VICTORIA GOLD CORP
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MEMO

Date	November 20, 2023
To	Jeremy Karkanis - Mining Technologist Erin Dowd, Manager – Major Mine Licensing
From	Hugh Coyle, VP Environment
Subject	Implementation Plan - Response to HLF Operations and Cyanide Management Desktop Review

This memorandum provides our response to the January 30, 2023 letter request to provide an Implementation Plan (IP) to address the Implementation Expectations detailed in that letter. Additionally, this IP includes our responses to a December 7, 2022, follow-up email from Yukon Government regarding a review of the June 2022 Cyanide Management Plan version 2022-01, and our responses to Bill Slater's August 2022 memo regarding his review of the CMP on behalf of the First Nation Nacho Nyak Dun.

Table 1 below provides a submittal timeline for various plans that include the: Cyanide Management Plan (CMP); Operations, Maintenance and Surveillance Plan (OMS); Water Management Plan (WMP); Contingency Water Management Plan (CWMP); Heap Leach Facility Emergency Response Plan (ERP) and the Environmental Monitoring, Surveillance and Adaptive Management Plan (EMSAMP). This IP also considers the updates to water balance approaches for the HLF and site management.

Detailed responses to YG and NND comments, implementation plan tasks and submittal timelines are provided in Table 2.

TABLE 1. IMPLEMENTATION PLAN SUBMITTAL TIMELINE

Plan	Submittal Timeline
Heap Leach Water Balance Model (HLF WBM)	Part of Annual Report Submission – every March 31
Site Water Balance and Water Quality Model (SWBWQM)	Part of Annual Report Submission – every March 31
Development of a Calibrated, Operational Water Balance Model using the SIMPS file	Daily/Weekly Updating, Monthly Reporting Seasonal Reporting – mid-summer (August 1 each year) and late fall (November 1 each year - by December 31, for this calendar year)
Water Management Plan (WMP)	December 31, 2023
Contingency Water Management Plan (CWMP)	Q1 2024
Environmental Monitoring, Surveillance and Adaptive Management Plan (EMSAMP)	Q1 2024

Plan	Submittal Timeline
Mine Water Treatment Plant Operating Plan (WTP-OP)	Submitted June 2023
Cyanide Management Plan (CMP)	Q1 2024
HLF Emergency Response Plan (ERP)	Q1 2024

TABLE 2. IMPLEMENTATION PLAN RESPONSE AND TIMELINE

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
1. Development and consistent use of a Calibrated, Operational Water Balance Model			
a. To include:	i. DAS volumes as set in the WUL and HLF CWMP	This was corrected in the 2022 Annual Water Balance Modeling Report prepared by Forte Dynamics and dated April 22, 2022 (submitted as Appendix F to the Annual Report for 2021).	The corrected DAS volumes will appear in each annual update of the HLF WBM report and the updated HLF CWMP (scheduled for submittal by Q1 2024).
	ii. all material inputs and outputs (including LDSP transfers)	For the purposes of water balance modelling for the 2022 Annual Report and moving forward to more accurately represent actual site water management practices, the scopes of SWBWQM and the HLFWBM have been adjusted. The primary change is that now the EP is primarily modelled within the SWBWQM (with input from the HLFWBM) so that transfers into and out of the LDSP and EP from other contact water sources are now appropriately represented. The SWBWQM considers the stored volumes (and available storage) within the EP and calculates the DAS (based on the available capacity within the IHP and EP). The Solution Inventory Monitoring Programs (SIMPs) excel-based model has been and will continue to be the primary method for daily tracking of all inputs and outputs associated with the LDSP, EP and IHP; it also provides calibrated routines to predict freshet, mid-summer and late fall conditions using continuously updated data associated with HLF and LDSP operations (i.e., daily stacking rates, water transfers between various facilities, climate data, etc.)	Updated reports for the HLF WBM and the SWBWQM will be provided as part of the annual report submission. The SIMPs file is updated daily/weekly (depending on data types) and will continue to be used to provide monthly updates regarding pond levels and transfers between ponds (as part of WUL monthly reporting requirements), and will be used to provide pre-freshet, mid-summer and late fall predictions.
	iii. actual values of initial and residual moisture content	Residual moisture content data utilized in the HLFWBM submitted in 2023 remains and will remain informed by the Brooks-Corey calculation. Further, the results from the In-Heap Pond Verification test confirm that the values utilized are appropriate.	VGC will continue using this approach for the annual submittal for HLFWBM. For interim water balance projections (i.e., mid-summer and late fall) VGC will use excel based modelling within the SIMPs file, which more readily allows for incorporating actual ore moisture values and future and historic makeup water trends (liters per tonne) to project demand based on the evolving seasonal observations.
	iv. inputs of license flow rate (2070 m3/hr) along side operational flow rate (1500 m^3/hr)	The HLFWBM submitted in 2023 used a solution application rate that was informed by the measured values from 2022 operational data (summarized in Table 2-6.1 of the Annual Report – 2022) and also considered a nominal maximum flow rate of 2,070 m^3/hr (corresponding to a leaching application rate of a 10 L/hr/m^2). VGC will continue to utilize actual solution application rates and trends based on seasonal consideration for the Annual submittal of the HLF WBM.	An updated report for the HLF WBM will be provided as part of the annual report submission.
	v. actual values for the in-heap pond based on the verification test (June 2022)	The In-Heap Pond Verification Test undertaken in 2022 confirmed the assumptions regarding In-Heap Pond volumes utilized in the previous HLF WBM. The recommendations and comments provided in the 2022 Piteau memo were valid and considered when the test methods were being finalized. The In-Heap Pond volume utilized in the HLFWBM submitted in 2023 thus remains unchanged. These values will continue to be used and will be verified again in accordance with Clause 71 of QZ14-041-1. No adjustments are necessary.	No deliverable.

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	vi. consideration of the MWTP capacity when it becomes operational, including its influence on the overall site water balance so as to avoid the need to pump water from LDSP to EP.	The MWTP became operational in January 2023. The SWBWQM now includes the MWTP as a modelling node and integrates triggers (i.e., stored volume thresholds) in the EP and LDSP to ensure that site operational practices are appropriately characterized. When the LDSP threshold is predicted to be reached, water is transferred to the EP. When the EP does not have capacity for the full DAS (noting that this is a conservative trigger as the available storage in the In-Heap Pond is part of the actual DAS requirement), the model assumes water is sent to the MWTP for treatment and discharge.	VGC will continue to use thresholds in the SWBWQM for transferring water to the MWTP to minimize the need to transfer water from the LDSP to the EP. The thresholds will continue to be evaluated as part of adaptive management protocols to see if they require any modifications in model evaluations.
	vii. consideration of no operating MWTP	No adjustments to account for this request are being contemplated at this time. It is not clear what the purpose nor scope of this request is intended to capture. The SWBWQM includes predictions of the volume of water that would need to be treated to ensure water management practices do not lead to a release of untreated contact water. Without a specific duration intended to be modelled for no operation of the MWTP, the volume intended for treatment could simply be assumed to be released once all containment facilities are full. The timing, duration, initial conditions (e.g., pond volumes, leach area, etc.), and hydrometeorologic conditions for this scenario would all need to be defined for the exercise to be of value and, with the MWTP operational and performing within specifications, the value would appear to be somewhat limited even with more defined model setup parameters.	No deliverable.
	viii. consideration of cyanide destruction	No adjustments to account for this request are being contemplated at this time. It is not clear what consideration is being requested in this point. The HLFWBM does consider when active treatment of process solution would be necessary to reasonably manage process solution. The HLFWBM also provides the expected probabilities for an overtopping event when treatment of process solution within the Events Pond would be necessary. Further, this request does not have any bearing on the use of a calibrated, operational water balance model which does not consider individual parameters that might or might not need treatment.	No deliverable.
	ix. actual stacking rates, when appropriate (e.g., determining future actions or evaluating past circumstances)	Both models (HLF WBM and SWBWQM) will continue to be calibrated based on observed conditions with stacking rates considered insofar as they contribute to the overall stacked volume/tonnages when the model period commences. The planned stacking rates will continue to be utilized in the HLFWBM and, by virtue of the HLFWBM makeup water demand, the SWBWQM. Further, the SIMPs file already incorporates all historical stacking rates which provides the basis for predicting water usage under various future scenarios.	All stacking rate assumptions are updated annually as a component of the annual modelling/reporting process, and will continue to be included in the HLFWBM Annual Report. If material changes to mine plan assumptions are considered/possible post submission of the HLFWBM Annual Report submission, these changes will be considered in the SIMPs update submission.
	x. site-specific data modelling to estimate both peak and seasonal snowmelt volumes	For the purposes of every annual update to the SWBWQM and HLFWBM, the site-specific data record (from snow surveys and climate station data) is updated and then considered by the technical experts during their evaluation	Snow and climate data are updated each calendar year and then incorporated into the development of both models as part of Annual reporting. This data is also tracked and utilized in the SIMPs file.

