

2026-05-14

Monica Nordling
A/Manager, Major Mines Licensing
Yukon Dept. of Energy, Mines and Resources
211 Main Street, Whitehorse, YT
Y1A 2B2

Re: Implementation of the Independent Review Board Recommendations

Dear Ms. Nordling,

BMC received a letter from your department dated May 11, 2016, outlining recommendations of the Eagle Gold Mine Independent Review Board (IRB) recommendations, with details on how: Government of Yukon intends to address these recommendations during the review of the Kudz Ze Kayah (KZK) Project QML application; expectations for BMC to provide additional information to confirm project design; and the timing of when additional information for each applicable recommendation would be expected in the regulatory review process. The attached table (Table 1) provides details of how these IRB recommendations have been addressed in BMC's QML application or will be addressed. These details are provided in [blue](#). Please note that BMC's engineering and environmental teams are of the opinion that certain IRB recommendations cannot or should not be applied as proposed to the KZK Project largely due to the proposed KZK Project not having a heap leach facility, and we have provided comments and supporting rationale on these recommendations in [green](#).

We are happy to discuss the attached at your convenience,

Yours sincerely



Kelli Bergh

Vice President, Environment and Regulatory Affairs

Enclosure

Table 1 – Eagle Gold IRB Recommendations and BMC Responses

ID	IRB Recommendation	Action Recommended by YG	Timeframe Recommended by YG	BMC Response
1	Class II and III facilities according to the Yukon Mine Waste Management Guidelines (2023) should have independent technical review boards (ITRBs) 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.	BMC is in the process of establishing an Independent Technical Review Board (ITRB) to provide independent technical review of all mine waste management facilities that the Yukon Guidelines for Mine Waste Management Facilities (GMWMF) pertains to. Detailed Design of these mine waste management facilities is ongoing, and we expect that the ITRB will provide review at multiple stages of the Detailed Design process. BMC will add this commitment to the Tailings Management Plan (TMP), Waste Rock and Overburden Management Plan (WROBMP) and Water Management Plan (WMP) during the QML Detailed Review Stage.
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.	BMC intends to add this information to the TMP, WROBMP and WMP during the QML Detailed Review Stage.
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; and 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	BMC intends to appoint an Accountable Executive Officer for the Class A Storage Facility prior to Project construction, and will add this commitment to the TMP during the QML Detailed Review Stage.
4	Have a Responsible Person (RP) to monitor on-site activities and ensure good coordination between the different groups involved in the facility's design, construction, operation, and surveillance	BMC to ensure project governance includes personnel to fulfil this role for all aspects of the project	Operational requirement throughout life of project	BMC intends to appoint one or more Responsible Persons prior to Project construction, and will add this commitment to the TMP, WROBMP and WMP during the QML Detailed Review Stage.
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.	BMC has had a Designer of Record (DOR) for all mine waste management facilities since 2017, and intends to maintain this DOR/Engineer of Record (EOR) role throughout Project design, construction, operations and closure. BMC will add this commitment to the TMP, WROBMP and WMP during the QML Detailed Review Stage. BMC has committed to developing an Operations, Maintenance and Surveillance (OMS) Manual for relevant mine waste management facilities that aligns with guidance from the Mining Association of Canada (MAC) prior to Project construction, as detailed in: • Chapter 11 of the Environmental Monitoring, Surveillance and Reporting Plan (EMSRP); • Section 3.9.1 of the WROBMP; and • Section 4.1 of the TMP. As detailed in guidance from MAC, an OMS Manual is a live document that contains highly detailed information regarding governance (e.g. names, contact details, training plans, succession plans etc.), facility designs and operations procedures, and maintenance and surveillance procedures (including for specific pumps, valves, instrumentation etc.). It is typical for the design and planned operations of facilities to change throughout licensing in response to regulator and stakeholder feedback. It is thus not possible to complete final designs and/or develop a complete and comprehensive OMS Manual until licensing is complete and facility designs are essentially fixed, allowing the operator to develop the detailed plans and information required in an OMS Manual. As discussed in response to QML Information Request 5A, BMC proposes that an OMS Manual be developed following licencing and be provided to YG prior to construction of mine waste management facilities.
6	Have an Engineer of Record (EoR) who is aware of the site history and can confirm that the design meets current practice and permit requirements, that construction and operation align with the design intent, and that 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 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	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.	BMC intends to appoint an EOR prior to Project construction, and will add this commitment to the TMP, WROBMP and WMP during the QML Detailed Review Stage. See Recommendation 5 for BMC's response related to submission of an OMS Manual.

