

Mathias Colomb Cree Nation (MCCN)

Lynn Lake Gold Mine Project

Environmental Impact Statement – Initial Review Comments on Detailed Technical Review of the EIS (Sufficiency Review)

October 10, 2020

NOTES:

- For greater clarity, all "Comments" provided require substantive responses.
- In addition, absence of comments or requested revision does not imply acceptance by MCCN of sections of the EIS. MCCN reserves the right to review and comment on all aspects of the EIS during the detailed technical review process and subsequent Information Request phase of the EA.
- References to numbered items (e.g., MCCN-01, 02) are to the numbered items in the table.

Lynn Lake Gold Mine Project – MCCN Initial Technical Review Comments on the EIS – October 10, 2020

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
2.0. Project I	Description(inclu	ding Alternative Means f	or Carrying out the Pr	oject)	
MCCN-01	MCCN	Part 2, Section 3.1 Project Components; Section 3.2 Project Activities.	Vol. 1, Section 2.3.1.1 Resource Extraction and Storage (Ore, Overburden and Mine Rock Stockpiles/Storag e Areas)	The EIS Guidelines state that sufficient information will be included to predict environmental effects and address concerns identified by the public and Indigenous groups. The EIS identifies ore stockpiling as a short-term storage option. Even over the short term, ARD and ML issues can emerge and have short term impacts on water quality.	There is unlikely to be more than 48% and 34% PAG (for MacLellan and Gordon respectively), and there is metal leaching potential. Please identify best management practices to minimize ARD from ore stockpiles, and examine if there are ways to reduce the amount of time that ore is stockpiled.
MCCN-02	MCCN	Part 2, Section 3.1 Project Components, Section 3.2 Project Activities/	Vol. 1, Subsections 2.3.1.1 Resource Extraction and Storage; 2.3.1.2 Utilities and Infrastructure	The EIS indicates that the Project is estimated to require 7 truckloads per hour (20 hours per day) between the Gordon and MacLellan sites during the first six years of mining operations. However, the type of heavy truck required is not indicated (e.g., B- train) In addition, the EIS indicates that the Project will require regular tanker truck shipments of water (to Gordon site), gasoline and diesel. Also, employees will be bussed from the worker camp at the MacLellan site to the Gordon site on a daily basis. Additionally, materials such as explosives and cyanide will require weekly shipments. However, the total number of truck trips per week are not provided. Understanding daily and weekly truck trips, as well as timing and conditions of truck travel, is important for estimating potential risk of collisions with wildlife, and also potential for accidents and spills along this route.	Please provide a supplementary submission that provides a full analysis of all vehicle traffic that is anticipated at different phases – construction, operation and decommissioning - of the Project. The traffic study should include projections of daily and weekly traffic estimations along each road segment, with a breakdown of different vehicle types and their respective cargo, and any potential mitigation measures currently proposed (i.e., speed limits, scheduling) to reduce risks of collisions (including with wildlife), accidents and spills.

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MCCN-03	MCCN	Part 2, Section 3.1 Project Components Part 2, Section 3.2 Project Activities.	Vol. 1, Section 2.3.1.1 Resource Extraction and Storage (Ore, Overburden and Mine Rock Stockpiles/Storag e Areas)	The EIS Guidelines state that sufficient information will be included to predict environmental effects and address concerns identified by the public and Indigenous groups. The EIS states that "high leaching potentials were identified for arsenic and cadmium for the MacLellan site ore based on kinetic testing. Moderate leaching potentials were determined for aluminum, fluoride, silver and copper for ore from the Gordon site and for silver, lead, copper and aluminum for ore at the MacLellan site." (p. 5.10) The EIS states that "Seepage/runoff collection ditches will be constructed around the perimeter of each stockpile/storage area and directed to a series of sumps and/or small ponds at topographic lows. Water collected in the sumps and/or small ponds will be pumped to a site water management pond (or collection pond) for management and/or treatment (if required) prior to discharge" (p. 2.5). The concern of metal leeching should be addressed and planned for. Alternative options for ore stockpiling should be considered to mitigate risks.	Please clearly plan for ML from ore stockpiles and consider alternative options for ore stockpiling in order to mitigate the risks associated with these activities.
MCCN-04	MCCN	Part 2, Section 3.2 Project Activities	Vol. 1, 2.3.2.1 Resource Extraction, Storage and Processing; 2.3.1.1 Resource Extraction and Storage	At various subsections in the Project Description, there is a reference to a "pre-production" phase (or "pre-production years" when ore will be stockpiled. However, it is unclear from the schedule information provided later in Section 2 (i.e., under subsection 2.7) when this proposed pre-production phase would occur, and the full extent of what it would involve. The EIS requires, "a schedule including time of year, frequency, and duration for all project activities."	Please provide supplementary information to clarify what is meant by a "pre-production phase", the full extent of activities it would entail and when it would be scheduled to occur in relation to other construction and operational activities identified in the Project Description.

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MCCN-05	MCCN	Part 2, 3.1 Project components; 3.2 Project activities	Vol. 1, Subsections 2.3.2.2 Other Waste Storage and Management; 2.3.2.3 Utilities and Infrastructure; Subsection 10.8.	From MCCN's perspective, the EIS is incomplete, as many components of the Project have yet to be finalized. Designs of the access bridge at the MacLellan site, for example, have not been completed (Section 10.82). Similarly, the alignment of the transmission line between Lynn Lake and the MacLellan site has not been finalized and the exact locations of transmission line water crossings have not been identified (Section 10.82). Furthermore, water quality models for the MacLellan site do not incorporate discharges from the wastewater treatment plant, as design details had not been finalized (p. 10.110). More detailed information regarding these project components, and related activities, are required in order to make an informed evaluation of potential Project effects to fish, fish habitat, vegetation, and wildlife, when the design and location of several key components have not been finalized. This information is important and may affect the conclusions of the assessment. As the EIS guidelines state, "Sufficient information will be included to predict environmental effects and address concerns identified by the public and Indigenous groups." Additional information is required to meet this requirement.	Please provide, in a supplemental filing to the EIS, plans for yet-undefined Project components, including the designs of the access bridge and the MacLellan site, alignment of the transmission line corridor, and designs for the wastewater treatment plant, in sufficient detail to enable the assessment of the potential effects of these components on the environment.
MCCN-06	MCCN	Part 2, 3.2.3. Decommissioning and abandonment	Vol. 1, Section 2.7.4 Decommissioning /Closure	The EIS states that "[a]s outlined in Section 2.6, active closure is anticipated to take 5-6 years to complete at each site and will be followed by 10 years of post-closure monitoring and between 11- 21 years of pit filling" (pp. 2.22 – 2.23). The above statement implies that pit filling will continue after post-closure monitoring is ceased. It is unclear as to why monitoring would be halted when further changes to the mine site will be implemented.	Please provide a clear timeline for monitoring over the lifespan of the project. If the proposed monitoring activities will cease before changes to the project site are concluded, please provide a rationale for why monitoring should not be continued throughout the full lifespan of the Project.

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MCCN-07	MCCN	Part 2, 3.1. Project components; 6.1.5. Groundwater and Surface Water; 6.3.4 Indigenous Peoples; 6.5. Significance of residual effects	Vol. 1, Section 2.8.2.1 Contact Water	The EIS states that "[w]ater collected in the sumps and/or small ponds and during open pit dewatering will be pumped to water management ponds located at each site, tested if required , and discharged directly to the environment, if it meets applicable federal and provincial regulatory discharge requirements" (p. 2.26, emphasis added). The requirements for testing in this case are ambiguous, and this statement implies that contact water could be discharged to the environment without being tested	Please clarify the criteria for requirements for testing all Project-related contact water. Please confirm that all contact water will be tested to ensure that the contact water meets applicable federal and provincial regulatory discharge requirements prior to any discharge of contact water to the environment.
MCCN-08	MCCN	Part 2, Section 2.2. Alternative means of carrying out the project.	Vol. 1, Section 2.9.1. Alternative Means for Carrying Out the Project. (Approach Overview)	 environment without being tested. The EIS Guidelines state that the EIS will identify and consider the environmental effects of alternative means of carrying out the project that are technically and economically feasible. Mine life variations should be identified and presented as this will have an impact on both environment and employment. 	Please identify if different time frames for longer term of mining have been considered. The potential to increase employment timeframe from 13 years to 26 years by halving mine tonnage should be identified. Please identify if economic feasibility included the lengthening of mine life. The lengthening of mine life will have major impacts on time of employment.
MCCN-09	MCCN	Part 2, Section 2.2. Alternative means of carrying out the project	Vol. 1, Section 2.9.3. Evaluation of Alternative Means for Carrying Out the Project. (Location of Key Project Infrastructure)	 EIS Part 2, 2.2 – Alternative means of carrying out the project. The EIS Guidelines state that the EIS will identify and consider the environmental effects of alternative means of carrying out the project that are technically and economically feasible. The EIS does not identify that the assessment includes or does not include input from other parties on the location of key project components. 	Please revise the alternatives assessment to include input from other parties on the location of key project components. Siting of key variables for the project, in addition to the approach taken to the remediation and planning of this project, have been determined by an engineering team. The detailed review of alternatives, as well as key siting variables may be a component for review with Indigenous parties. The proponent should identify all the variables that can be influenced and adjusted, as well as the process through which Indigenous led alternatives assessment can be done.

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MCCN-10	MCCN	Part 2, Section 2.3 Engagement with Indigenous Groups Part 2, Section 5 Engagement with Indigenous Groups and Concerns Raised	Section 3.3.4 Indigenous Engagement Methods	 The EIS Guidelines encourage the Proponent to engage with Indigenous groups as early as possible in the project planning process. Among other things, early engagement provides an opportunity for Indigenous groups to identify issues and suggest modifications to the project design to address potential effects to their rights and interests. Section 3.0 of the EIS does not identify how the Proponent engaged with MCCN on the project design, including opportunities to participate in the project alternative assessment. This information is required to assess the adequacy of the Proponent's engagement with MCCN. 	Please describe efforts to engage MCCN in early discussions regarding project design and/or plans for ongoing engagement with MCCN in the project planning process.
MCCN-11	MCCN	Part 2, Section 5 Engagement with Indigenous Groups and Concerns Raised	Section 3.3.4 Indigenous Engagement Methods	 The EIS Guidelines require the proponent to provide Indigenous groups with key EA documents, including baseline studies, EIS, key findings, and plain language summaries. Section 3.0 of the EIS does not describe key EA documents provided to MCCN. This information is required to assess the adequacy of the Proponent's engagement with MCCN. 	Please describe efforts to provide MCCN with key EA documents, including baseline studies, EIS, key findings, and plain language summaries.
MCCN-12	MCCN	Part 2, Section 5 Engagement with Indigenous Groups and Concerns Raised	Section 3.3.4 Indigenous Engagement Methods	 The EIS Guidelines require the proponent to describe Indigenous groups' contribution to the effects assessment methodology, including selection of valued components and spatial and temporal boundaries. Section 3.0 of the EIS does not describe opportunities provided to MCCN to contribute to the effects assessment methodology. This information is required to assess the adequacy of the Proponent's engagement with MCCN and the effects assessment methodology. 	Please describe efforts to engage MCCN in discussions regarding the effects assessment methodology, including selection of valued components and spatial and temporal boundaries.