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		of whether any updates to the synthetic climate record are required. Both models include considerations for peak and seasonal snowmelt volumes. The synthetic climate record development approach is discussed in detail in the Eagle Gold Hydrometeorology Report - 2021 (Lorax Environmental, 2021). The division of precipitation between rain and snow and the calculation of excess water (rain and melt) are represented in Forte's HLFWBM by using Snow 17, which is a sub-model that takes average daily temperature and precipitation as the critical inputs, and corrects for seasonal solar radiation changes, latitude and altitude in the implicit calculations of melt factor, and lapse rate most notably. Snow 17 also makes use of daily heat deficit, accounting for the internal condition of the snowpack based on the net heat transfer effects due to daily temperature and precipitation at the snow surface. Lorax's SWBWQM represents streamflow (as quick flow, interflow and baseflow) using a modified version of the Birkenes model (Christophersen and Seip, 1982) to account for variability in catchment areas and specific representation of snowfall/melt processes during freshet and aufeis production during winter. The Snow 17 approach yields similar results to the method used by Lorax. In Forte's experience for heap operations SNOW 17 more closely aligns to measured snowpack on heap surfaces and provides a better representation of snow accumulation and snow melt for heap leach operations.	
b. To be calibrated and used:	i. As a tool to support water management on site (e.g., eliminate encroachments on DAS that are not associated with extreme events in the HLF catchment, and reduce frequency and severity of all encroachments on the DAS) – modelling results should be linked to trigger levels and actions associated	As part of annual reporting and future predictions associated with water management practices, the SWBWQM now has thresholds imbedded in its operating rules to trigger or stop transfers when specific maximum and minimum volumes for the EP and LDSP are reached, and for operating the MWTP at specific treatment rates. The SIMPs file is the primary tool used to support daily, weekly and monthly forecasting decisions associated with overall site (including HLF, LDSP and MWTP) water management decisions, including the need to reduce encroachments on the DAS.	SWBWQM and HLFWBM will continue to be updated annually as per QZ14-041-1, while SIMPs results will be used for mid-summer and late fall reporting. The SIMPs file will continue to use calibrated predictive functions and be used to support water management on site.
	ii. To replicate infringements on DAS	There is no meaningful rationale for replicating prior infringements on the DAS, which were outcomes associated with water management decisions based on real-time events prior to the commissioning of the MWTP. Now that the MWTP is commissioned and operating, the modeled conditions that will lead to DAS encroachments will be different and will need to incorporate the use of the MWTP. The SWBWQM and HLFWBM will continue to be used as forward-looking models that will be updated once every year (as part of Annual Reporting). They will be used to predict potential infringements on the DAS over a longer time frame (yearly) and are also used to help develop more long-term strategies for water management decisions. The SIMPs file will continue to be used to inform on-time water management decisions on a daily/weekly basis, including the potential for infringements on the DAS.	Revisions to the SWBWQM and HLFWBM will continue to occur on an annual basis. They are updated in March every year using databases that integrate data from the previous calendar year. The SIMPs file is updated daily/weekly (depending on data types) and will be used to provide timely updates regarding potential infringements on the DAS.

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	iii. To verify ore properties (initial moisture, residual moisture, and active leaching moisture)	The HLF WBM is not used to verify ore properties but uses measured values for initial, residual and active leaching ore moisture. Ore moisture values (initial, residual and active leaching) will continue to be updated each year as part of the annual HLF WBM reporting. Most recently, the IHP pumping test (conducted in July 2022) verified the current assumptions for active and leaching moisture contents.	Any revisions to ore property assumptions will be reported on an annual basis as part of annual reporting.
	iv. To verify sufficient pond capacity to safely store solution prior to freshet	Experience gained during this year (2023) will reflect new conditions (i.e., MWTP operations) and provide further input to the SWBWQM and the SIMPs file, which will provide annual and daily/weekly projections, respectively, regarding the evolving available pond capacity to safely store solution in the EP prior to and during freshet.	Revisions to the SWBWQM and HLFWBM will continue to occur on an annual basis. They are updated in March every year using databases that integrate data from the previous calendar year. The SIMPs file is updated daily/weekly (depending on data types) and will be used to provide monthly updates (as part of WUL monthly reporting requirements) regarding available pond capacities and the ability to store solution prior to freshet.
	v. To determine the necessity and/or size of an Emergency Pond	Continued use of modelling (SWBWQM) and SIMPs monitoring based on operational experience of the MWTP will be used to evaluate the appropriateness of storage capacities of the existing facilities, while considering triggers developed to manage freshet and rainfall events volumes.	As above.
	vi. To evaluate whether additional mitigations are necessary to prepare for freshet each year (e.g., raincoats)	Continued use of modelling (SWBWQM) and SIMPs monitoring based on operational experience of the MWTP will be used to evaluate the appropriateness of any additional mitigations to address any potential infringements on the storage capacities of the existing facilities.	Revisions to the SWBWQM and HLFWBM will continue to occur on an annual basis. They are updated in March every year using databases that integrate data from the previous calendar year. The updated HLF OMS is scheduled for Q1, 2024. The updated HLF CWMP is scheduled for Q1, 2024.
c. The GoldSim water balance model should be updated regularly using monthly data.		Fluid level data is tracked on a 6-hour basis using the GoldSim model, and also integrated daily/weekly using the SIMPs file for overall site water management decisions associated with the use of the Events Pond and LDSP. The SIMPs file uses precipitation data gathered each month and is also updated daily/weekly with water transfer data, pond levels, pond inputs/outputs, MWTP treatment rates, ore production rates and make-up water uses. Daily monitoring and reporting and predictive analysis will continue to help guide our onsite water management practices.	As above.