ID	IRB Recommendation	Action Recommended by YG	Timeframe Recommended by YG	BMC Response
7	The EoR should perform Failure Modes and Effects Analysis (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.	BMC, in collaboration with the Project DOR, YG and other stakeholders, conducted FMEAs in 2020 and 2024, provided as Appendix E and Appendix F of the TMP. BMC intends to update these analyses prior to Project construction, and periodically throughout operations and closure, and will add this commitment to the TMP, WROBMP and WMP during the QML Detailed Review Stage.
8	Conduct periodic third-party inspections comparable to those for TSFs. 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.	BMC intends for the DOR/EOR to review site conditions at least quarterly, and following significant seismic or storm events or unexpected monitoring results, as discussed in Chapter 11 of the EMSRP. BMC also intends to have independent reviewers periodically evaluate site conditions, including the ITRB and potentially other independent reviewers, as determined to be appropriate by the EOR and ITRB in consultation with YG, and in concordance with Term 45 of the YESAA Decision Document dated April 10, 2026. This commitment is discussed in Section 11.6 of the EMSRP. The wording 'comparable to those for TSFs' is unclear. BMC expects that ITRB and other independent reviews will be adequate to meet this IRB recommendation. See Recommendation 5 for BMC's response related to submission of an OMS Manual.
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.	BMC maintains an Integrated Knowledge Base similar to that required in Principle 2 of GISTM, and intends to continue maintaining this database throughout Project construction, operations and closure. BMC will add this commitment to the TMP, WROBMP and WMP during the QML Detailed Review Stage..
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	The potential variability of the natural and synthetic materials that will comprise mine waste management facilities at the Project has been evaluated through years of field and laboratory testing, benchmarking against similar facilities, and professional judgement on the part of the DOR and their experienced engineering design team. This potential variability was considered in the facility designs presented in the QML application, with conservative assumptions made as appropriate to ensure that facilities are stable and perform as intended despite the variability expected in material properties. This is standard engineering practice, and is a requirement for the robust design of tailings and mine waste management facilities, as discussed in GISTM and other guidelines. Additional field and laboratory testing was conducted in 2024 and will be conducted in 2026 in support of Detailed Design, and further testing will be conducted throughout construction and operations to ensure that design assumptions are met, and to support design revisions as needed to ensure geotechnical stability and facility performance.