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MCCN-13	MCCN	Part 2, Section 5 Engagement with Indigenous Groups and Concerns Raised	Section 3.3.4 Indigenous Engagement Methods	The EIS Guidelines require the Proponent to provide Indigenous groups with opportunities to validate the interpretation of their views.Section 3.0 of the EIS does not describe opportunities provided to MCCN to verify the Proponent's characterization of issues and concerns about the Project raised by MCCN.This information is required to assess the adequacy of the Proponent's engagement with MCCN and the effects assessment methodology.	Please describe efforts to provide MCCN with opportunities to verify the Proponent's interpretation of MCCN's views.
MCCN-14	MCCN	Part 2, Section 5 Engagement with Indigenous Groups and Concerns Raised	Section 3.3.5.2 Mathias Colomb Cree Nation Section 3.3.6 Summary of Key Issues	 The EIS Guidelines require the Proponent to describe how issues raised by Indigenous groups have been responded to and addressed. Section 3.0 of the EIS does not describe how issues raised by MCCN have been responded to or addressed. This information is required to assess the adequacy of the Proponent's engagement with MCCN and the effects assessment methodology. 	Please provide a tracking table indicating how issues raised by MCCN have been responded to or addressed.
MCCN-15	MCCN	6.6.3 Cumulative effects assessment	Subsection 4.3.4.4, Assessment of Cumulative Environmental Effects	The Proponent must assess the cumulative effects on each VC selected by comparing the future scenario with the project and without the project. The EIS Guidelines state that this assessment must consider each VC not only in relation to current conditions, but <u>conditions prior to historic mining (i.e. the undisturbed</u> <u>baseline), and identify changes/alterations in the interim, relevant</u> to the consideration of cumulative effects. Throughout the VC components for Fish, Wildlife and Vegetation/Wetlands, the Proponent repeatedly fails to provide an adequate assessment of cumulative effects both with the project	For each of the ecological VCs (Wildlife, Fish and Vegetation), please provide the total estimate of area and percent disturbance from cumulative existing and foreseeable future development, compared to the undisturbed (i.e., pre-industrial) baseline for each VC in the cumulative effects assessment. Please clarify how both direct and indirect effects have been determined and accounted for in this assessment.

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MCCN-16	MCCN	6.6.3 Cumulative effects assessment	Subsection 4.3.4.5, Determination of Significance of Effects (Project and Cumulative)	and without the project, in consideration of direct and indirect effects from previous and future impacts. Cumulative effects are largely discussed qualitatively, with little to no quantification of previous and foreseeable future effects to aquatic and terrestrial VCs. The Proponent fails to provide adequate context regarding the area and percent change from an undisturbed baseline. Furthermore, it is unclear how future projects will quantitatively contribute to further area and percent change for land cover categories in the PDA, LAA, and RAA, relative to the undisturbed baseline. Understanding the current degree of landscape disturbance relative to an undisturbed baseline is crucial for evaluating whether thresholds will be or have already been crossed. Both direct and indirect impacts must be represented in this calculation to adequately characterize cumulative effects from the Project and foreseeable future development. In reference to consideration of cumulative effects, the EIS states that the Proponent must "consider each VC not only in relation to current conditions, but conditions prior to historic mining, and identify changes/alterations in the interim, relevant to the consideration of cumulative effects". Furthermore, the EIS requires "Effects of past activities (activities that have been carried out) will be used to contextualize the current state of the VC." Guidance developed by the Agency has clearly identified that the significance of cumulative effects determined by a VC-centred	Provide a supplementary analysis for each of the key VCs relevant to MCCN's exercise of rights, including but not limited to surface water (including water quality), fish and fish habitat, vegetation, wildlife and wildlife habitat (including migratory birds), that assesses the significance of cumulative effects on these VCs using as a reference point thresholds based on MCCN's requirements to be able to meaningfully harvest within and peacefully occupy and otherwise use the lands within the project area.
				analysis to determine whether the combined effects of the project together with interacting effects of past, present and future projects and activities surpass the threshold of acceptable change for the specific VC. Yet, this section of the EIS states to the contrary that, "The assessment of significance of cumulative environmental effects is based on comparison to current conditions and includes an	and otherwise use the lands within the project area.

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				analysis of the Project's contribution to these cumulative effects." (emphasis added)	
5.0 Environr	mental Setting				
MCCN-17	MCCN	Part 1, Section 4.3. Study strategy and methodology	Vol.1, Section 5.2.2 Air Quality and Greenhouse Gases	 The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "In undertaking the environmental effects assessment, the proponent will use best available information and methods." (p. 11, emphasis added). The EIS states that "[t]he Fort Smith ambient air quality monitoring station, operated by the Government of Northwest Territories, is considered the most representative for the Project as the station is in a similarly remote area with low population density and with similar meteorological and topographical conditions" (p. 5.2). This monitoring station appears to be located fairly distantly from the Project. It is unclear as to why this station was chosen as a representative site for the Project, and this choice of sites implies a data gap relative to assessment of Project effects on air quality. 	Please provide a list of candidate ambient air quality monitoring stations which could be evaluated as choices for representative sites. Please provide further rationale for the choice of the Fort Smith ambient air quality monitoring station as a representative site. If the list of candidate stations should return a better choice of representative stations, please revised the assessment to incorporate the updated selection and any associated analyses and determinations.

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MCCN-18	MCCN	Part 2, Section 6.2.1. Changes to the atmospheric environment	Section 6.7.1 Significance of Project Residual Effects	 The EIS predicts that maximum TSP and PM10 concentrations will be greater than the Manitoba Ambient Air Quality Criteria outside the Project Boundary – a high magnitude effect – due primarily to fugitive emissions for both the Gordon Site and MacLellan Sites. However, the EIS concludes that residual effects on air quality are not significant. The EIS bases this conclusion, in part, on the Proponent's commitment to implement an ambient air quality monitoring program to monitor ambient TSP, PM10 and PM2.5 concentrations during construction and operation which will be used to determine whether additional mitigation measures are needed to further reduce fugitive PM emissions. This conclusion contradicts the definition provided in the EIS that "a significant residual adverse effect for air quality is one where the Project's air emissions degrade the quality of the ambient air such that the model predicted concentrations (combined with background) are likely to exceed applicable regulatory criteria for ambient air quality []". A commitment to implement monitoring is not an acceptable basis for determining the significance of residual effects. Dustfall is a concern for MCCN as it can impact vegetation and MCCN's harvesting rights. 	Please describe additional mitigation measures that will be applied to reduce maximum concentrations of TSP, PM10 and PM2.5 below regulatory guidelines, or revise the air quality significance assessment to accurately reflect the high magnitude of exceedance.
7.0 Noise and	d Vibration				
MCCN-19		6.1.9 Indigenous Peoples; 6.3.1 Migratory Birds; 6.3.4 Indigenous Peoples	7.0	The noise assessment only considered stationary equipment (pumps, motors, crushers), mobile equipment (back up alarms) and pile driving. Blasting is only considered in relation to vibration. The assessment determined that project noise is within guidance targets however this component has not been carried over into consideration into the effects of wildlife and migratory bird distribution and its relation to the assessment of effects under subsection 5(1)(c) of CEAA, in particular in respect to preferred	Given the potential effects of blasting, combined with other noise effects of the Project, on wildlife and migratory bird distribution between and within a 5-10km radius of the project sites, please provide a supplementary submission that considers how noise/vibration effects, including blasting, may impact MCCN harvesting opportunities within a 10km radius of the project area.

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				harvesting locations and timing for MCCN current use.	consider the effects of changes to the sensory/auditory environment may induce avoidance of areas by MCCN members up to a 5km radius (or greater) from the mine site due to changes in the ambient auditory environment caused by mining activities.
8.0 Assessm	ent of Potential	Effects on Groundwate	r		
MCCN-20	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 8.2.1.1 Baseline Hydrogeological Study	 The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "In undertaking the environmental effects assessment, the proponent will use best available information and methods." (p. 11, emphasis added). The EIS notes that both the Gordon and MacLellan "site monitoring locations are located mostly within the PDA[s]" (pp. 8.12 – 8.13). It is unclear why the monitoring locations are concentrated within the PDAs, as opposed to an equitable distribution across the PDAs, LAAs and RAAs. This monitoring scheme represents a potential data gap that hampers the ability to assess Project effects on groundwater quantity and quality. 	Please provide a rationale for the selection of monitoring locations, including an evidence-based rationale for the apparent deficiency of monitoring locations within the respective LAAs and RAAs relative to the concentration of monitoring locations within the PDAs.
MCCN-21	MCCN		Vol. 1, Section 8.1.4.2 Temporal Boundaries	The EIS states that: "[p]ermanent closure will occur when the site is stable, and monitoring is no longer required. For groundwater this would occur when the water level elevations of the pit lakes meet the design criteria and groundwater quality of seepage from mine	 Please provide a rationale for why monitoring will cease when seepage groundwater quality is decreasing. Please provide an evidence-based time frame over which the stability of the site (e.g. groundwater quality in reference to regulatory criteria) is assessed to determine when to cease monitoring.

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MCCN-22	MCCN	Part 1, 4.2.2.	Vol. 1, Section	components is demonstrated to be decreasing and/or meet relevant regulatory criteria." (p. 8.9) It is unclear why the Proponent would cease monitoring when groundwater quality of seepage decreases. It is furthermore unclear as to the time period over which the determination of stability is made (e.g. point-in-time, temporal average). The EIS Guidelines state that "[t]he proponent will integrate	Please provide a comprehensive rationale for the choice of
		Community knowledge and Aboriginal traditional knowledge Part 2, 6.5 Significance of residual effects	8.1.6 Significance Definition	Aboriginal traditional knowledge into all aspects of its assessment including both methodology (e.g. establishing spatial and temporal boundaries, defining significance criteria) and analysis (e.g. baseline characterization, effects prediction, development of mitigation measures, conducting a Human Health Risk Assessment)" (p. 8, emphasis added). The EIS Guidelines require the Proponent to consider the following criteria for the determination of significance of Project effects:	groundwater supply wells and their utility for groundwater users to define thresholds for significance determination for impacts to groundwater quantity and quality. The rationale should incorporate references to applicable regulatory documents, environmental standards, guidelines, or objectives that can be incorporated into revised thresholds.
				 "- magnitude geographic extent timing duration frequency reversibility ecological and social context existence of environmental standards, guidelines or objectives for assessing the effect" (p. 36) The EIS Guidelines furthermore require that "[i]n assessing significance against these criteria the proponent will, where possible, use relevant existing regulatory documents, environmental standards, guidelines, or objectives such as prescribed maximum levels of emissions or discharges of specific hazardous agents into the environment" (p. 37). 	The rationale should furthermore note where MCCN data on MCCN use and rights related to groundwater quantity and quality was considered in the development of this threshold. If no MCCN data was considered, please provide a commitment to provide opportunities and resources to engage with MCCN to jointly revise the significance determination thresholds and analysis methods.