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d. The WBM should generally align with the OMS and other related documents.		The HLF WBM will continue to be updated each year as part of the annual report submission, the other three documents will be aligned in their next update.	The HLF WBM is reported on annually (March 31 each year). The next revisions of the other three are estimated as follows: WMP – December 31, 2023 HLF CWMP – Q1 2024 HLF OMS – Q1 2024
e. To be submitted pre-freshet, mid-summer, and late fall to be used by YG to assess predictive modelling potential for contingency or adaptive management activities.		Data and predictive estimates for contingency planning will be conducted using two separate platforms. As per QZ014-41-1, the HLF WBM will continue to use stochastic modeling to look at potential conditions over the short term (months) while it will use deterministic modeling to look at the longer-term picture. At the same time, the SIMPs file will be updated to include predictive analyses for examining potential conditions during the up-coming pre-freshet, mid-summer and late fall periods.	We will continue to provide pre-freshet analysis and freshet predictions in the annual report submission (March 31 each year). Mid-summer updates and forward-looking estimates (into the fall) will be provided by August 1st each year, while late fall and forward-looking conditions (through winter) will be by November 1st each year.
2. Updated Cyanide Management Plan			
a. To reflect current site conditions including, but not limited to:		The updated CMP was submitted for review and approval on June 15, 2022. We received comments on the updated CMP from various YG Departments which included Bill Slater's August 2022 review on December 8, 2022. Our response to these comments is provided below.	A CMP update will be provided in Q1 2024.
	i. The current water management system (e.g., water transfers, discharges, etc.)	The CMP and WMP will be updated and better integrated to incorporate operational experience with the MWTP and routine inspections to address secondary containment, culvert covers on the connection points, and to ensure sloping entrance points and have proper culverts.	A CMP update will be provided in Q1 2024 that addresses the integration of the current water management system.
	ii. Retrofits to secondary containment at ADR and preventative measures taken to ensure solution does not flow beyond HLP containment in active areas (e.g., access points for stacking)	An SOP will be developed to address criteria for grading upkeep and secondary containment. The SOP will include an inspection schedule, and a description of the reconfiguration on the east side of the ADR pad and the configuration of the cutoff trench, which will also identify where routine inspections will be conducted. The updated HLF OMS will include the inspection schedule, acceptable tolerance limits for grading conditions and overall solution flow boundary conditions, and action items to address unacceptable conditions.	A CMP update will be provided in Q1 2024 that addresses the integration of the current water management system. The updated HLF OMS will be Q1 2024. The regrading SOP will be provided with the HLF OMS.
b. To include:	i. Protocols for the transfer of storm water to the EP to verify there is no cyanide in the EP (intent is to ensure Section 5.4.1 is not violated).	Protocols for the transfer of storm water from the LDSP to the EP are being developed. They will be incorporated in the updated CMP, WMP and HLF OMS. Further, a sampling strategy (locations, type and frequency of analyses of EP water) will also be included in an updated EMSAMP.	A CMP update will be provided in Q1 2024 that addresses the integration of the current water management system. The updated WMP is scheduled for December 31, 2023. The updated HLF OMS will be provided Q1 2024. An updated EMSAMP will be provided by Q1 2024.
Additional Updates to the CMP based on Yukon Government's review of the June 15, 2022 version 2022-01			
Section 1.2 – second sentence	States that CMP reflects final as-built designs but does not specify which designs are being	The updated CMP will clarify all references to as-built designs	An updated CMP will be provided in Q1 2024.

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
	referenced Clarify which as-built designs are reflected in the CMP.		
Section 4.3 Prevention	This section provides a great opportunity to discuss PPE and personal monitoring devices or any other preventative measures regarding workforce exposures. Add key examples of preventative measures such as HCN monitoring devices.	Key examples of preventative measures will be included in the updated CMP.	As above.
Section 5.1.1 – Plans and Procedures	This section documents safe operating procedures and training for employees dealing with Cyanide. There is opportunity here to expand and discuss availability/access of the plans and SOPs to worker on the ground (e.g., copies that are likely kept in the ADR facility). Add discussion on accessibility of plans and procedures, including SOPs, to workers on the ground performing applicable tasks.	The updated CMP will include a discussion on the accessibility of plans and procedures, including SOPs, to workers on the ground performing applicable tasks.	As above.
Section 5.1.3 – Preventative Maintenance	It is unclear what the process is to ensure an inventory of commonly failed parts within the ADR (pumps, valves, etc.) are readily available for replacement. Further clarify the process or reference the location of this information.	The updated CMP will provide clarification regarding the process to ensure an inventory of critical spares are readily available for replacement.	As above.
Section 5.1.3 – Preventative Maintenance	Routine maintenance is not referenced in the section. Include routine/preventative maintenance in section or reference the location of this information.	The updated CMP will include references to routine/preventative maintenance actions.	As above.
Section 5.1.3 – Preventative Maintenance Section 5.7 – spill prevention and containment measures	There have been lessons learned from past cyanide spills which should be incorporated into the preventative maintenance section (e.g., routine grading of lined area around ADR to ensure any solution flows into lined area). SOP-PRO-205 that is referenced only contains routine maintenance for the storage and mixing areas. Elaborate on preventative measures taken to ensure cyanide solution is contained and ensure all appropriate SOPs are referenced (or even the OMS, if applicable).	Relevant SOPs will be updated to include an accounting of lessons learned from past cyanide spills.	The updated SOPs will be provided with an updated CMP in Q1 2024.
Figure 5.3-1 – water balance model	The water balance model depicted is for the entire site. The HLF-specific water balance model is more directly applicable and should be included. This will also reduce the	The site water balance model report and schematics include all necessary detail about the management of HLF water/solution and how site water management is integrated with MWTP operations. Thus, while VGC is not	An updated CMP will be provided in Q1 2024.

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	likelihood of a required update with the onset of the MWTP. Include HLF water balance model schematic.	entirely clear on the request for a standalone HLF WBM schematic, we will also provide one in the updated CMP.	
Section 7.2.2 – Ambient/Personal Monitoring Devices	Newly developed VGC-SOP-HSS-022 (Gas Badge Accountability Process) should be included in the CMP and discussed in this section. Include in Appendix A	The SOP-HSS-022 will be included as an Appendix to the CMP.	An updated CMP will be provided in Q1 2024.
Appendix A - SOPs	There are a lot of SOPs contained in Appendix A and it would be helpful to have a TOC or list of SOPs up front to more easily navigate the appendix. Add list or TOC at the top of Appendix A.	The TOC to the updated CMP will include all the SOPs included as appendices.	An updated CMP will be provided in Q1 2024.
Appendix A – SOP for water transfers	VGC has been moving storm water to the EP due to limited storage capacity and no active water treatment plant. Protocols to ensure the EP does not contain cyanide should be outlined in an SOP and undertaken prior to any storm water transfer to the EP. The Mine water treatment plant is unable to destruct cyanide, therefore if EP water requires treatment is may also require cyanide destruction, which is only available in the ADR.	The updated CMP will include protocols to ensure the EP does not contain cyanide above EQS prior to any transfer to the LDSP or the MWTP.	An updated CMP will be provided in Q1 2024.
Figure 4.1-2 and Section 5.7	Both reference the lined secondary containment under and around the ADR. Corrective actions as a result of the June 2021 cyanide spill indicate the need for regrading. Proper grading is a preventative maintenance and should be done regularly. Has the re-grading of material around the ADR been corrected to flow into lined area? If not, when? Other corrective actions?	An SOP is being developed to address criteria for grading upkeep and secondary containment. The SOP will include an inspection schedule and identify where routine inspections will be conducted. The updated HLF OMS will include the inspection schedule, acceptable tolerance limits for grading conditions and overall solution flow boundary conditions, and action items to address unacceptable conditions.	The updated HLF OMS will be provided in Q1 2024. The regrading SOP is scheduled for completion during Q1 2024.
Section 5.1.2	First paragraph mentions “maximum precipitation events” without delineating what that is. In points below “assumed storm events” is used. What does “maximum precipitation events” mean? Does it relate to regulatory requirements for design? Language needs to consistent and clear.	The updated CMP will clarify the meanings of maximum precipitation events and be consistent with language used for engineering design and regulatory guidance documents.	An updated CMP will be provided in Q1 2024.
Section 5.3.1 – general inputs	Last bullet references an emergency pond. What pond is this referring to? Clarify statement.	The updated CMP will provide clear references to specific ponds.	An updated CMP will be provided in Q1 2024.