ID	IRB Recommendation	Action Recommended by YG	Timeframe Recommended by YG	BMC Response
11	Identify any potentially liquefiable or contractive materials; such materials must be considered in the design and perform analyses with consistent geotechnical parameters. Furthermore, 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	Potentially liquefiable materials, including natural foundation materials and filtered tailings have been identified and considered in the Project design. Further evaluation of these materials is being conducted as part of Detailed Design. The risk of potential liquefaction of natural foundation materials will be mitigated by removing unsuitable material from foundations, as discussed in Section 3.3 of the TMP and Section 3.3 of the WROBMP. Some potentially liquefiable material may remain in facility foundations in locations where it is effectively buttressed by non-liquefiable materials and does not pose a geotechnical stability risk. The filtered tailings placed in the Class A Storage Facility may be potentially liquefiable if not adequately compacted. The risk of potential liquefaction of these materials will be mitigated in part by co-disposal with waste rock, and in part by compaction to ensure that the void ratio of potentially liquefiable materials is less than their critical void ratio, as discussed in Section 4.2 of the TMP.
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	BMC intends to implement a detailed monitoring and surveillance system during Project construction, operations and closure, as discussed in Chapter 11 of the EMSRP. Further details will be provided in the OMS Manual, as discussed in response to Recommendation 5.
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		N/A
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	BMC intends for the monitoring and surveillance system to be consistent with MAC guidelines, as discussed in Chapter 11 of the EMSRP.
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	The monitoring and surveillance system will focus in part on geotechnical performance, including monitoring of pore pressures in mine waste management facilities, as discussed in Chapter 11 of the EMSRP. The KZK Project does not include a heap leach facility, so recommendations pertaining to solution are not applicable. Monitoring of temperature and/or freezing of mine waste materials may be conducted if deemed appropriate by the EOR and/or ITRB, but the KZK facilities are very different from a heap leach, and freezing conditions do not present the geotechnical stability risk that they would at a heavily irrigated heap leach.
16	Develop a critical control system with trigger action response plans (TARPs), and periodically verify their effectiveness for geotechnical behaviour, 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	Risk controls are identified and considered in the FMEAs provided as Appendix E and Appendix F of the TMP. BMC intends to update the FMEA prior to Project construction, and will include identification of critical controls and development of TARPs. Risk controls will include ground based monitoring, and may also include airborne monitoring, if deemed appropriate. BMC will add this commitment to the EMSRP during the QML Detailed Review Stage. While both ground-based and airborne surveying and monitoring systems (InSAR, LiDAR, PhotoSat and others) should be considered for all mine waste management facilities, airborne systems are not always a useful tool for monitoring the geotechnical stability of filtered tailings or waste rock storage facilities. The need for airborne monitoring should be a decision of the EOR and ITRB, and not a QML requirement.
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		N/A

ID	IRB Recommendation	Action Recommended by YG	Timeframe Recommended by YG	BMC Response
18	The regulator should be reassured that a solid governance system is in place within the owner's or operator's organization as, as outlined in Table 8.1. Such a governance system should follow generally accepted guidelines such as MAC's Towards Sustainable Mining (TSM), the Global Industry Standard on Tailings Management (GISTM), the 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.		See 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	A Detailed Design Basis Memorandum was developed as part of Feasibility Design of the mine waste management facilities, and an updated version will be developed as part of Detailed Design. Summaries of the Design Basis applicable to each facility are provided in Chapter 2 of the TMP, Chapter 2 of the WROBMP, and Chapter 4 of the WMP.
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.		N/A BMC recommends that YG does not require the submission of ITRB reports. Section 3.2 of the GMWMP accurately explains the purpose and objective of an ITRB, part of which is for ITRB members to be able to speak freely providing non-binding advice and guidance, while not directing the work or performing the role of EOR, and typically without accepting any liability for facility performance. Requiring that ITRB members provide full ITRB reports to regulators is not aligned with the desires and expectations of most ITRB members, and risks compromising review outcomes. ITRB members may not speak freely if they see a risk of their recommendations being interpreted in a way that it is not intended by regulators or the public, or in a way that can be seen as assigning liability to them. See Principle 15 of GISTM for current best practice disclosure requirements, including disclosure of summaries of 'material findings', rather than entire review reports.
21	The licensing documents should expressly address monitoring systems and other critical controls	Regulatory considerations, no action from BMC needed.		N/A
22	Regulators should have clear enforcement authority over all key licensing provisions, including deviations from design, specifications, and operating protocols that were required as part of the licensing process	Regulatory considerations, no action from BMC needed.		N/A
23	Ensure that the needed legislative changes are in place to enable these recommendations	Regulatory considerations, no action from BMC needed.	Regulatory considerations, no action from BMC needed.	N/A
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.	Regulatory considerations, no action from BMC needed.	N/A
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.	Regulatory considerations, no action from BMC needed.	N/A
26	Staffing levels and technical skill sets should be matched to demands	Regulatory considerations, no action from BMC needed.	Regulatory considerations, no action from BMC needed.	N/A
27	Consider placing subject matter experts (SMEs) on retainer so that staff, including the enforcement teams, can draw upon as needed	Regulatory considerations, no action from BMC needed.	Regulatory considerations, no action from BMC needed.	N/A
28	Implement regular training for the enforcement officers to keep them abreast of potential failure modes, critical controls, and early warning signs	Regulatory considerations, no action from BMC needed.	Regulatory considerations, no action from BMC needed.	N/A
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 Stability rating and hazard classification system (Smith et al., 2025), and the Guidelines for heap and dump leach design & operations (Smith et al., 2025), 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.	Regulatory considerations, no action from BMC needed.	N/A