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MCCN-23	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 8.2.2.3 Estimation of Hydraulic Conductivity	 However, the EIS states that the Significance Definitions for Change in Groundwater Quantity and/or Flow and Change in Quality are defined ultimately by changes to water quantity and quality for groundwater supply wells located beyond the PDA within the LAA/RAA (p. 8.11). It is unclear why the Proponent has elected to use groundwater supply wells as a proxy for the full range of environmental effects to groundwater quality and quantity from the Project. The extent to which MCCN knowledge and use was considered in the derivation of these significance criteria is also unclear. These information gaps impair evaluation of the Proponent's assessment and impacts of the Project on MCCN use and rights. The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "In undertaking the environmental effects assessment, the proponent will use best available information and methods." (p. 11, emphasis added). The EIS states that "[h]ydraulic testing of the organic deposits was not completed due to their shallow nature and thickness" (p. 8.19). However, the reported thicknesses of accumulations of organic deposits described in Section 8.2.2.1 Local Geology and Hydrostratigraphy (p. 8.16) would appear to facilitate hydraulic testing (see Morris, Paul J., Andy J. Baird, and Lisa R. Belyea. 2015. "Bridging the Gap between Models and Measurements of Peat 	Please provide further rationale for the decision not to conduct hydraulic testing of organic deposits, as well as an explanation of the effect of the range of estimated hydraulic conductivity values for organic deposits on the modeling process.

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				Hydraulic Conductivity." Water Resources Research 51 (7): 5353– 64. https://doi.org/10.1002/2015WR017264.). Hydraulic conductivity is a key parameter for groundwater modeling, and this lack of information constitutes a potential information gap related to Project impacts on water quality.	
MCCN-24	MCCN		Vol. 1, Section 8.4.2.2 Mitigation	The EIS states that "[t]he water pumped from the interceptor wells will be pumped to Gordon and/or Farley lakes. If necessary , the water will be treated to meet applicable federal and provincial regulatory requirements prior to discharge to the environment" (p. 8.43, emphasis added). The criteria for treatment of water prior to discharge to the environment is ambiguous, and hinders the ability to evaluate the utility of this mitigation for Project effects.	Please confirm that all water pumped from Project components (e.g. interceptor wells) will be treated to meet applicable federal and provincial regulatory requirements prior to discharge to the environment. If this is not the case, please provide a rationale.
MCCN-25	MCCN		Vol. 1, Section 8.4.2.3 Project Residual Effects	The EIS states that "[t]he reduction in groundwater discharge to Gordon and Farley lakes will be mitigated by returning at least a portion of the water pumped from the interceptor wells to the lakes" (p. 8.48). It is not clear as to what extent this mitigation will offset the reduction in groundwater discharge so as to preserve the water balance for Gordon and Farley lakes. Further information is required to sufficiently evaluate Project impacts on Gordon and Farley lakes.	Please provide an evidence-based, quantitative estimate for the effect of returning water from interceptor wells to the lakes on the water balances for Gordon and Farley lakes over the full lifespan of the Project, including after decommissioning/closure.
MCCN-26	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 8.4.3.3 Project Residual Effects	 The EIS Guidelines state the following: 1. "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). 2. "Assumptions will be clearly identified and justified [and] [a]ll data, models and studies will be documented such 	Please describe the potential (if any) for seepage under transient conditions (i.e. before reaching a steady-state saturation condition) for MRSAs for all Project sites. Please provide a rationale for why this potential (if identified) was not considered in assessing Project effects to groundwater quality.

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				 that the analyses are transparent and reproducible" (p. 9). 3. "In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions will be substantiated and predictions will be based on clearly stated assumptions. The proponent will describe how each assumption has been tested. With respect to quantitative models and predictions, the EIS will document the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained." (p. 11, emphasis added). 	
				The EIS states that "[t]he duration of time for the new MRSA [mine rock storage area] to reach a steady-state saturation condition, where the volume of water infiltrating into the MRSA from precipitation will result in an equal amount of seepage or recharge out the base of the MRSA, is expected to be longer than the duration of the construction phase of the Project (Volume 5, Appendix F). Therefore, seepage from the new MRSA and subsequently effects to groundwater quality resulting from recharge through the new MRSA, is not predicted during the construction phase of the Project." (p. 8.62).	
				It is unclear how this conclusion accounts for seepage under transient conditions (i.e. before reaching a steady-state saturation condition). Further information to support this statement is required to enable adequate assessment of Project impacts on groundwater quality.	
MCCN-27	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 8.4.3.3 Project Residual Effects	 The EIS Guidelines state the following: 1. "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in 	Please provide further rationale for the chosen recharge rate from the new MRSA of 50% of the infiltration rate during operation. The rationale should also include the basis for using a constant value across the 17 – 28 year wetting period.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				 the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). 2. "Assumptions will be clearly identified and justified [and] [a]II data, models and studies will be documented such that the analyses are transparent and reproducible" (p. 9). 3. "In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions will be substantiated and predictions will be based on clearly stated assumptions. The proponent will describe how each assumption has been tested. With respect to quantitative models and predictions, the EIS will document the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained." (p. 11, emphasis added). The EIS states that "[t]o account for the 17 to 28-year wetting time, the recharge rate from the new MRSA was set at 50% of the infiltration rate during operation" (p. 8.64, emphasis added). The basis for the 50% figure is unclear, which inhibits understanding of the efficacy of the groundwater modelling. It is furthermore unclear why a constant value was used to calculate the recharge rate over the time period described for wetting. 	
MCCN-28	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 8.4.3.3 Project Residual Effects	 The EIS Guidelines state the following: 1. "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). 2. "Assumptions will be clearly identified and justified [and] [a]ll data, models and studies will be documented such 	 Please provide a supplementary analysis for worst case for seepage quality and groundwater recharge quality based on a sensitivity scenario that uses a 100-year dry climate year to determine the pore water volumes. In addition, please provide supporting peer-reviewed references and rationale for the selection of an appropriate sensitivity scenario, taking into consideration the full range of variability for the existing hydrologic

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				 that the analyses are transparent and reproducible" (p. 9). 3. "In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions will be substantiated and predictions will be based on clearly stated assumptions. The proponent will describe how each assumption has been tested. With respect to quantitative models and predictions, the EIS will document the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained." (p. 11, emphasis added). The EIS notes that "[g]roundwater concentrations of seepage from the new MRSA were simulated under two scenarios: expected and sensitivity. The expected scenario was simulated using concentration data from field bin testing of waste rock scaled up assuming that a normal climate year controls pore water volume and flows through the new MRSA. The sensitivity scenario was simulated with concentration data from field bin testing of waste rock, scaled up assuming that a 25-year dry climate year controls pore water volume and flows through the the use of a 25-year dry climate year as a "worst case" parameter accounted for the potential for changing climate regimes due to climate change. The lack of information surrounding the choice of the 25-year dry climate year for controlling pore water volume and flows in the sensitivity scenario prohibits sufficient assessment of the efficacy of this modeling exercise. 	dataset and the predicted effects of climate change (i.e., a shifting climate regime over the Project lifespan and following decommissioning/closure).

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-29	MCCN	Part 1, 6.5 Significance of residual effects	Vol. 1, Section 8.7.1 Significance of Project Residual Effects, pp.	The EIS Guidelines require the Proponent to consider the following criteria for the determination of significance of Project effects: "- magnitude - geographic extent - timing - duration - frequency - reversibility - ecological and social context - existence of environmental standards, guidelines or objectives for assessing the effect" (p. 36) The EIS Guidelines furthermore require that "[i]n assessing significance against these criteria the proponent will, where possible, use relevant existing regulatory documents, environmental standards, guidelines, or objectives such as prescribed maximum levels of emissions or discharges of specific hazardous agents into the environment" (p. 37). The EIS predicts exceedance of regulatory criteria and objectives for water quality due to the Project (see Section 8.4.3.3 Project Residual Effects). The EIS further states that the Project will have adverse impacts to groundwater quantity and quality that include high magnitude, irreversible and long-term duration impacts (p. 8.77). Nonetheless, the EIS concludes that Project effects on groundwater quality are not significant because of the rationale that "[n]o groundwater users are known within the area of influence of Project components" (p. 8.82). The EIS's significance determination is problematic in this case because the determination appears to ignore the evidence provided in the EIS that the Project poses severe impacts to	The Proponent should conduct a revised significance determination for Project impacts to groundwater quantity and quality based on thresholds defined from the full range of criteria required by the EIS Guidelines and applicable regulatory documents, environmental standards, guidelines or objectives (see above comment, MCCN-22).

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				groundwater quality and quantity under the criteria (e.g. magnitude, reversibility) required for consideration under the EIS Guidelines.	
9.0 Assessme	ent of Potential I	Effects on Surface Water			
MCCN-30	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions (Groundwater and Surface Water)	Vol. 1, Section 9.1.4 Boundaries. (Spatial Boundaries) Table 9.4	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects. The EIS includes the Keewatin River in the Local Assessment Area (LAA) as a likely source of freshwater for the mill and a	Please identify how water withdrawals from the Keewatin River will be minimized, as well as measures to ensure that mine wastewater is not released into this river. The Keewatin River of key concern to MCCN.
				watercourse into which mine effluent or contact water would eventually drain. The EIS states that "Freshwater demands from the Keewatin River are estimated to be 350,400 m3 or 40 m3/hour after the first year" (p. 2.14).	
MCCN-31	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions (Groundwater and Surface Water)	Vol. 1, Section 9.1.4.2 Temporal Boundaries	The EIS states that "[a]ctive closure will be followed by post- closure, which is the time period during which active reclamation measures are complete, but monitoring is still required. The expected duration for post-closure is approximately 10 years. Pit filling is expected to take 11 years at the Gordon site and 21 years at the MacLellan site under average conditions (Section 9.4.1)" (p. 9.15).	Please provide a clear timeline for monitoring over the lifespan of the project. If the proposed monitoring activities will cease before changes to the project site are concluded, please provide a rationale for why monitoring should not be continued throughout the full lifespan of the Project.
				The above statement implies that pit filling will continue after post-closure monitoring is ceased. It is unclear as to why monitoring would be halted when further changes to the mine site will be implemented.	

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-32	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 9.2.2.1 Surface Water Quantity; Hydrology Baseline Technical Data Report	 The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "In undertaking the environmental effects assessment, the proponent will use best available information and methods." (p. 11, emphasis added). 	Please provide a description of the impacts of the limitations for the hydrologic data on the surface water effects assessment and the potential for variability to manifest in the determination of significance. Please provide a commitment to undertake further baseline hydrologic monitoring to build a sufficient hydrologic record throughout the PDAs, LAAs and RAAs that covers a sufficient time period. The response should include a rationale for the selected time period that references the best available applicable knowledge and literature.
				The Hydrology Baseline Technical Report notes that only six of the eighteen hydrometric monitoring stations had sufficient data to enable development of rating curves due to issues such as beaver activity (p. viii). Furthermore, the Hydrology Baseline Technical Report states that "[a]nalysis of flow and level for streams and lakes within the Gordon and MacLellan LSAs were limited by having less than two years of data collection at each location" (p. 74, emphasis added).	
				The limitations documented in the Hydrology Baseline Technical Report constitute substantial information gaps that hinder a comprehensive understanding of project effects on surface water.	
MCCN-33	MCCN	Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA 2012	Vol. 1, Section 9.1.5 Residual Effects Characterization	The document titled <i>Determining Whether a Designated Project is</i> <i>Likely to Cause Significant Adverse Environmental Effects under</i> <i>CEAA 2012</i> referenced in the EIS Guidelines states that "the rationale for identifying an environmental effect as being a low, moderate or high magnitude should be clearly documented". The EIS defines a "High" magnitude change for surface water quantity as "a Project-caused change in hydrology (flow or levels)	Please provide an evidence-based rationale for the thresholds used to define the Magnitude (e.g. Negligible – High) for Change in Surface Water Quantity. The rationale should include references to the best available applicable knowledge and literature.
				that is greater than 30% relative change from existing conditions" (p. 9.16, emphasis added).	