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Section 7.1.1 – Exposure Risk Assessment	Have additional problematic HCN areas been identified in the ADR? If so, will additional stationary HCN gas detectors be installed in the ADR?	No additional problematic areas have been identified in the ADR; however, the air distribution and management system has been completely revised to further manage areas where HCN gas could be problematic.	NA
Appendix A – SOP-PRO-201 Section 4.2	Section 4.2 mentions the use of crane facilities for lifting and positioning reagent supersacks during solution preparation, yet the use of this equipment isn't mentioned in the solution preparation SOP. SOP-PRO-201 needs to be updated with thorough instructions, including instruction on the use of each piece of equipment required for the work, or reference to equipment-specific SOPs.	SOP-PRO-201 will be updated with thorough instructions, including instruction on the use of each piece of equipment required for the work, or reference to equipment-specific SOPs.	An updated SOP-PRO-201 is scheduled for Q1 2024.
Document control – Pg. I	Second sentence says "The table below is intended to identify modifications to the Plan compared to Version 2019-02…." This is inconsistent with the table title which indicates these are updates from the 2021-01 version. Ensure the correct version is referenced properly in both locations.	The updated CMP will ensure the correct version is referenced properly.	An updated CMP will be provided in Q1 2024.
Section 1.1 – last sentence	Reference to Appendix A should be made when SOPs are discussed. Add reference to Appendix A.	The update CMP will add the reference to the appropriate appendix.	An updated CMP will be provided in Q1 2024.
Section 3.2	This section looks as though it's an exact replica of Section 2.2. There is no need for this redundancy. Delete section, or simply reference section 2.2 instead.	The updated CMP will reflect this change.	An updated CMP will be provided in Q1 2024.
Table 5.1-2 - inspections	Proper use of PPE is referenced for almost all items, but the availability and accessibility is not. Add accessibility/availability of PPE to the list.	The updated CMP will provide the additional information regarding accessibility and availability of PPE.	An updated CMP will be provided in Q1 2024.
Section 5.1.9 – preventative maintenance	This section is very repetitive of Section 5.1.3. Consider combining or rephrasing to be more topic-specific.	The updated CMP will reflect any changes made to consider this recommendation.	An updated CMP will be provided in Q1 2024.
Section 5.1.10 – critical power	The opening statement does not make it clear if there is only sufficient backup generation capacity for the HLF or if it is a part of a much larger back-up generation system. SOP-010 details this more clearly. Clarify statement of ensuring appropriate back-up power.	The updated CMP will provide clarification regarding statements associated with backup power generation, and ensure the language is consistent with SOP-010.	An updated CMP will be provided in Q1 2024.

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Section 5.3.2 – general inputs	The first bullet says that the predicted range of rates that barren solution could be applied is considered. Yet, the water balance model does not consider maximum rate allowed by regulatory authorizations. Clarify statement.	The updated CMP will provide any necessary clarification regarding the operating range of the barren and pregnant pumps.	An updated CMP will be provided in Q1 2024.
Section 6.2.3 – jurisdictional requirements	We do not “negotiate” financial security, it is determined. Required: do not use the term negotiate.	The updated CMP will clarify the jurisdictional requirements/process with respect to financial security.	An updated CMP will be provided in Q1 2024.
Additional Updates to the CMP based on the August 16, 2022 Bill Slater review of the June 15, 2022 version 2022-01			
General Overview Comment From an overview perspective, my main expectations were that the updated Plan would address two important issues that are apparent from ongoing operations: 1. Incidents related to cyanide management at the site, specifically including five releases of process solution (one from the ADR Plant and four from the HLF). 2. Management of freshet runoff from outside of the HLF catchment that has led to annual incursions into the Desired Available Storage for the HLF/Events Pond.	Unfortunately, the revised Plan does not effectively address either of these issues. Also, the 2021 CMP Audit does not refer to either the spill incidents or the management of Desired Available Storage. It is not clear whether the auditor was made aware of these issues when conducting the audit.	There are two inferred recommendations regarding 1) the incorporation of lessons learned regarding past spills, and 2) the scope of future CMP Audits – in particular to ensure the auditor is aware of site water management practices regarding the Events Pond. The update CMP will incorporate lessons learned including the prevention and mitigation of potential spills. For future CMP Audits – the auditor will be appraised of all site water management practices regarding the Events Pond.	An updated CMP will be provided in Q1 2024.
General Comment regarding releases of process solution	With respect to the releases of process solution, the wording in the Plan does not acknowledge or identify the failure mechanisms that led to the releases. In the case of the release from the ADR Plant, the Plan describes a system in which the ADR Plant has adequate secondary containment as part of the floor construction, and that if secondary containment is exceeded, flows either be pumped, or will naturally report back, to containment in the HLF. In June 2021, changes made to the flow circuit in the ADR Plant led to tank overflows that exceeded the capacity of the secondary containment, and the excess flows did not report to the HLF.	There is an inferred recommendation for the next CMP to incorporate lessons learned from past spill events associated with grading related issues. Regrading of materials to ensure containment is addressed above in Section 2. a.	An updated CMP will be provided in Q1 2024.

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	Instead, “road material build up and grading” (July 2021 Spill Report) led to migration of solution outside of containment. The Plan provides for a review and approval mechanism (Eagle Gold Operating Procedures – Cyanide Facility Change Management Process) before changes are made to the ADR circuit, potentially addressing the first part of the failure, but it does not include any mechanisms to address the grading-related issues. Three of the releases from the HLF were also associated with issues of grading and placement of material, two at a footing for the conveyor and one along an access road. Despite these three failures, the CMP does not identify the grading and material placement as a potential source for failure mechanisms and there are no revisions to the Plan or the Standard Operating Procedures that specifically aim to prevent further occurrences of this type.		
General Comment regarding the management of freshet runoff	With respect to management of freshet runoff, the descriptions of Events Pond water management in the revised Plan are not consistent with how the Events Pond has actually been, and is being, used – especially the use of the pond to manage sediment laden runoff accumulated during freshet from areas outside of the HLF catchment. During mine planning and design, the Events Pond was specifically in place to address flows from the HLF catchment. Also, the revised Plan does not describe what measures Victoria Gold (VG) will take to avoid continued annual encroachment into the Desired Available Storage Capacity under normal spring operating conditions. The FNNND raised concerns during the water licensing process about these types of uses of the Events Pond because they increase the risks associated with water management failures associated with cyanide solution at the HLF.	There are no recommendations in this general comment, however, the concepts are addressed above in Section 1.	NA
General Comment – Integration of lessons learned	The CMP should be further updated to specifically address the lessons learned from past failure events and management	The updated CMP will include a section that addresses lessons learned from past failure events and subsequent management challenges. The update will	An updated CMP will be provided in Q1 2024.

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	challenges. A further revised plan should demonstrate that VG has clearly put in place measures that are aimed at preventing similar failures and addressing management challenges in the future.	include operating measures that are aimed at preventing similar types of failures.	
General Comment regarding cyanide transportation	A further gap in the CMP is any detail about managing issues related to transportation of cyanide to the site. VG notes that it has contractual arrangements with the cyanide supplier (Cyanco) for management of the entire supply and deliver chain. Cyanco is a certified cyanide producer under the International Cyanide Management Code (ICMC). The CMP refers to Cyanco's "Global Transportation Emergency Response Plan" with a specific annex for Canada. However, no details are provided about Cyanco's plan, and VG states that the document is confidential. It is unclear whether there has been any regulatory review of cyanide management during transportation to the site, or if this is overlooked because VG has contracted the responsibility to a third party. Yukon Government should confirm whether the transportation of cyanide to the Eagle Gold site has been subject to any regulatory oversight, and if so what. In its review of the CMP, the FNNND identified the need for additional emergency response supplies spaced along the access road – with supplies to clean up spills that include hydrocarbons and cyanide.	VGC will incorporate any relevant and appropriate modifications to the management of cyanide storage/transport in the updated CMP.	An updated CMP will be provided in Q1 2024.
CMP Section 1.1	This section references codes and protocols prepared by the International Cyanide Management Institute (ICMI), and states that VG's CMP is designed in accordance with these documents. While more than 50 mining operations are signatories to the ICMC prepared by the ICMI, VG is not one of them. No update to plan necessary	No update to plan necessary	NA
CMP Section 2.2	This section describes VG's plans for supply of cyanide if its primary ICMC-certified supply is interrupted for some reason. In such an event, VG states that it intends to locate other ICMC suppliers, but it has not yet investigated	No update to plan necessary	NA