ID	IRB Recommendation	Action Recommended by YG	Timeframe Recommended by YG	BMC Response
30	Consider giving the guidelines more authority, such as requiring an applicant to demonstrate an equivalent or better approach where the project deviates materially from the guidelines	Regulatory considerations, no action from BMC needed.	Regulatory considerations, no action from BMC needed.	N/A
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.	N/A
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	As discussed in response to Recommendation 1, BMC is in the process of establishing an ITRB. The ITRB will review the closure plan for all mine waste management facilities during Detailed Design, and periodically thereafter.
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.		N/A
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.		N/A
35	Set standards or guidelines for what is to be included in the cost estimate	Regulatory considerations, no action from BMC needed.		N/A
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.		N/A
37	Valley leach facilities and any HLF with winter ore stacking should be Class III	Not applicable to KZK Project		N/A
38	Dams or any slopes of the heap that can impact dams should be designed in accordance with the applicable requirements of the MAC A Guideline to the Management of Tailings Facilities, the Canadian Dam Association, or ICOLD guidelines	Not application to KZK Project		N/A
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 the Yukon Government. 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	BMC's DOR has established a hazard classification for all mine waste management facilities in accordance with the GMWMF and/or the Canadian Dam Association (CDA) guidelines, provided as Appendix B of the TMP. The GMWMF already provides guidance for classification of all mine waste management facilities that differs from Hawley (2017) in scope and content. GMWMF also uses a different approach to classification than all other widely used guidelines, including GISTM, CDA etc, which may be problematic for operators that need to meet the expectations of multiple regulators and stakeholders. Consistent guidance from YG that aligns with other widely used guidelines would be beneficial.
40	Make sure that on-site water storage capacity allows sufficient flexibility to accommodate upset conditions, both in terms of volume and water quality. 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	All proposed water conveyance and storage structures have been designed using a risk-based approach that accommodates upset conditions, including large storm events. This approach is standard engineering practice, as reflected in GMWMF, GISTM, CDA and others. Design criteria are presented in Section 4.2 of the WMP, and were developed considering guidance from CDA, BC MOE Technical Guidance 7 and GMWMF.
41	Change 24-hr duration to “critical duration,” defined 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	Design criteria for all water conveyance and storage structures are presented in Section 4.2 of the WMP, and were developed considering guidance from CDA, BC MOE Technical Guidance 7 and GMWMF. These criteria were determined to be appropriate by the DOR and their experienced engineering design team, and will be reviewed as part of Detailed Design. The Project's water management system is designed using conservative assumptions and includes multiple levels of redundancy. In the case that a design event is exceeded, there are many potential measures that can be implemented to ensure there are no significant adverse impacts to the environment or the operation, as discussed in Section 3.4 of the Adaptive Management Plan.
42	The current “24h-500yr wet period” 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	See response to Recommendation 41.