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				However, the rationale for this choice of threshold value for relative change is unclear. In the absence of a rationale for this choice of threshold it is not possible to sufficiently evaluate the Proponent's significance determination.	
MCCN-34	MCCN	Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA 2012	Vol. 1, Section 9.1.5 Residual Effects Characterization	The document titled Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA 2012 referenced in the EIS Guidelines states that "the rationale for identifying an environmental effect as being a low, moderate or high magnitude should be clearly documented". The EIS defines a "High" magnitude change for Change in Surface Water Quality as "measurable change that is not within the variability of existing conditions and not within applicable guidelines, legislated requirements and/or federal and provincial management objectives and is likely to have an adverse effect on aquatic biota in the LAA or RAA" (p. 9.16). However, the EIS assesses impacts to fish and fish habitat separately in Chapter 10. It is unclear why the Proponent has elected to use impacts to aquatic biota as the ultimate threshold for characterizing residual effects to surface water quality given that the Project is expected to result in measurable changes that exceed applicable environmental standards (e.g. see Section 9.4.2 Surface Water Quality).	Please revise the residual effects characterization such that impacts to aquatic biota are not used to supersede consideration of impacts to natural variability and environmental and regulatory surface water quality standards, guidance and objectives for characterizing residual effects.
MCCN-35	MCCN	Part 1, 4.2.2. Community knowledge and Aboriginal traditional knowledge	9.1.6 Significance Definition	The EIS Guidelines state that "[t]he proponent will integrate Aboriginal traditional knowledge into all aspects of its assessment including both methodology (e.g. establishing spatial and temporal boundaries, defining significance criteria) and analysis (e.g. baseline characterization, effects prediction, development of mitigation measures, conducting a Human Health Risk Assessment)" (p. 8, emphasis added).	Please provide a rationale for the significance criteria for impacts to surface water quantity and quality from the Project. The rationale should note where MCCN information on MCCN use and rights related to surface water quantity and quality was considered in the development of this significance criteria. If no MCCN data was considered, please provide a commitment to provide opportunities and resources to engage with MCCN to

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				 The EIS states that the significance definition for Changes to Surface Water Quantity is based on relative changes from existing hydrologic conditions (pp. 9.16 - 9.18). The EIS states that the significance definition for Changes to Surface Water Quality is based on exceedance of water quality guidelines to the extent that community- or population-level adverse toxicological effects are anticipated for aquatic biota (p. 9.18). It is unclear how MCCN knowledge and use was considered in the derivation of these significance criteria. This information gap impairs evaluation of the Proponent's assessment and impacts of the Project on MCCN use and rights. 	jointly revise the significance determination thresholds and analysis methods.
MCCN-36	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 9.4.1.1 Analytical Assessment Methods for Surface Water Quantity	 The Project on MCCN use and rights. The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "Assumptions will be clearly identified and justified [and] [a]II data, models and studies will be documented such that the analyses are transparent and reproducible" (p. 9). "In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions will be substantiated and predictions will be based on clearly stated assumptions. The proponent will describe how each assumption has been tested. With respect to quantitative models and predictions, the EIS will document the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained." (p. 11, emphasis added). 	Please provide further rationale for the use of the referenced climate scenarios for the water balance estimation. The rationale should include an explanation for how climate change (i.e. a shifting climate regime over the Project lifespan and following decommissioning/closure) was considered in selecting this parameter. If climate change was not sufficiently considered, please revise the analysis to incorporate a climate parameter that accounts for the effects of current and projected climate change.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-37	MCCN	Part 1, 4.3. Study	Vol. 1, Section	The EIS notes that "[t]he baseline water balances estimated lake levels and streamflows under average, 1:25-year dry, and 1:25-year wet climate scenarios" (p. 9.34).It is not clear whether the use of these climate scenarios accounted for the potential for changing climate regimes due to climate change. The lack of information surrounding the choice of the climate scenarios for the baseline water balance estimation prohibits sufficient assessment of the efficacy of this estimation.The EIS Guidelines state the following:	Please provide a supplementary analysis for a sensitivity
		strategy and methodology	9.4.1.2 Project Pathways	 "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "Assumptions will be clearly identified and justified [and] [a]II data, models and studies will be documented such that the analyses are transparent and reproducible" (p. 9). "In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions will be substantiated and predictions will be based on clearly stated assumptions. The proponent will describe how each assumption has been tested. With respect to quantitative models and predictions, the EIS will document the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained." (p. 11, emphasis added). 	scenario that uses a 200-year 24-hour precipitation event to assess the potential for discharge from the TMF. In addition, using peer-reviewed sources, please provide a supplementary submission that provides a description and explanation of the terminology, "average climate conditions", that has been used in the EIS for determining potential for TMF discharge. The submission should clarify whether climate change (i.e. a shifting climate regime over the Project lifespan and following decommissioning/closure) was considered in selecting this parameter, and if so, in what manner. If climate change was not considered, please revise the analysis to incorporate a hydrologic parameter that accounts for the effects of current and projected climate change.
				The EIS states that "[t]he TMF is designed to contain 100-year , 24 - hour rainfall event without discharge to the environment. No	

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
	MCCN	Dart 1 4 2 Study	Val 1 Section	discharge from the TMF is anticipated to occur under average climate conditions ." (p. 9.38, emphasis added). It is not clear whether the assumption of average climate conditions considered climate change and the potential for shifting climate regimes. In turn, it is not possible to sufficiently evaluate the efficacy of the Proponent's claims regarding TMF discharge.	In view of the widely accented need for climate shange
MCCN-38	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 9.4.1.3 Mitigation	 The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "Assumptions will be clearly identified and justified [and] [a]II data, models and studies will be documented such that the analyses are transparent and reproducible" (p. 9). "In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions will be substantiated and predictions will be based on clearly stated assumptions. The proponent will describe how each assumption has been tested. With respect to quantitative models and predictions, the EIS will document the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained." (p. 11, emphasis added). The EIS notes that one of the mitigations for surface water impacts is "[d]esigning contact-water collection ditches to convey the 1:25-year storm event" (p. 9.41, emphasis added). 	In view of the widely-accepted need for climate change preparedness and adaptation to be incorporated into project design, mitigation measures for the Project, such as the proposed contact water collection ditches, should be developed for, at minimum, a 200-year 24-hour precipitation event. In addition, please provide supporting peer-reviewed references and rationale for the selection of an appropriate sensitivity scenario, taking into consideration the full range of variability for the existing hydrologic dataset and the predicted effects of climate change (i.e., a shifting climate regime over the Project lifespan and following decommissioning/closure).

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				The basis for the use of a 1:25 year storm event as a parameter for the water collection ditch design is unclear, and it is not clear whether the use of this parameter adequately accounts for the full variability in the existing hydrologic data set, climate change and the potential for shifting climate regimes. In turn, it is not possible to sufficiently evaluate the veracity of the Proponent's claims regarding the efficacy of the contact-water collection ditches.	
MCCN-39	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions (Groundwater and Surface Water)	Vol. 1, Section 9.4.1 Surface Water Quantity. (Mitigation)	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects. The EIS claims that the Project will reuse process water to the extent feasible between the TMF and the ore processing facility. The reuse of water is vital to reduce water intake from Keewatin River.	Please identify best available technology to reduce water quantity required and maximize reuse. The Keewatin River is of key concern to MCCN.
MCCN-40	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 9.4.1.4 Project Residual Effects	 The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "Assumptions will be clearly identified and justified [and] [a]ll data, models and studies will be documented such that the analyses are transparent and reproducible" (p. 9). "In undertaking the environmental effects assessment, the proponent will use best available information and methods. All conclusions will be substantiated and predictions will be based on clearly stated assumptions. The proponent will describe how each assumption has 	Please provide further rationale for the choice of a 10% threshold for incorporating nodes into the assessment. The rationale should reference best available applicable knowledge and literature.

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MCCN-41	MCCN	Part 1, 4.3. Study strategy and methodology	Vol. 1, Section 9.4.2.1 Analytical Assessment Methods	 been tested. With respect to quantitative models and predictions, the EIS will document the assumptions that underlie the model, the quality of the data and the degree of certainty of the predictions obtained." (p. 11, emphasis added). The EIS states that the node for "Keewatin River south of proposed open pit" was not carried forward in the assessment because "average monthly or annual results at this node experience project-related effects less than 10% and are not discussed in the sections below" (p. 9.56). The rationale for the use of "less than 10%" as a threshold for including this node in the assessment is unclear, and impairs ability to sufficiently evaluate the surface water impacts of the Project. The EIS Guidelines state the following: "Except where specified by the Agency, the proponent has the discretion to select the most appropriate methods to compile and present data, information and analysis in the EIS as long as they are justifiable and replicable" (p. 9, emphasis added). "In undertaking the environmental effects assessment, the proponent will use best available information and methods." (p. 11, emphasis added). The EIS states that "[d]ue to modelling limitations for some parameters, Project-related changes in dissolved oxygen (DO), pH, and turbidity (as TSS) were not assessed quantitatively" (p. 9.63). 	Please provide a commitment to revise the assessment to incorporate a fulsome quantitative analysis of Project impacts to dissolved oxygen, pH and turbidity.
				This deficiency constitutes an information gap for these key water quality parameters that impairs the ability to sufficiently evaluate the impacts of the Project on water quality. The exclusion of these parameters is not acceptable for a development of this size.	