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	other supply chains. Potential alternate ICMC-certified suppliers should be identified in advance.		
CMP Section 4.1	This section describes cyanide unloading and storage. Shipping containers are initially unloaded onto a concrete pad adjacent to the ADR Plant. Inside the shipping containers, the cyanide is in solid form (briquettes) in nylon “supersacks” that are then packed in plastic-lined plywood pallet crates. It appears that the cyanide crates remain in the shipping containers on the concrete pad until they are needed in the ADR Plant – i.e., the shipping container is not immediately offloaded into the storage area in the ADR Plant. While the supersacks, lined-plywood crates and shipping containers provide secondary containment, the concrete pad does not appear to have any form of containment. This means that it is critical that any spills of solid cyanide in this area are cleaned up immediately and safely.	No update to plan necessary	NA
CMP Section 5.1.6	This section states that cyanide facilities are subject to “routine” inspections, and results are reviewed on a “regular” basis. Similarly, Section 5.3.3 refers to “periodic” inspection of upgradient interceptor ditches. Other sections include similar vague wording about frequencies for monitoring and inspections of various facilities and activities. In many cases, the CMP refers to “VGC-SOP-PRO-205 Sodium Cyanide Facility Inspections.” Unfortunately, this standard operating procedure is not included in the CMP, leaving uncertainty about specific inspection requirements. The operating procedure should be reviewed to ensure that adequate inspections are required. For example, in discussions arising from previous spill events, the FNNND has noted its expectation that there must be at least daily inspections of HLF ditching and berms.	SOP-PRO-205 will be reviewed to help better define minimum monitoring frequencies, and then updated as necessary following a review that considers the recommendation.	The updated SOP-PRO-205, if needed, is scheduled for Q1 2024.
CMP 2021 Audit	The audit identified concerns about lack of reporting and record keeping for inspections, noting that VG was not able to provide reports of many routine inspections. The CMP and	No update to plan necessary; CMP 2022 Audit noted that record-keeping processes were improved.	NA

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	standard operating procedures should clarify requirements for review, reporting and record keeping.		
CMP Table 5.1-2	This table identifies things that should be observed during inspections of cyanide facilities. For the “HLF earthworks, risers, distribution lines, emitters, internal pond(s), and leak detection system” the list does not include observations of things that would help to prevent the types of failures that have led to release of cyanide solutions in the past – issues related to grading and material placement (see above general comments). The inspection list should be revised to address these specific issues.	The updated CMP will include an inspection list that addresses issues related to lessons learned from past failures.	An updated CMP will be provided in Q1 2024.
CMP Section 5.2	This section and the CMP Audit both assert that ICMC Standard of Practice 4.2 related to optimization of cyanide usage is not relevant because the Eagle Gold Mine does not process ore in a mill and does not have mill tailings. The Standard states: “Introduce management and operating systems to minimize cyanide use, thereby limiting concentrations of cyanide in mill tailings.” Despite the lack of a mill, the Eagle Gold Mine relies on the same cyanidation process for gold recovery as that carried out in a mill, and will leave a spent ore heap rather than tailings. As a result, the optimization of cyanide use in order to avoid elevated concentrations in the heap at the conclusion of gold recovery is likely also relevant to the Eagle Gold Mine. The CMP should be revised to include consideration of Standard of Practice 4.2.	The updated CMP will include any appropriate revisions, if needed, to address the ICMC Standard of Practice 4.2. It should be noted that there is a distinct difference between mill tailings and heap leach facilities in the use and eventual residual storage of cyanide. Residual cyanide in mill tailings is generally not flushed, whereas, the heap rinsing and drain-down processes eventually reduces the quantity of residual cyanide left in the facility.	An updated CMP will be provided in Q1 2024.
CMP Section 5.3.4	This section notes that the water balance includes consideration of storage in the Events Pond and refers to the Desired Available Storage considerations. However, the description for water balance modeling does not describe how the pond has actually been used, specifically that it has been used as a reservoir for storage of non-compliant runoff water from areas of the site outside of the HLF catchment. Also, there is no discussion about encroachment on the Desired Available Storage Capacity as a	See above in Section 1: Development and consistent use of a Calibrated, Operational Water Balance Model. Additionally, the CMP will be updated to more accurately describe site water management practices.	As above.

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	result of these water management actions. Similarly, Figure 5.3-1, the conceptual model for the water balance, does not contemplate storage of water in the Events Pond for runoff management. Overall, VG should identify water management measures that will avoid future encroachment on the Desired Available Storage Capacity for reasons other than extreme events in the HLF catchment. In any case, the water balance should be updated to reflect actual water management practices because the current practices will increase the risks that cyanide solution or mixtures with cyanide solution would need to be released. If the water balance predicts continued annual encroachment on Desired Available Storage, this would confirm that other measures are required to maintain the storage capacity as required in the licence.		
CMP Section 5.4-1	This section focuses on wildlife protection from cyanide solution. The Section describes water management in the Events Pond, but it is not consistent with the actual water management that is carried out at the site – see above comments. The actual water management practices affect the wildlife management measures, and should be reflected in the CMP. Similarly, the Eagle Gold Operating Procedure – Monitoring and Maintenance of Solution Pond Avian Protection System includes descriptions of Events Pond water management that are not consistent with current practices.	The updated CMP will reflect actual water management practices for the Events Pond. The Operating Procedure – Monitoring and Maintenance of Solution Pond Avian Protection System will be updated to reflect current Events Pond water management practices.	An updated CMP will be provided in Q1 2024. The updated OP is scheduled for Q1 2024.
CMP Section 5.5.1	This section discusses direct discharges of effluent to surface water. The CMP asserts that direct discharges from the HLF and Events Pond are not necessary during operations. However, direct discharges from the Events Pond have already occurred due to current water management practices. These discharges are not of process solution, but nonetheless need to be addressed in the CMP because they are discharges from the containment system for cyanide solution. Discharge that contain cyanide solution are more likely given the current practices that	The updated CMP and WMP will reflect the current water management practices for the Events Pond.	An updated CMP will be provided in Q1 2024. An updated WMP is scheduled for December 31, 2023.

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	lead to encroachment on the Desired Available Storage capacity.		
CMP Section 5.5.2	This section states that the “HLF and event pond are both fully lined facilities with interstitial leak detection arrangements.” This is not an accurate portrayal for the HLF where only part of the facility has leak detection. The actual design is more accurately portrayed in the CMP Audit.	Section 5.5.2 in the updated CMP will be revised to provide a clearer description of the liner system.	An updated CMP will be provided in Q1 2024.
CMP Section 5.7.1	This section provides the description of secondary containment in the ADR Plant. It should be revised to describe containment in circumstances like the June 2021 incident, where the failure mechanism was not related to tank failure and overflows exceed the capacity of a single tank and therefore the capacity of secondary containment.	The updated CMP will describe containment during circumstances like the June 2021 incident, where the failure mechanism was not related to tank failure and overflows exceeded the capacity of a single tank and therefore the capacity of secondary containment, and where the overflow would be directed to containment provided by the HLP.	An updated CMP will be provided in Q1 2024.
CMP Section 8.1.1	This section states that unloading of cyanide is conducted within the contained areas of the ADR Plant. This is not consistent with the descriptions of unloading described in Section 4.1, where unloading occurs on an adjacent concrete pad that appears to be outside of containment.	The CMP will be updated to include a figure that depicts the locations for unloading cyanide.	An updated CMP will be provided in Q1 2024.
CMP Section 8.1.2	This section states that a risk assessment of cyanide emergency scenarios was conducted prior to operations. The Section lists scenarios that were considered in the risk assessment. However, aside from pipe leaks, none of the scenarios that led to release of cyanide solution from the HLF were identified in the initial risk assessment. The risk assessment should be repeated based on experience gained in operations, including consideration of scenarios like those that have actually occurred on site.	The CMP will be updated to include discussion of prior failure mechanism and the remediation/mitigations actions taken including ongoing maintenance and monitoring of these actions.	An updated CMP will be provided in Q1 2024.
CMP Section 8.4.2	This section describes approaches for notifications about emergency incidents. It proposes that notification of FNNND about serious incidents will occur through periodic communications that are part of ongoing initiatives. Only in the case of offsite incidents does the Plan propose immediate notification. This approach does not appear to be consistent with the past practice of immediate	The CMP will be updated to be consistent with the more rigorous notifications to the FNNND that VGC has provided. These are also triggered by the related Spill Response Plan requirements.	An updated CMP will be provided in Q1 2024.

