZK Project	
55	Consider similar provisions for early treatment for non-cyanide heap leaching, such as sulfuric acid for copper ores	Not applicable to KZK Project	
56	Ensure undrained peak and residual strength parameters are being considered for the ore, foundations, and liner interfaces, where applicable and with suitable minimum factors of safety	BMC has completed these parameters and is responsible for additional field and laboratory data prior to construction	Required as part of license application – will form part of the application review process and updated as required during detailed design and throughout the life of the project.