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-42	MCCN	Part 1, 6.4. Mitigation measures	Vol. 1, Section 9.4.2.2 Project Pathways	 The EIS Guidelines require that mitigation measures are "specific, achievable, measurable and verifiable, and described in a manner that avoids ambiguity in intent or commitment, interpretation and implementation" (p. 35). The EIS states that "[t]he pit is expected to fill in approximately 11 years under average climate and runoff conditions at the Gordon site. Once the open pit is filled, water in the formed pit lake will be allowed to flow into West Farley Lake." (p. 9.67). It is ambiguous from this statement as to whether the water in the formed pit lake will be treated prior to flowing into West Farley Lake, which inhibits assessment of Project effects on surface water quality. 	Please confirm that water from the pit lake will be treated to conform to applicable federal and provincial regulatory standards prior to discharge into any lakes.
MCCN-43	MCCN	Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA 2012	Vol. 1, Section 9.4.3.2 Surface Water Quality	 The document titled Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA 2012 referenced in the EIS Guidelines states that "the rationale for identifying an environmental effect as being a low, moderate or high magnitude should be clearly documented". The EIS concludes that the Project will result in substantial impacts to surface water quantity that exceed baseline variability of conditions as well as applicable environmental standards (see p. 9.103). However, the EIS downgrades the severity of Project impacts to surface water quality by concluding that the Project will not have adverse effects on aquatic biota (see p. 9.103). As noted in the above comment MCCN-34, the rationale for this interpretation of Project impacts to surface water quality is unclear, given that impacts to aquatic biota are considered in a separate chapter and that the Project is expected to result in severe impacts outside of the range of baseline variability and applicable environmental standards. The uncertainty regarding the Proponent's interpretation of surface water quality impacts 	Please revise the analysis of Project impacts on surface water quality based on the updated residual effects characterization such that impacts to aquatic biota are not used to supersede consideration of impacts to natural variability and applicable environmental and regulatory surface water quality standards, guidance and objectives.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				precludes sufficient evaluation of Project impacts on surface water quality.	
MCCN-44	MCCN	6.5 Significance of Residual Effects	Vol. 1, Section 9.7 Determination of Significance	The Agency's guidance, Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA 201, and referenced in subsection 6.5 of the EIS Guidelines states that "the rationale for identifying an environmental effect as being a low, moderate or high magnitude should be clearly documented". The EIS concludes that "Project-related changes in surface water quantity are predicted to be not significant. This is because, although there are likely to be measurable changes in lake levels and streamflows with the LAAs, the predicted changes are not expected to exceed a 30% relative change from existing conditions." (p. 9.110). The EIS further concludes that "Project-related changes in surface water quality for the Expected Case are predicted to be not significant. This is because, although there are concentrations of some water quality parameters that are predicted to exceed federal and/or provincial water quality guidelines for the protection of aquatic life and baseline concentrations are below the toxicological thresholds at which adverse effects are expected to occur in fish and other aquatic biota" (p. 9.110). The Proponent's use of selected thresholds to interpret Project impacts on surface water quantity and quality is ambiguous and inhibit ability to sufficiently evaluate the veracity of the Proponent's claims regarding significance determination.	Please revise the significance determination to account for updates to the residual effects characterization such that impacts to aquatic biota are not used to supersede consideration of impacts to natural variability and environmental and regulatory surface water quality standards, guidance and objectives for characterizing residual effects.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to			
10. Fish and	LO. Fish and Fish Habitat							
MCCN-45	MCCN	Part 2, 3.2.3 Spatial and temporal boundaries	Volume 2, Section 10.1.4.1 Spatial Boundaries	The EIS Guidelines state that spatial boundaries will be defined taking into account the appropriate scale and spatial extent of potential environmental effects, community knowledge and Aboriginal traditional knowledge, current or traditional land and resource use by Indigenous groups, ecological, technical, social and cultural considerations. The LAAs include components of the Cockeram Lake and Ellystan Lake watersheds in which the Proponent has determined that potential and measurable effects to fish and fish habitat may occur. It is unclear what criteria were used in this evaluation, particularly to exclude watershed components which were not selected, and whether the selected components are adequate to represent potential Project effects to fish and fish habitat from the perspective of Indigenous groups, based on current or traditional land and resource use. Indigenous perspectives on the spatial scale of potential Project effects to fish and fish habitat may differ from the criteria used by the Proponent. For example, downstream fishing sites (such as Sickle Lake) may be of high value or concern and it is unclear why they have been excluded from this evaluation. Similarly, it is unclear if the selected components are sufficient to capture MCCN and the Manitoba Metis Federation's concerns about the effect of fishing pressure associated with an increase in the population in the Lynn Lake area. It is important that these social and cultural considerations are taken into consideration in the development of appropriate spatial boundaries.	Please clarify how traditional and current Indigenous resource use was considered in the development of the LAAs. Please clarify why some rivers and lakes used for fishing within the watershed (e.g. Sickle Lake) have been excluded from the LAAs. Please specify how the effects of increased fishing pressure throughout the LAAs and RAA, as a result of increased employment in the Lynn Lake area, been considered in the development of these spatial boundaries.			

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-46	MCCN	Part 2, 6.3.1 Fish and Fish Habitat	Volume 2, Section 10.1.3 Potential Effects, Pathways and Measurable Parameters	The EIS Guidelines require a characterization of fish populations on the basis of species and life stage, abundance, distribution, and movements, as well as a description of the predicted effects on fish and their habitat, including anticipated changes in the composition and characteristics of the populations of various fish species.	Please provide a characterization of fish populations (including abundance, distribution, and movements) and potential Project effects to these fish and their habitat for lake sturgeon and other culturally important fish species that are known to occur in the region.
				The Proponent has based their assessment of potential Project effects on three focal species (northern pike, lake whitefish, and walleye) and one fish guild (forage species). These focal species are not sufficient to represent the unique life history, ecology, and habitat requirements for fish in potentially affected surface waters. Of particular concern, these focal species fail to capture the unique life history and habitat requirements of culturally important species that have been and/or continue to be harvested in the vicinity of the Project, including a declining lake sturgeon population, which has been assessed as Endangered by COSEWIC. It is important that this assessment reflects the unique ecology and life history requirements of lake sturgeon and other culturally important fish species are not currently represented by the four focal species, contributing to substantial gaps in the assessment of	
MCCN-47	MCCN	Part 2, 6.3.1 Fish and	Volume 2, Section	potential project effects to VCs. The EIS guidelines require the identification of any potential	i) Please provide a calculation and summary of the area of
		Fish Habitat	10.4.1.4 Project Residual Effects	adverse effects to fish and fish habitat including the calculations of any potential habitat loss or alterations (temporary or permanent) in terms of surface areas (e.g. spawning grounds, fry- rearing areas, feeding), and in relation to watershed availability. The EIS does not provide an adequate summary of habitat loss or alterations in terms of surface area, nor watershed availability. For many components, a surface area calculation has not been provided (e.g., loss of East Pond, or effects to fish habitat as a result of changes in water levels and stream flows). For all	fish habitat potentially affected by the Project, including any potential fish habitat loss or alterations (temporary or permanent) for Project components (e.g., diversion channels, road crossings, intakes, dewatering, and as a result of changes in water levels and stream flows). Please include a summary of any potential fish habitat loss or alterations in relation watershed availability (i.e. area and % change in habitat availability within the PDA, LAA, and RAA as a result of the Project, under existing conditions, construction & operation, and post-closure).

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				components, the Proponent has failed to present these areas in relation to watershed availability (e.g. a calculation of the proportion of habitat affected within the watershed). Furthermore, the Proponent has not summarized this information across Project components to provide an overall assessment of the total area or proportion of fish habitat that will be lost or altered within the PDA, LAA or RAA as a result of the Project. Understanding the cumulative area of potential adverse effects and the anticipated change in watershed availability is crucial for	ii) Please present this information in a table or tables, including a summary of surface area by fish habitat type (e.g. spawning, rearing, feeding, migration, etc.).
				assessing Project effects to local fish populations and the relative availability of fish habitat for the maintenance of Indigenous fishing rights. Without this information, it is difficult to make an informed evaluation of the changes and cumulative impacts that will be incurred as a result of the Project.	
MCCN-48	MCCN	Part 2, 6.3.1 Fish and Fish Habitat	Volume 2, Section 10.4.2.5 Residual Effects	The EIS guidelines require the identification of any modifications in fish migration or local movements (upstream and downstream migration, and lateral movements) following the construction and operation of works (physical and hydraulic barriers).	Please provide a description of any potential modifications in fish migrations or local movements for culturally important fish species, including lake sturgeon, as a result of Project construction, operation, and post-closure.
				The current EIS lacks an adequate description of potential modifications in fish migration or local movements as a result of the Project, particularly for culturally important species, such as lake sturgeon, that have not been included as focal species in this assessment.	
				Understanding changes in migration and movement corridors is crucial for assessing potential Project effects to fish communities and the maintenance of Indigenous fishing practices in preferred harvesting areas.	

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-49	MCCN	Part 2, 6.3.1 Fish and Fish Habitat	Volume 2, Section 10.4.2.5 Residual Effects	The EIS Guidelines require a discussion of how vibration caused by blasting may affect fish behaviour, such as spawning or migrations. Vibration is not mentioned in Chapter 10. While the Proponent includes a brief discussion of how blasting activities can cause direct injury or mortality to fish, there is not discussion of how vibrations caused by blasting may affect fish behaviour, including spawning or migrations. Vibrations can have a variety of impacts on fish behaviour, movement, and condition. Understanding the implications of vibrations caused by blasting for fish health, behaviour, movement, and reproductive success is crucial to understanding potential Project effects on these fish communities.	Please provide a detailed description of how vibration caused by blasting may affect fish behaviour, such as spawning or migrations. Please include a description of the area potentially affected by vibrations as a result of blasting, as well as the timing and duration during which vibrations may be experienced.
MCCN-50	MCCN	Part 2, 6.3.1 Fish and Fish Habitat	Volume 2, Section 10.8.1 Change in Fish Habitat; 23.5.15 Fish Habitat Offsetting Plan	The EIS Guidelines require a calculation of any potential habitat offset/compensation works related to fish and fish habitat in terms of the amount of habitat being offset/compensated, as well as the spatial location of the offsetting/compensation habitat. The EIS does not include a calculation of habitat offset/compensation works in terms of the amount of habitat being offset. While the Proponent provides three examples of potential offsetting measures, the EIS does not include details about which measures will be selected, the area that they will offset/compensate, or in some cases the spatial location in which they will occur. Overall, the level of detail provided in the EIS in respect to the Fish Offsetting Plan, i.e., in subsection 23.5.15, is inadequate to determine its potential efficacy in addressing adverse residual effects to fish and fish habitat. Without sufficient information on the area, location, and means of offsetting, MCCN cannot be confident that habitat offset/compensation works will be adequate to address Project	 Please provide a supplementary submission that provides sufficient conceptual-level detail in respect to the Fish Habitat Offsetting Plan to be able to assess its potential efficacy, including: the location of proposed habitat offsets the anticipated time-lag between initial construction of the fish habitat offsets and the offsets gaining full ecological function the habitat offsetting ratio for all proposed fish habitat offset/compensation works related to fish and fish habitat; and a description of how MCCN will be engaged in the development and implementation of the fish habitat offset in the fish habitat offset in the fish habitat offset in the fish habitat offset plan.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				effects to fish and fish habitat. To support offset/compensation measures that will address potential impacts to MCCN Aboriginal and Treaty rights associated with fish and fishing, MCCN must be engaged in the development and implementation of this plan.	
11. Vegetatio	on and Wetlands	5			
MCCN-51	MCCN	Part 2, 3.2.3 Spatial and temporal boundaries	Volume 2, Section 11.1.4.1 Spatial Boundaries	The EIS Guidelines state that spatial boundaries will be defined taking into account the appropriate scale and spatial extent of potential environmental effects, community knowledge and Aboriginal traditional knowledge, current or traditional land and resource use by Indigenous groups, ecological, technical, social and cultural considerations. For vegetation and wetlands, the PDA includes a 30 m buffer to account for direct Project effects, and the LAA includes a 1 km buffer around the PDA and PR 391 access road to account for indirect effects. These buffers are inadequate to account for direct and indirect effects in consideration of ecological, social and cultural factors. Dewatering needed to empty the open pit during construction for mine operation, for example, is expected to lower water levels by 1 m within 1.2 km of the open pit (Chapter 8, Section 8.4.2.3), with implications for wetland function and species composition. Open pit mines have far reaching consequences on the composition and quality of vegetation and wetland communities well beyond a 1 km buffer area. Furthermore, the Proponent's buffers fail to capture Indigenous perspectives on the spatial extent of impacts from open pit mines to vegetation and wetland VCs, which has profound implications for the maintenance of associated Aboriginal and Treaty rights.	 Please clarify how a 1 km buffer area was selected for the LAA, despite the fact that indirect effects to vegetation and wetlands are anticipated to extend beyond this area. Please provide a supplementary submission that describes of how Indigenous traditional knowledge, land and resource use, and cultural considerations were considered in the selection of this buffer. Included in this submission should be answers to the following questions: What Indigenous communities were engaged in the selection of the spatial boundary used in this assessment? What were Indigenous communities engaged in this initial scoping exercise? How were Indigenous communities engaged in the identification of this buffer?