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
	notification of FNNND about serious incidents, whether onsite or offsite. The CMP should be revised to more accurately reflect the existing notification practices for the FNNND.		
Eagle Gold Operating Procedure – Cyanide Emergency Response Procedures	This procedure states that cyanide released in the ADR Plant will collect in sumps and will be pumped back into the HLF and that if pumps are inoperable, ADR overflow will flow in a lined trench back to the HLF. Neither of these mechanisms worked in the case of the June 2021 ADR Plant spill. The Procedure and the CMP should be revised to describe actual conditions and how to avoid the events that have occurred in the past.	Emergency response procedures for addressing a spill in the ADR will be revised to reflect how the system operates under a range of actual conditions.	The updated Operating Procedure for Cyanide Emergency Response is scheduled for Q1 2024.
Eagle Gold Operating Procedure – Cyanide Emergency Response Procedures	This procedure states that if any cyanide is released during unloading, staff will ensure that no water or liquid comes in contact with the material. Given that unloading and transfer occur in exposed areas, it is unclear how this could be achieved. Perhaps the Procedures should be revised to ensure that unloading and transfer do not occur in conditions where exposure to water is possible – e.g., no transfer of crates during rain.	Given the environment that the Project takes place in, the suspension of transfers during periods of rain is not practical and thus the current procedure will remain as previously described.	NA
Eagle Gold Operating Procedure – Cyanide Emergency Response Procedures	This procedure regarding incident Investigation and Reporting focuses on incidents related to health and safety. The scope should likely be expanded to include environmental incidents as well, or the two could be addressed in separate Procedures. The CMP document should also be revised to incorporate requirements associated with investigation and reporting on environmental incidents.	It is acknowledged that reporting on environmental incidents associated with a cyanide emergency are important considerations; however, to ensure that reporting remains clear and consistent to operational personnel, it is VGC's opinion that the CMP is not the appropriate document for providing this direction to staff. Reporting of these types of incidents are already contemplated in the Spill Response Plan and the EMSAMP.	NA
The Standard Operating Procedure – Sodium Cyanide Site Storage	This procedure lists PPE required for unloading and transferring sodium cyanide. The CMP Audit refers to a much more comprehensive listing of PPE requirements which should likely be reflected in the Procedure. The same procedure states that an additional person should be present for these activities. The procedure should be	The SOP will be updated to align with current site practices.	The updated SOP for Sodium Cyanide Site Storage is scheduled for Q1 2024.

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
	revised to state that an additional person must be present.		
ADR Operations Plan – Section 5.3	This section describes the cyanide destruction circuit. The ability to treat cyanide is a requirement of the water licence and the circuit is intended to meet this requirement. The circuit relies on carbon tanks in the ADR Plant being repurposed on short notice to use for reagent mixing and cyanide destruction. This requires installation of equipment to support mixing and reagent addition at the time that the system is needed. It is unclear whether this system has been tested and therefore it is not possible to know the practicality of implementation when needed. The CMP should require testing of the cyanide destruction circuit to confirm that it will function as planned in an emergency situation.	The updated CN Destruct System is now procured and installed. Flow functionality has been tested and the system operated as considered. The system utilizes dedicated reagent and reaction tanks, and there is no longer any dependency on the ADR carbon tanks. The cyanide destruct circuit design uses the Caro's Acid method, which has the advantage of a short reaction time which allows for the destruction process to be carried out in relatively small tanks, and that the final reaction by products are benign (bicarbonate and nitrate). The updated CMP will describe the procured and installed system.	An updated CMP will be provided in Q1 2024.
3. Updated HLF Operations, Maintenance and Surveillance Manual			
a. To include:	i. Specific procedures that ensure granular material near edge of HLP does not leave containment, nor does it allow solution to move beyond containment	The updated HLF OMS will include specific procedures for keeping granular material (ore) inside containment, and to help prevent the migration of solution to beyond containment. This will be integrated into the SOP described above.	The HLF OMS will be updated in Q1 2024.
	ii. Routine inspection of mechanical connectors to ensure they are safely located or shielded containment (e.g., daily)	The updated HLF OMS will include an SOP that addresses the timing and frequency of routine inspections of mechanical connectors, the condition of safety shields, piping locations, and grading conditions, etc.	The HLF OMS will be updated in Q1 2024.
	iii. Frequent inspection of every location where granular material crosses	As noted above in 2.a.ii, an SOP is being developed to address the locations of where granular material crosses the HLP boundary.	The SOP will be included in the OMS update (Q1 2024).
	iv. And identify triggers for the construction of the Emergency Pond based on modelling, monitoring and reporting	Water level monitoring of the three ponds (IHP, EP and LDSP) will continue to be conducted daily. Each pond has associated threshold levels that indicate when certain actions need to be taken. These protocols will be included in the updated CMP, HLF OMS, HLF CWMP and WMP.	The next revisions of these plans are estimated as follows: WMP – December 31, 2023 HLF OMS – Q1 2024 HLF CWMP – Q1 2024 CMP – Q1 2024
	v. A map or maps of the instrumentation and monitoring locations	The updated HLF OMS will include a map of the instrumentation and monitoring locations.	The HLF OMS is scheduled to be updated in Q1 2024.

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
	vi. Ice management procedures to ensure that ice does not block the spillways of the in-heap pond or EP, or lead to overland flow on the heap that could escape containment.	The updated HLF OMS will include procedures to manage the build-up and mitigation of ice in the spillways, the embankment ditch, and drainage from the pad - all done to maintain containment of solution.	The HLF OMS is scheduled to be updated in Q1 2024.
	vii. Triggers and procedure to clarify when the CWMP, ERP (and any other relevant plans or SOPs) should be implemented (e.g., encroachment on the DAS) which also need to be consistent with the QPOs in the CDA's Technical Bulletin, Application of CDA dam safety guidelines to mining dams (2019).	The updated HLF OMS will include triggers and procedures that clarify when the Emergency Response Plan (ERP) should be implemented or when certain actions as described in the HLF CWMP need to be taken. These triggers and actions will be consistent with the Qualified Performance Objectives stated in CDA's 2014 guidance document (Application of CDA Dam Safety Guidelines to Mining Dams). There is no 2019 version.	The HLF OMS is scheduled to be updated in Q1 2024. The updated HLF ERP is scheduled to be updated in Q1 2024. The HLF CWMP is scheduled to be updated by Q1 2024.
	viii. A blanket approach to corrective actions following a breach of containment or spill (e.g., leak at blind flange would trigger all mechanical fittings near the edge of containment to be checked and secured appropriately).	The updated HLF OMS will include an overall approach to implementing corrective actions following a breach of containment or spill, and if necessary, implementation of the ERP.	The HLF OMS is scheduled to be updated in Q1 2024. The updated HLF ERP is scheduled to be updated in Q1 2024. The HLF CWMP is scheduled to be updated by Q1 2024.
	ix. Specific criteria to trigger the Earthquake Occurrence inspections (see ERP Table 5.2-1).	The updated OMS will include specific criteria that are triggered after an earthquake occurrence. These will be integrated with the HLF ERP.	The HLF OMS is scheduled to be updated in Q1 2024. The updated HLF ERP is scheduled to be updated in Q1 2024.
	x. A requirement for a list of critical parts and supplies inventory in appropriate locations (e.g., critical parts for and redundant pumps)	A critical parts and supplies list associated with the operation of the HLF and ADR is maintained within the Enterprise Resource Planning Software system utilized for all site procurement. The list includes minimum and maximum inventory amounts for all critical items. Once an item is removed from inventory, the ERP automatically determines if the remaining in inventory amount is within the minimum threshold and, if it is not, generates a reorder from the established vendor.	The critical parts and supplies list is currently maintained by VGC.
	xi. Mac 2019 and 2021 recommendations as applicable (e.g., Trigger Action Response Plans in Appendix 3 of MAC 2021a)	The MAC 2019 guideline (2nd Ed), "*Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities,*" and the MAC 2021 guideline (3rd Ed), *A Guide to the Management of Tailings Facilities*, will be reviewed as part of the development of trigger actions and a response plan within the HLF OMS.	The HLF OMS is scheduled to be updated in Q1 2024.
	xii. Trigger and response actions that align with the existing dam break analysis, and updated when that analysis is updated (e.g., issuing warnings and evacuating downstream areas)	There are no plans to update the current dam break analysis. The engineering assumptions for the analysis have not changed and the analysis can still be used to demonstrate the extent of a dam break from the HLF and then identify evacuation routes. The updated HLF OMS will include a section that describes triggers and response actions associated with a dam break.	The HLF OMS is scheduled to be updated in Q1 2024.