ID	IRB Recommendation	Action Recommended by YG	Timeframe Recommended by YG	BMC Response
43	The three- or five-day draindown criteria should be supported by risk assessment of extended pumping loss, and the actual draindown rate should include allowances for the actual dynamic storage in the heap and the seasonal variations thereof	Not applicable to KZK Project.		N/A
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		N/A
45	Keep the water balance up to date on a monthly or quarterly basis	Not applicable to KZK Project		N/A
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	The underdrains proposed for the Class A and Class B Storage Facilities were designed by the DOR to be fit for purpose, including appropriate drainage and pipe materials and configuration, as discussed in Section 3.3 of the TMP and Section 3.2 of the WROBMP. The underdrains are not necessary for geotechnical stability, and are provided only to facilitate construction and to ensure that any seepage through the underliner is collected for treatment. BMC notes that this IRB recommendation pertains to the pregnant leach solution collection system of a heap leach facility. Collecting leach solution from a heap leach is very different from collecting seepage from a filtered tailings storage facility, where there are orders of magnitude less fluid to collect, and the consequences of poor system performance are much less.
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		N/A
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.	Seepage modelling of the mine waste storage facilities was conducted alongside stability modelling, as discussed in Appendix D of the TMP and Section 3.5 of the WROBMP. Snow will be removed from areas where deposition of tailings and/or waste rock are taking place to minimize the development of entrained ice or snow lenses. It is likely that some limited areas of snow or ice will occur within the tailings and waste rock material, but given the overall hydrology of the facilities (minimal infiltration and/or very high permeability), these areas will pose a low risk to facility stability. Detailed snow removal procedures will be included in the OMS Manual, to be developed prior to Project construction. Thermal modelling is not warranted for the Project's mine waste management facilities, and has not been conducted. BMC notes that this IRB recommendation pertains to heap leach facilities, where the surface is irrigated and large volumes of leach solution must be able to percolate freely through the pad material to ensure geotechnical stability. In a heap leach facility, there is a high risk of ice lenses developing if irrigation occurs during winter, and the potential consequences of these ice lenses can be very significant. Filtered tailings and waste rock storage facilities are not irrigated, so much less fluid must be able to pass through them to ensure geotechnical stability. As a result, both the likelihood of ice lenses developing, and the consequences of potential ice lenses, is low, and thermal modelling is generally considered to not be warranted for these facilities.
49	Winter stacking or stockpiling controls, monitoring, and verification (solution temperature for average and local or discreet measurements, minimum ore temperatures when stacked, thermistors installed in heap) should be part of the critical controls	Not applicable to KZK Project		N/A
50	Establish verifiable controls to reduce any detrimental freezing within the heap or solution management system	Not applicable to KZK Project		N/A

ID	IRB Recommendation	Action Recommended by YG	Timeframe Recommended by YG	BMC Response
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 behaviour 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	Liner construction will be conducted in accordance with manufacturer's specifications, and may have seasonal limitations if appropriate. Residual strength for liner interfaces was not considered during Feasibility Design, as there are not expected to be strain weakening materials in contact with the liners. A sensitivity analysis of liner strength was conducted, as discussed in Appendix B of the TMP. Further evaluation of residual strength behaviour will be considered as part of Detailed Design. BMC notes that this IRB recommendation pertains largely to heap leach facilities, and that the KZK Project does not have GCL or a PLS collection system.
52	Consider prescribed minimum allowable PLS temperature (average and local or discreet) measurements, including actions to mitigate unacceptably low temperatures	Not applicable to KZK Project		N/A
53	Valley fill HLFs and large ponds, such as events ponds at any HLFs, 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		N/A
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		N/A
55	Consider similar provisions for early treatment for non-cyanide heap leaching, such as sulfuric acid for copper ores	Not applicable to KZK Project		N/A
56	Ensure undrained peak and residual strength parameters are being considered for the ore, foundations, and liner interfaces, where applicable and with suitable minimum FoS	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.	Undrained conditions were assumed in stability analyses of the mine waste management facilities, as discussed in Appendix B of the TMP. In all cases, suitable minimum FOS are met. Residual strength parameters were not evaluated in detail as part of Feasibility Design as there are not expected to be strain weakening materials present in the facilities or the foundations, as discussed in response to Recommendation 11. Further evaluation of residual strength behaviour will be considered as part of Detailed Design.