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-52	MCCN	Part 2, 6.1.4 Riparian, Wetland, and Terrestrial Environments	Volume 2, Section 11.4.6 Project Residual Effects	The EIS guidelines require characterization of the shoreline, banks, current and future flood risk areas, and wetlands (fens, marshes, peatlands, mudflats and eelgrass beds, etc.), including the location and extent of wetlands likely to be affected by project activities according to their size, type (class and form), the description of their ecological function (ecological, hydrological, wildlife, socioeconomic, etc.) and species composition. Direct effects to wetland classes during construction and operation are summarized in Tables 11-7 and 11-8 of the Project proposal, however, the spatial extent of indirect effects, such as changes in groundwater height, dust from mine operation and vehicles, thawing of permafrost, etc., are discussed in Section 11.4.6, it is unclear what area and proportion of wetland habitat will be affected. Understanding the full extent of direct and indirect effects to unique habitat types is important for evaluating potential Project effects to the quantity and quality of culturally important plants and wildlife associated with these ecosystems. Indirect effects to vegetation and wetlands can have substantial impacts on Indigenous harvesting practices (e.g., due to changes in species composition, or a loss of confidence in the quality of wild foods) and must be quantified.	Please provide a discussion and tabular summary for each wetland class of the area and percent of area potentially affected by indirect Project effects within the LAA and RAA during Project construction and operation and closure. Please provide a tabular summary of the cumulative area potentially affected by direct and indirect effects within the LAA and RAA during Project construction & operation and closure.
MCCN-53	MCCN	6.1.4 Riparian, wetland, and terrestrial environments	Volume 2, Section 11.2 Existing Conditions for Vegetation and Wetlands	The EIS Guidelines require a characterization of plant species (abundance, distribution and diversity) and their habitats, with a focus on species at risk or with special status that are of social, economic, cultural or scientific significance. The Proponent has not provided an adequate characterization of plant species abundance, distribution or habitats for plants of	Please provide a discussion, map, and tabular summary of the habitats (i.e. land cover classes) for plant species of interest to Indigenous communities within the PDA, LAA, and RAA.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-54	MCCN	6.2.3 Changes to riparian, wetland and terrestrial environments	Volume 2, Section 11.4.6 Project Residual Effects	 interest to Indigenous communities. Table 11-4, for example, includes information on the number of observations and average percent cover of identified plant species of interest to Indigenous communities, but does not describe the habitats in which these species are found, nor their estimated abundance and distribution within the LAA and RAA. Vegetation surveys conducted for the Project were not designed to target plant species of interest to Indigenous communities and may be a poor representation of their total or relative abundance and distribution of plant species and their habitat (under existing conditions, during operation, and after closure) for plants of interest to Indigenous communities is crucial for understanding potential project effects to the availability of these species and the maintenance of Aboriginal and Treaty rights. The EIS Guidelines require a description of changes to key habitat for species important to current use of lands and resources for traditional purposes. 	For each species* of interest to Indigenous communities, please calculate the total area of habitat present under existing conditions, as well as the total area that will be directly or indirectly affected by the Project. Please provide a table summarizing the total area and % change in area for each species' habitat within the PDA, LAA, and
				of interest to Indigenous communities and provide an adequate description of how these habitats may be directly and/or indirectly affected by the Project. Understanding changes in the abundance and distribution of habitat for plants of interest to Indigenous communities is crucial for understanding potential project effects to the availability of these species and the maintenance of Aboriginal and Treaty rights. This is particularly important given the absence of adequate baseline surveys specifically designed to document the distribution and abundance of culturally important plants.	RAA under existing conditions, construction & operation, and closure phases. Please include a discussion of how changes in the area of key habitats (as a result of direct and indirect effects) may affect the abundance, distribution, and quality of these culturally important plant species. * If summarized by habitat type rather than by species, please draw a clear link between the species and their occurrence in these habitats.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to			
12. Wildlife a	12. Wildlife and Wildlife Habitat							
MCCN-55	MCCN	6.3.3 Species at Risk	Volume 2, Section 12.0 Assessment of Potential Effects on Wildlife and Wildlife Habitat	The EIS Guidelines require an assessment of the potential adverse effects of the project on <i>Species at Risk Act</i> listed species and species assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as extirpated, endangered, threatened, or of special concern (e.g. barren ground caribou, wolverine, bank swallow, and barn swallow). The Proponent has excluded seven species at risk and species of conservation concern on the basis that they are not known to regularly occupy the RAA. Furthermore, the Proponent has excluded barren ground caribou from their assessment on the basis that the Project does not overlap with its modern range. This decision contradicts the requirements of the EIS Guidelines. An absence of regular occurrence or detections within the RAA does not preclude the use of this area for species at risk and species of conservation concern. Trumpeter swan, for example was excluded from the Proponent's assessment on the basis that this species does not regularly use the RAA but was recorded during field surveys that overlapped with their migration through the area (p. 12.23). Any further disruption or loss of potential habitat for species at risk and species of conservation concern may pose a threat to the sustainability of these populations. In accordance with the precautionary principle, it is important to assess potential impacts to habitat for all species at risk and species of conservation concern that potentially overlap with the project.	Please provide the required assessment of potential adverse effects of the project on species at risk and species of conservation concern, including those that have been assessed as locally extirpated or are not regularly observed within the RAA.			

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-56	MCCN	6.2.3 Changes to riparian, wetland and terrestrial environments	Volume 2, Section 12.0 Assessment of Potential Effects on Wildlife and Wildlife Habitat	The EIS Guidelines require an assessment of changes to key habitat for species important to current use of lands and resources for traditional purposes. The Proponent has failed to provide an adequate assessment of potential changes in habitat for key species of importance to current use of lands and resources for traditional purposes. While residual changes to wildlife habitat are summarized by land cover class in Table 12-12, this is not sufficient for a species level assessment of changes to key habitat. Habitat modeling and assessments of potential project effects on habitat availability have not been included in the Project proposal for moose, gray wolf, black bear, American marten, or beaver. Examination of the baseline studies conducted for this Project (Volume 4, Appendix M) reveal high moose density, numerous furbearer observations, and active beaver lodge locations overlapping with both of the wildlife PDAs and LAAs. Understanding potential species-specific impacts and changes in key habitat for these animals is critical for evaluating potential Project effects to current use of lands and resources for traditional purposes.	Please provide a discussion, map, and tabular summary of potential changes to key habitat for moose, gray wolf, black bear, and beaver, including the area and percent change within the PDAs, LAAs, and RAAs potentially affected by direct and indirect effects during construction & operation and post-closure.
MCCN-57	MCCN	6.2.3 Changes to riparian, wetland and terrestrial environments	Volume 2, Section 12.0 Assessment of Potential Effects on Wildlife and Wildlife Habitat	The EIS guidelines require a description of changes to the habitat of migratory and non-migratory birds, with a distinction made between the two bird categories, including losses, structural changes and fragmentation of riparian habitat of terrestrial environments and wetlands frequented by birds (types of cover, ecological unit of the area in terms of quality, quantity, diversity, distribution and functions). Changes to habitat for migratory and non-migratory birds have not been discretely discussed in sufficient detail to meet the requirements of the EIS Guidelines. While changes in habitat have	Please provide a discrete summary of potential changes to the habitat of migratory and non-migratory birds. Please include information on the habitat types (i.e. land cover classes or ecological units) frequented by each of these two categories of birds, and potential changes in terms of quality, quantity, and distribution for each habitat type.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				been broadly discussed (mostly qualitatively), the EIS does not provide sufficient detail regarding changes and fragmentation of the habitat types frequented by each of these two bird categories, in terms of quality, quantity, diversity, distribution or functions.	
MCCN-58	MCCN	3.2.3 Spatial and temporal boundaries	Volume 2, Section 12.1.4.1 Spatial Boundaries	The EIS Guidelines state that spatial boundaries will be defined taking into account the appropriate scale and spatial extent of potential environmental effects, community knowledge and Aboriginal traditional knowledge, current or traditional land and resource use by Indigenous groups, ecological, technical, social and cultural considerations.	Please describe how an appropriate spatial scale will be identified and implemented in consultation with MCCN.
				For wildlife and wildlife habitat, the PDA includes a 30 m buffer to account for direct Project effects, and the LAA includes a 1 km buffer around each PDA component. This buffer fails to capture potential indirect effects to wildlife and associated Indigenous land and resource use, particularly as a result of sensory disturbance. Weir et al, ¹ for example, conducted a seasonal analysis of woodland caribou avoidance around an open pit mine site, and found that caribou avoided areas within 4 km of the mine site across most seasons. The authors found that the group size and number of caribou decreased within 6 km of the mine with progression of mining activity in the late winter, pre-calving and calving seasons.	
				It is important that the selected spatial boundaries are adequate to capture potential indirect effects to wildlife and wildlife habitat. MCCN recommends a more appropriate buffer of 4 to 6 km to account for indirect effects and requests that we are engaged in the selection of this value.	