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	xiii. Specify surveillance frequency for instruments which cannot be automatically reported (e.g., inclinometers)	The updated HLF OMS will include the surveillance frequency for instruments (e.g., inclinometers) that are not automatically reporting.	The HLF OMS is scheduled to be updated in Q1 2024.
	xiv. Discussion on how critical instrumentation data will be retrieved during an extended power outage (e.g., Piezometers)	The updated HLF OMS will include a description of critical instrumentation data (e.g., piezometers) and then discuss how this data will be retrieved during a power outage.	The HLF OMS is scheduled to be updated in Q1 2024.
	xv. A reduction in variety of personnel responsible for collection of monitoring data, where practical and consistent with shift rotation (see Table 9.1-1 in OMS)	The updated HLF OMS will include a revised SOP for the collection of monitoring data; the SOP will be reviewed and revised, as appropriate, to reduce the potential for inconsistencies in monitoring tasks and data collection.	The HLF OMS is scheduled to be updated in Q1 2024.
	xvi. Table 9.1-1 consistent with the language of Section 9 and actual practice	Table 9.1-1 and Section 9 will be reviewed for language consistency and VGC's actual practice.	The HLF OMS is scheduled to be updated in Q1 2024.
	xvii. Clear actions to bring EP levels back down after DAS is exceeded (e.g., stop solution transfers into the system)	The HLF OMS will be updated to include response actions that will be linked to thresholds on EP levels. The actions will include the need to manage and/or stop solution transfers based on pond levels and the encroachment on the DAS. The WMP and HLF CWMP will be integrated with the HLF OMS to include these types of response actions.	As stated above, the next revisions of these plans are estimated to be completed as follows: WMP – December 31, 2023 HLF OMS – Q1 2024 HLF CWMP – Q1 2024 HLF ERP – Q1 2024
	xviii. A more aggressive response to in-heap pond RL 3, mandatory actions to reduce leakage flow rates to RL 2 in a timely manner, and RL 3 should also include an engineering assessment to ensure pressurization of the secondary liner.	The HLF Engineer of Record (EOR) will review the In-heap Pond RL (1-4) levels and associated actions, including when and how long (response time) mandatory actions to reduce leakage flow rates to acceptable levels should be taken, and when (which RL) engineering assessments (performance and state of pressurization) of the condition of the secondary liner are required. Any EOR recommended changes to action items will be included in the revised HLF OMS.	The HLF OMS is scheduled to be updated in Q1 2024.
	xix. Significantly lower RL (1-4) associated with the EP; RL 3 should mandate repair of the liner during the next dry seasons as well as pond level reduction	The HLF EOR will review the Event Pond RL (1-4) levels and associated actions (including when liner repair should be mandated during the next dry season) associated with the EP and revise as appropriate. Any EOR recommended changes to action items will be included in the revised HLF OMS.	The HLF OMS is scheduled to be updated in Q1 2024.
	xx. Alert levels and actions for the monitoring of survey monuments and inclinometers with clear monitoring frequencies (e.g., when there is evidence of movement of embankment distress)	The updated HLF OMS will include alert levels and actions associated with the monitoring results (i.e., evidence of movement) of survey monuments and inclinometers.	The HLF OMS is scheduled to be updated in Q1 2024.

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
	xxi. Trigger levels and actions associated seepage and underdrain monitoring	The updated HLF OMS will include trigger levels and actions associated with the monitoring results (i.e., flow rates and water quality findings) of the underdrain.	The HLF OMS is scheduled to be updated in Q1 2024.
	xxii. Delineation events that trigger event-driven inspection (e.g., earthquake movement, size or intensity of a large precipitation event, etc.).	The updated HLF OMS will provide a description of specific events and actions (e.g., earthquakes, large rainfall-runoff event, etc.) that trigger inspections.	The HLF OMS is scheduled to be updated in Q1 2024.
	xxiii. Information on required back-up power and the generator capacity to support operations.	The updated HLF OMS will provide information on required back-up power and where/how that back-up power will be supplied.	The HLF OMS is scheduled to be updated in Q1 2024.
b. To align better with related licensing documents (e.g., Water balance model, CMP, etc.)		The HLF OMS will be updated to align with the HLF WBM, CMP, WMP and the HLF CWMP and incorporate consistent terminology and approach including the identification of management thresholds and response actions	The next revisions of these plans are estimated to be completed as follows: WMP – December 31, 2023 HLF OMS – Q1 2024 HLF CWMP – Q1 2024 HLF ERP – Q1 2024 HLF WBM – annually by March 31
c. The term “trigger” should be more consistently and accurately used and be consistent with MAC guidelines.		In the updated plans, the terms trigger and threshold will be used in a manner that is consistent with MAC Guidelines.	The next revisions of these plans are estimated to be completed as follows: WMP – December 31, 2023 HLF OMS – Q1 2024 HLF CWMP – Q1 2024 HLF ERP – Q1 2024 HLF WBM – annually by March 31
d. Reconcile language of Table 9.1-1 with the language of Section 9 and actual practice		Section 9 and Table 9.1-1 will be reviewed and revised as required to reconcile any language differences or confusion.	The updated HLF OMS is scheduled for Q1 2024.
e. Re-evaluate trigger levels (EP elevations) and recommended or require response actions to ensure that the operators have adequate time to resolve the problem without advancing to the next condition level (i.e., there is little room to act on the orange level before getting to the red zone)		EP water levels will be re-evaluated for appropriate trigger levels, response actions and response times. The updated HLF OMS will incorporate these re-evaluations.	The updated HLF OMS is scheduled for Q1 2024.
f. Provide operators with a number of simple ways to conservatively estimate the available in-heap dynamic storage capacity using available information		The updated HLF OMS will include a checklist that operators can follow to conservatively estimate available dynamic storage capacity.	The updated HLF OMS is scheduled for Q1 2024.
4. Updated Emergency Response Plan			
a. To include:	i. Evacuation routes that are well removed from inundation zones (e.g., Figure 8.1-1 shows dam break evacuation route crossing inundation zone)	The updated ERP will provide a figure/map that delineates evacuation routes that are well removed from the inundation zone.	The updated HLF ERP is scheduled for Q1 2024.