¹ Weir, J.N., Mahoney, S.P., McLaren, B. and Ferguson, S.H. 2007. "Effects of mine development on woodland caribou Rangifer tarandus distribution." Wildlife Biology 13 (1): 66–74. https://doi.org/10.2981/0909-6396(2007)13[66:EOMDOW]2.0.CO;2.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
13.0 Labour MCCN-59	and Economy MCCN	Part 2, Section 6.1.11	Volume 2, Section	The EIS Guidelines (6.1.11) require that the baseline information	Provide supplementary information, in consultation with
		Human Environment	13.2 Existing Conditions for Labour and Economy	reflects the health and socio-economic conditions affecting communities in the study area, including the characterization of "the functioning and health of the socio-economic environment, encompassing a broad range of matters that affect communities in the study area in a way that recognizes interrelationships, system functions and vulnerabilities". Best practices guidance for the assessment of socio-economic impacts in relation to Indigenous peoples suggests an assessment of socio-economic conditions should include "Indigenous demographic and other baseline data that is properly disaggregated from the overall local and/or regional population and must adequately represent individual Indigenous populations". (See First Nations Major Projects Coalition (2020) – Appendix 1 – Indigenous Socio-economic Impact Assessment (SEIA) pp. 6). While Section 13.2 (Existing Conditions for Labour and Economy) of the EIS provides detailed discussion and analysis of the regional conditions for Labour force, Employment and Economy, there is no clear linkage to the actual socio-economic circumstances for each "individual Indigenous group" relevant to these VCs. Data presented throughout this section is largely aggregated as 'local and regional'. Limitations with secondary statistical data is acknowledged, however, such an assessment requires primary data collection in consultation with MCCN to obtain project- specific information on the Labour Force, Employment, and Economy VCs.	 MCCN, on the current baseline socio-economic conditions that reflect the actualities and vulnerabilities of the community, including a detailed discussion on any effects on the socio-economic conditions of MCCN members resulting from a change in the environment. A socio-economic baseline study, led by MCCN, is required in order to adequately establish current socio-economic conditions faced by MCCN members. Project specific analyses relevant to the Labour and Economy VCs could include: Effects on existing workers/ jobseekers Socio-economic vulnerabilities of the economically marginalized Contracting opportunities for local businesses Identification of any barriers to accessing employment or other economic opportunities arising from the Project

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-60	MCCN	Part 2, Section 6.1.11 Human Environment	Section 13.1.3 Potential Effects, Pathways and Measurable Parameters	The assessment of potential project effects, pathways and indicators presented in Section 13.1.3 is too narrowly scoped and inadequate for a robust effects' prediction relevant to MCCN's Labour force, businesses, and economy. For example, the analysis of economic benefits does not include an assessment of impact equity and impacts on subsistence/mixed economy. The Proponent suggests the Project will result in overall positive effects for the local and regional labour force, businesses, and economy, however there is no discussion of how the opportunities created will be accessed by MCCN members and businesses.	A community-led Socio-Economic Impact Assessment (SEIA) should be undertaken in order to provide adequate information required in respect to MCCN socio-economic baseline and project-community interactions. MCCN should be given the right of first refusal to undertake a community-specific SEIA; if MCCN does not elect to undertake its own SEIA, then MCCN should have the option to collaborate in the proponent-led SEIA.
MCCN-61	MCCN	Part 2, Section 6.1.11 Human Environment	Section 13.1.4. 1 Spatial Boundaries	The Spatial boundaries (Section 13.1.4.1) adopted to assess Project effects, including residual and cumulative environmental effects, on Labour and Economy is inadequate and there is insufficient context for the inclusion of MCCN in the RAA. Individuals from MCCN communities (not just Granville Lake) may seek employment in the Project.	
MCCN-62	MCCN	Part 2, Section 6.1.11 Human Environment	Section 13.9 Follow-up and Monitoring	The Proponent suggests the extent to which workers and business participate in Project-related opportunities is largely external to Alamos and does not propose any follow-up and monitoring programs for the select VCs (see Section 13.9).	Please provide supplementary information describing plans to engage and collaborate extensively with MCCN to develop appropriate context-specific follow-up and monitoring programs. The proponent should also set targets for local Indigenous content, monitor the number of self-identifying Indigenous people employed by the project and provide a mechanism for adaptive management if targets are not met.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-63	MCCN	Section 6.1.11 Human Environment	14.2 Existing Conditions for Community Services, Infrastructure, and Well-being	As required under paragraph 5(1)(c) of the Canadian Environmental Assessment Act, 2012 (CEAA 2012), the EIS should provide a description and analysis of the "health and socio- economic conditions, including the socio-economic determinants of health, the functioning and health of the socio-economic environment, encompassing a broad range of matters that affect communities in the study area in a way that recognizes interrelationships, system functions and vulnerabilities".	 Please provide a supplementary submission detailing culturally appropriate socio-economic well-being baseline information for MCCN. MCCN should have the opportunity to collaborate with the Proponent to provide context-specific data on the existing conditions for Community Services, Infrastructure, and Well-being. Such characterization could include but not limited to: Analysis of access (including potential pressures on) to social services and protection facilities in the community The general state of community well-being including the physical and mental health conditions by age, sex, and race Potential impacts on existing infrastructure including access to roads, housing, and additional pressures on infrastructure Psycho-social impacts (fear, anxiety, depression) from impacts on lands and resources, negative behaviors from increased disposable income.
MCCN-64	MCCN	Section 6.1.11 Human Environment	14.1.2 Influence of Engagement on the Assessment	Engagement with MCCN is limited and inadequate. Accordingly, a detailed discussion of the baseline conditions relevant to MCCN members is evidently absent.	A community-led Socio-Economic Impact Assessment (SEIA) should be undertaken in order to provide adequate information required in respect to MCCN socio-economic baseline and project-community interactions. MCCN should be given the right of first refusal to undertake a community-specific SEIA; if MCCN does not elect to undertake its own SEIA, then MCCN should have the option to collaborate in the proponent-led SEIA.
MCCN-65	MCCN	Section 6.1.11 Human Environment	14.1.3 Potential Effects, Pathways	The potential effects and pathways analysed in the Section are narrowly scoped and inadequate to provide a robust assessment of MCCN's conditions. The assessment does not take into account the potential effects on family relations, food security, and psycho- social impacts.	See information request above (MCCN-64).

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
			and Measurable Parameters		
15.0 Land a	nd Resource Use	 !			
MCCN-66	MCCN	Section 6.1.11 Human Environment	15.2 Land and Resource Use	 The discussion of Land and Resource Use provided in Section 15 of the EIS does not include any analysis of the potential effects of the Project on MCCN non-traditional Land and Resource Use and Activities, i.e., commercial activities. Information regarding effects on MCCN involvement in natural resource management, and/or harvesting, within the commercial sphere, is absent. For example, MCCN involvement in forestry and commercial fishing is not referenced in this section. 	Provide supplemental filing on MCCN involvement in the regional commercial economy, including but not limited to potential and active engagement in forestry and the commercial fishery.
16.0 Heritage	e Resources	1	1		
MCCN-67	MCCN	Section 6.3.4 Indigenous peoples	16.0 Heritage Resources	The EIS Guidelines (6.3.4) requires an analysis for each Indigenous group of how changes to the environment resulting from the Project will affect the "physical and cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance to groups". In addition to physical cultural heritage, this also includes a range of intangible cultural heritage values (e.g., sacred areas, cultural landscapes, language use and transmission).	In collaboration with MCCN, please develop project- specific baseline data regarding MCCN heritage resources in the study area, as a necessary first step. An assessment of project effects on MCCN heritage resources should only be made if and when adequate information is obtained.
				CEAA 2012 "Technical Guidance for Assessing Physical and Cultural Heritage or any Structure, Site or Thing" (2014) identifies the need for consultation with Indigenous groups when characterizing the effects of any changes to the environment resulting from the	The proponent should plan to develop a pre-construction HRIA that includes MCCN traditional knowledge and addresses the data gap regarding MCCN's cultural heritage values and concerns.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				 Project on the community's intangible as well as tangible heritage resources. A substantial gap exists in this section with respect to the baseline information on MCCN's heritage resources. There is no discussion on MCCN's cultural heritage values or resources of important historical cultural significance presented for the study area. Another critical concern for MCCN is the limited use of Traditional Knowledge information in the characterization of heritage resources within the study area. 	
17.0 Assessm	nent of Potential	Effects on Current Use of	Lands and Resources	s for Traditional Purposes by Indigenous Peoples	
MCCN-68	MCCN	6.1.9 Indigenous peoples	17.1.3.1 Consideration of Indigenous Interest and Community Knowledge Regarding Current Use of Lands and Resources for Traditional Purposes	Despite recognizing that IAAC requires a community-by- community consideration of effects, the EIS notes that residual effects on Current Use are "amalgamated in summary because the effects pathways and Project effects identified for each potentially affected community were similar and lead to similar conclusions." This is premature given that MCCN's baseline information on Current Use has not been submitted or considered.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Re-assess residual effects based on the above.
MCCN-69	MCCN	2.3 Engagement withIndigenous Groups4.2.2 Communityknowledge andAboriginal traditionalknowledge	17.1.4 Potential Effects, Pathways and Measurable Parameters	While the EIS appropriately recognizes that intangible values especially are the purview of Indigenous communities, analyses of project effects to Current Use are inherently incomplete without the input of communities.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
		5. Engagement with Indigenous groups and concerns raised			
MCCN-70	MCCN	3.2.3 Spatial and temporal boundaries	17.1.5.1 Spatial Boundaries	A 1 km buffer around the PDA is used to designate the Current Use LAA. The rationale for this spatial boundary is not substantiated. There is no indication that input from Indigenous Nations was solicited and/or considered in the identification of the LAA buffer. The EIS states that the spatial boundaries were created "considering information gathered through Project specific engagement, and by applying available TK and Current Use information". Given that the baseline record is incomplete and engagement is ongoing, the selection of spatial boundary is premature. The EIS further states that Indigenous communities may identify spatial boundaries in relation to their traditional lands but that there may be variation between communities. As such, the EIS spatial boundaries for Current Use are tied to wildlife and surface water features for consistency. This is dismissive of Indigenous input. MCCN values and concerns should inform the spatial boundary for assessing potential effects on MCCN Current Use.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN, based on a spatial boundary appropriately developed with MCCN input.
MCCN-71	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge	17.1.7 Significance definition	The definition of significant adverse effects on Current Use does not allow for the possibility of significant local effects as it specifies substantial loss or diminishment in the RAA. Moreover, it is unclear how Indigenous input was explicitly considered in creating the definition.	Provide a supplementary submission in reference to MCCN Current Use that applies the methodologies set out under the Agency's Technical Guidance for assessing the Current Use of Lands and Resources for Traditional Purposes under CEAA 2012, in combination with the Agency's Operational Policy Statement for Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under the CEAA 2012.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-72	MCCN	 2.3 Engagement with Indigenous Groups 4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised 	17.2.14.2 Mathias Colomb Cree Nation	Information on MCCN Current Use is largely absent pending the completion of the MCCN TLRU study. This information is crucial for the proper assessment of Current Use and other linked VCs that rely on the Current Use analysis. Conclusions drawn in advance are premature.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Revisit the assessment of Current Use given the above.
MCCN-73	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised 6.1.9 Indigenous peoples	17.3 Project interactions with current use of land and resources for traditional purposes	The potential project interactions with Current Use described in the EIS are lacking in detail, reliant on limited information and analysis, and are not specific to MCCN. The analysis has not considered MCCN current use baseline information and therefore is entirely speculative and unreliable.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Revisit project interactions with Current Use given the above, while also explicitly addressing MCCN Current Use.
MCCN-74	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised	17.4 Assessment of residual environmental effects on current use of lands and resources for traditional purposes 17.4.2.3 Project residual effects	Identification and characterization of project residual effects is premature without adequate baseline information or mitigation measures verified by MCCN and Indigenous communities. No explanation has been provided to indicate how Indigenous input was specifically incorporated into this section.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Reassess residual effects based on the above.
MCCN-75	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge	17.4.3 Change in access to resources currently used for traditional purposes	Identification and characterization of project residual effects is premature without adequate availability of baseline information for MCCN. The methodology proposed in this subsection must also be reviewed and reconsidered.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Reassess residual effects based on the above. Explicitly describe how MCCN input was incorporated into the assessment and how the chosen indicators account