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
	ii. Added detail and specificity to Table 5.2-1 as consistent with current operations, including the ADR plant (e.g., thresholds for slope failure, dam failure, etc.)	The updated ERP will provide an updated Table 5.2-1 that will be consistent with current operations. The updated table will provide more details regarding thresholds and response actions associated with certain events (e.g., slope failure, dam failure, etc.).	The updated HLF ERP is scheduled for Q1 2024.
	iii. Additional clarity and details, as needed, to section 6 and tie preventative measures, site response, potential effects, and follow-up to specific causes.	The updated ERP will provide clarification as needed that describes the linkages between the incident type (i.e., preventative measures, site response, etc.) and specific causes.	The updated HLF ERP is scheduled for Q1 2024.
	iv. Clear authority and trigger events to order evacuation and make it clear that rapid evacuation is essential when there is a potential embankment failure	The updated ERP will provide a description of those with specific authority levels associated with certain trigger events to order specific actions (e.g., rapid evacuation) during an event (e.g., embankment failure).	The updated HLF ERP is scheduled for Q1 2024.
	v. An update to Figure 8.8-1 to reflect as-built condition and revise the evacuation routes to provide quicker access to high ground and to keep evacuation routes away from the inundation zone (e.g., different routes may be needed for different locations)	The updated ERP will provide an updated Figure 8.8-1 that reflects the as-built condition of the mine site and provide updated evacuation routes appropriate for the magnitude and potential affected area of an event.	The updated HLF ERP is scheduled for Q1 2024.
	vi. A figure to show the entire extent of the inundation zone for an embankment failure	The updated ERP will provide a figure that shows the entire extent of the inundation zone associated with an embankment failure.	The updated HLF ERP is scheduled for Q1 2024.
b. Should reflect current operating conditions and as-built facilities		The update ERP will reflect current operating conditions and as-built facilities.	The updated HLF ERP is scheduled for Q1 2024.
c. Align with MAC 2021a, MAC 2021b, CDA 2013, and CDA 2019 as referenced in the report.		The updated ERP will use the relevant language and terminology that is consistent with MAC 2021a, MAC 2021b and CDA 2014. There is no relevant CDA 2019 document.	The updated HLF ERP is scheduled for Q1 2024.
5. Updated HLF Contingency Water Management Plan			
a. To include:	i. Available dynamic storage capacity expressed relative to the key variables influencing it	The key variables affecting dynamic storage will be reviewed by our operations team and then incorporated into the revised versions of the HLF CWMP and HLF OMS, as appropriate.	The updated HLF OMS is scheduled for Q1 2024. The updated HLF CWMP is scheduled for Q1 2024.
	ii. Consideration of a scenario where the majority of dynamic storage has been used, there is a full or partial pumping failure and a design storm event, where the 72-hr draindown could be as much as 180,000 m^3.	The updated versions of the HLF CWMP and HLF OMS will include a provision for examining potential drain-down rates and volumes during an upset condition for various dynamic storage scenarios.	The updated HLF OMS is scheduled for Q1 2024. The updated HLF CWMP is scheduled for Q1 2024.
	iii. Triggers linked with response actions consistent with WUL Clause 48 and the recommendations of MAC (2021a, 2021b)	The updated HLF OMS and HLF CWMP will include trigger levels and response actions associated with the encroachment on the DAS. These levels and responses will be reviewed based on the operational performance	The updated HLF OMS is scheduled for Q1 2024. The updated HLF CWMP is scheduled for Q1 2024.

Implementation Expectations		Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
		of the MWTP and site water management (including water transfer capacities) operations.	
	iv. Specific triggers and response action to implement the intent of WUL 102c (e.g., snow removal)	The updated HLF CWMP will consider the development of a snow management trigger based on the snow water equivalent of the snowpack (as per WUL 102c), and the historical snowpack data collected on the HLF and site. The update will also describe more on the rationale for how the SWE data is to be used.	The updated HLF CWMP is scheduled for Q1 2024.
	v. Ranges of total storage volume available in each facility and associated variables influencing them (e.g., dynamic storage volumes in in-heap pond depend on a 5th pump being available, DAS is unavailable, etc.).	The updated HLF CWMP will provide a range of estimated available volumes based on a number of factors including for example, heap leach area, heap thickness, time of year, pumps available and operating, and as-built volumes for both the Events Pond the In-Heap Pond.	The updated HLF CWMP is scheduled for Q1 2024.
	vi. The minimum daily capacity of the MWTP to treat HLF solutions (i.e., cyanide destruction)	The MWTP and the CN Destruct Circuit has been constructed and commissioned to meet the terms of the WUL. The updated HLF CWMP will include relevant MWTP design elements to treat specific mine-site sources.	The updated HLF CWMP is scheduled for Q1 2024.
	vii. Reference to the required inventory of reagents and supplies (including quantities) for the MWTP – list should be maintained in MWTP operating plan, once commissioned.	A list of reagents and supplies (including spares) to operate the MWTP is currently being refined. This list can be appended to the HLF CWMP, however, the MWTP has its own operating plan that incorporates necessary reagents, supplies and inspection and reporting schedule.	The MWTP operating plan has been completed by the design engineer and was submitted to YG June 14, 2023.
	viii. Triggers to implement the ERP	We will consider how to address this as we prepare the revised versions of the ERP and the HLF CWMP.	The updated HLF CWMP is scheduled for Q1 2024. The updated HLF ERP is scheduled for Q1 2024.
6. On-site activities			
a. Ground around ADR plant must be regraded to provide adequate secondary containment as described in the CMP and ADR Plan		The specified regrading work around the ADR was completed. As described above for the updated CMP, the ground around the ADR will be inspected on a regular basis to ensure site activities do not change the grade so that any solution or runoff is channeled to the containment provided by the HLP.	Inspections are conducted on a daily/weekly basis depending on the status of operations.
b. Where there is any risk of solution flowing through granular layers beyond containment, the areas should be retrofitted in ways which effectively eliminate this risk in all seasons (e.g., access points for stacking)	i. Granular material that crosses over the edge of containment should be sloped so that flow direction is into the contained area	The specified regrading work at the edge of containment was completed. As described above for the updated CMP, the edges of the containment area now have protocols that include routine inspection of these areas with response actions and durations.	Inspections are conducted on a daily/weekly basis depending on the status of operations.
c. Post inventory lists in appropriate locations for critical parts and supplies (e.g., pumping parts)		A critical parts and supplies list associated with the operation of the HLF and ADR is maintained within the Enterprise Resource Planning Software system utilized for all site procurement. The list includes minimum and maximum inventory amounts for all critical items. Once an item is removed from inventory, the ERP automatically determines if the remaining in inventory	The critical parts and supplies list is currently maintained by VGC.

Implementation Expectations	Implementation Plan Tasks	Scheduled Deliverables, Timeline and Milestones
	amount is within the minimum threshold and, if it is not, generates a reorder from the established vendor.	
d. Install level-actuated pumps for the LDRS pumps in both the in-heap pond and the EP which monitor, record and report on flow and level data.	The level-actuated pumping system has been installed in the LDRS for the HLF.	NA
e. Evaluate the pump redundancy in terms of solution accumulation during an extended multi-pump failure (i.e., determine need for any additional pond capacity or full replacement kits on site) – results to be included in OMS	The updated HLF OMS will include the results of the evaluation of pump redundancy during an extended multi-pump failure.	The updated HLF OMS is scheduled for Q1 2024.
f. Evaluate motor control center (MCC) failure (i.e., the need for a back-up MCC, spare parts, etc.)	The updated HLF OMS will include the results of the evaluation of an MCC failure and the need for back-up.	The updated HLF OMS is scheduled for Q1 2024.
g. Have spare pump for EP on-site (e.g., complete pump and motor, or complete repair kit for pump and motor)	A critical parts and supplies list associated with the operation of the HLF and ADR is maintained within the Enterprise Resource Planning Software system utilized for all site procurement. The list includes minimum and maximum inventory amounts for all critical items. Once an item is removed from inventory, the ERP automatically determines if the remaining in inventory amount is within the minimum threshold and, if it is not, generates a reorder from the established vendor.	The critical parts and supplies list is currently maintained by VGC.
h. Recommendations resulting from annual inspections, performance reviews, and any other reports or studies required should be implemented in a timely manner.	An active on-site Action List with response times will be developed for the HLF/ADR operations based on annual inspections, performance reviews, and relevant reports/studies.	The initial Action List will be completed at the beginning of Q1 2024. It will be maintained on site by VGC and be reviewed and updated quarterly.
i. Install 8 survey monuments along the embankment crest (Forte, 2022). These monuments should be anchored in concrete to reduce noise and detect movement more reliably.	The survey monuments were installed in November 2022 and are being routinely monitored.	NA
7. EOR sign-off on		
a. No need for a network of survey prisms to the crest and downstream slopes of both the in-heap pond and events pond embankments	The survey monuments were installed in November 2022 and are being routinely monitored.	NA
b. No need for a second inclinometer in the embankment	The necessity for the second inclinometer will be discussed with the EoR as a component of the EoR report for the 2023 operating year.	Ongoing