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
		5. Engagement with Indigenous groups and concerns raised	17.4.3.1 Project Pathways	Quantification of access by the length and number of travel routes affected is a questionable indicator that ignores other avenues in which access may be affected such as avoidance, the influx of outsiders in the region, increased amounts of traffic on roads, etc.	(i.e., length and number of travel routes) for Indigenous knowledge and values.
MCCN-76	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised	17.4.4 Change to Traditional Cultural and Spiritual Sites and Areas 17.4.4.1 Project pathways	Identification and characterization of project residual effects is premature without adequate baseline information or mitigation measures verified by MCCN and Indigenous communities. How Indigenous input was explicitly incorporated and considered is absent. Quantification of change to traditional cultural and spiritual sites and areas by the number of sites physically removed and only considering indirect changes from emissions is overly narrow in scope. There is little consideration of intangibles linked to such sites, including principles and norms of respect. The project-impact-pathways described furthermore note that there are no cultural or spiritual sites and areas in the Gordon site PDA, and none are noted for MacLellan. This is premature given baseline information from MCCN is absent.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Reassess residual effects based on the above. Explicitly describe how Indigenous input was incorporated in the assessment and how the chosen indicators account (i.e., number of cultural and spiritual sites removed or affected by emissions) for Indigenous knowledge and values.
MCCN-77	MCCN	 4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised 6.1.9 Indigenous peoples 6.3.4 Indigenous peoples peoples 	17.5.1 Project Residual Effects Likely to Interact Cumulatively with Current Use of Lands and Resources for Traditional Purposes	Determination of cumulative effects on Current Use is highly cursory and also premature given a lack of baseline data. For example, cumulative effects pathways described for the availability of resources currently used for traditional purposes constitutes no more than two sentences, and are vague and non- specific to particular developments or communities. This is similar for descriptions of cumulative effect pathways for access to resources, changes to traditional cultural and spiritual sites and areas, and changes to the environment that affect cultural value or importance.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Reassess cumulative effects based on the above, with explicit consideration of MCCN inputs.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-78	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised	17.7 Determination of significance	Estimations of the significance of project residual effects and cumulative effects is premature without adequate baseline information or mitigation measures verified by MCCN and Indigenous communities. How Indigenous input was explicitly incorporated and considered is absent.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Explicitly describe how Indigenous input was incorporated in the significance definition.
MCCN-79	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 2.4 Application of the precautionary approach	17.8 Prediction confidence	The EIS states that "overall confidence in residual environmental effect and significance predictions for Current Use is high". This is unwarranted given that the basic and necessary baseline data is absent; an estimation of significance is premature.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Revisit the significance estimation based on the above.
18.0 Assessn	nent of Effects or	n Human Health			
MCCN-80	MCCN	Part 2, Section 6.3. Predicted Effects on Valued Components	Vol.2 Section 18.1.3 Potential Effects, Pathways and Measurable Parameters. (Table 18-1)	The EIS Guidelines states that based on the predicted changes to the environment identified in section 6.2 of the EIS Guidelines, the proponent is to assess the environmental effects of the project on the following VCs. All interconnections between VCs and between changes to multiple VCs will be described. In Section 18.1.3 of the EIS, backyard garden produce is combined with traditional use of indigenous nations as effect pathways for ingestion of contaminants of potential concern. This is an inappropriate equivalency to present when assessing potential effects on the health of Indigenous communities that may be harvesting country foods in the vicinity of, or downstream from, the proposed mine site.	Please submit a revised analysis of potential effect pathways that clearly distinguishes "backyard garden produce" from country foods consumption and provides a separate analysis for each.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-81	MCCN	Part 2, Section 6.3. Predicted Effects on Valued Components	Vol.2 Section 18.1.4 Boundaries (Temporal Boundaries)	The EIS Guidelines state that based on the predicted changes to the environment identified in section 6.2 of the EIS Guidelines, the proponent is to assess the environmental effects of the project on the following VCs. All interconnections between VCs and between changes to multiple VCs will be described. Environmental effects can be most accurately observed if baseline data can be sourced from a time before project activity has taken	Please inquire whether any back casting can be done to establish baseline prior to the operation of the historic projects; or how to consider the modelling of that reality. The baseline from prior to historical mining would give a more realistic historical baseline.
				place.	
MCCN-82	MCCN	Part 2, Section 6.3. Predicted Effects on Valued Components	Vol.2 Section 18.1.4 Boundaries (Temporal Boundaries)	The EIS Guidelines state that based on the predicted changes to the environment identified in section 6.2 of the EIS Guidelines, the proponent is to assess the environmental effects of the project on the following VCs. All interconnections between VCs and between changes to multiple VCs will be described. The open pit is anticipated to be filled in Year 17 at the Gordon site (11 years from the end of active closure; Table 9-14) and Year 35 at the MacLellan Site (21 years from the end of active closure; Table 9-21). However, the EIS states that the expected duration for post-closure monitoring is approximately 10 years. This duration does not appear to be long enough to account for changes in water quality associated with pit filling. Water quality is a key consideration for human health.	Please address the long term need for water quality monitoring. Until the pit is filled (at year 11 and 21), the final state for water quality will be not be clearly identified. The modeling for pit water quality should be carefully examined to identify if conservative assumptions are made for water quality, and long-term water quality (and then therefore for the human health risk assumptions).
MCCN-83	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions.	Vol.2 Section 18.2.1 Methods	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects Traditional medicines, plants and animals are not identified among baseline samples. This information is required because traditional medicines, plants and animals greatly impact human health for the local populations.	Please clearly identify traditional medicines, plants and animals among those being sampled as part of baseline sampling. The baseline information may not be accurate otherwise.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-84	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions.	Vol.2 Section 18.4.1 Analytical Assessment Techniques	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects. The EIS does not include the impacts of previous mining activities in the baseline. Identification of the impacts of previous mining is required for the development of adequate baseline information.	Please identify how past contributions of mining may have contributed to existing COPCs. The baseline information may not be accurate otherwise.
MCCN-85	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions	Vol.2 Section 18.4.1 Analytical Assessment Techniques (COPC Concentrations in Environmental Media)	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects The EIS states that "baseline Case concentrations SO2 and NO2 were based on 2018 ambient air quality monitoring results from the National Air Pollution Surveillance Program (NAPS) station in Fort Smith, Northwest Territories" (p. 18.16). This location of monitoring for the baseline case is too far away to be considered valid data.	Please reconsider the location for the base case for SO2 and NO2 monitoring so that is an accurate representation of the area.
MCCN-86	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions	Vol.2 Section 18.4.1 Analytical Assessment Techniques (COPC Concentrations in Environmental Media-McLellan Region)	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects. The EIS states that baseline Case concentrations in the soil, terrestrial vegetation, small mammals, water, sediment, and fish were based on samples collected from the LAA within the Gordon and MacLellan regions. It is not clear whether samples were verified with affected Indigenous nations.	Samples that were collected should be verified with the MCCN to verify they fit with the traditional use species relied on. The species that were sampled need to be consistent with the traditional use species that are relied on.
MCCN-87	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions	Vol.2 Section 18.4.1 Analytical Assessment Techniques (COPC Concentrations in Environmental Media) (Fish- Gordon Region)	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects The EIS states that "receptors are assumed to not obtain fish from Farley Lake (immediately downstream of the Project) based on feedback from local residents and Indigenous people. Swede Lake	Please verify with MCCN the assumption that receptors do not obtain fish from Farley Lake. There is a need to verify assumptions to ensure accuracy.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				is located immediately downstream of Farley Lake and formerly supported a commercial fishery" (p. 18.18). This assumption may not be valid and needs to be verified as there has not been a traditional land use study completed.	
MCCN-88	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions	Vol.2 Section 18.4.1 Analytical Assessment Techniques (COPC Concentrations in Environmental Media) (Receptors Assumptions)	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects The EIS states that "Receptors were assumed to obtain 10% of the fish they consume on a yearly basis from Swede Lake (for Gordon region receptors) or Cockeram Lake (for MacLellan region receptors). This is considered conservative as the results of community and Indigenous engagement suggest that people are unlikely to obtain fish from either of those waterbodies due to perceived contamination of surface water related to historical mining activities" (p. 18.24). This assumption may not be valid and needs to be verified as there	Please verify with MCCN the assumption that receptors obtain 10% of the fish they consume on a yearly basis from Swede Lake (for Gordon region receptors) or Cockeram Lake (for MacLellan region receptors). There is a need to verify assumptions to ensure accuracy.
MCCN-89	MCCN	Part 2, Section 6.5. Significance of Residual Effects.	Vol.2 Section 18.7.1 Significance of Project Residual Effects	has not been a traditional land use study completed. The EIS Guidelines state that after having established the technically and economically feasible mitigation measures, the EIS will present any residual environmental effects of the project on the VCs identified in Section 6.3 the EIS Guidelines. All residual effects, even if very small or deemed insignificant will be described. The EIS states that "Future Case inhalation exposures for 1-hour NO2 and 2-hour DPM are predicted to exceed their respective regulatory thresholds on an infrequent basis. These exceedances are predicted to result in only minor exceedances of the regulatory limits (maximum calculated CR = 1.6 for 1-hour NO2 in the work camp). For both 1-hour NO2 and 2-hour DPM, the regulatory thresholds are based on respiratory effects that are transitory and	Please indicate why the exceedances are limited to the time period described. Mitigation measures to reduce or ensure no exceedances should be considered. In the event that the exceedances are immitigable, the license and Proponent mitigation measures should be specific to this point so that these cannot occur out of this range.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				where recovery occurs when contaminant concentrations return to levels below the regulatory limits. In addition, the 1-hour NO2 and 2-hour DPM exceedances are predicted to occur sometime between 19:00 and 6:00, a time period where people would be unlikely to the present at the locations where the exceedances are predicted to occur. As a result, these exceedances would not be expected to represent a potential concern for human health" (p. 18.45). It is not clear why the exceedances are limited to the time period described.	
19.0 Assessm	nent of Potential	Effects to Indigenous Peo	ples		
MCCN-90	MCCN	3.2.3 Spatial and temporal boundaries 4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised	19.9.1.2 Boundaries	The spatial boundary used for the assessment of effects on Aboriginal or Treaty Rights demonstrate little consideration of MCCN's rights. The Rights LAA and RAA appear to be generic geometric shapes that do not consider any biophysical, social, or topographical factors, including the extent and practice of MCCN rights. The EIS provides no indication that MCCN was included in any discussion of spatial boundaries for this assessment, or how MCCN information would have been included. For instance, it is noted in the EIS that "Indigenous communities may identify spatial boundaries in relation to their traditional lands or traditional territories," however this is immediately dismissed by the following clause, "however, physical effects of the Project are not expected to extend beyond the RAA."	Provide a supplementary baseline and project-MCCN Rights interaction and impact study developed in collaboration with MCCN that specifies how MCCN input has considered in boundary setting.
MCCN-91	MCCN	 4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised 	Table 19-11 Definitions used to assess the level of severity of impact on Indigenous or Treaty rights	It is unclear how or if MCCN input was incorporated into the development of assessment definitions. Although the EIS states that sections on the significance of project residual and cumulative effects on Current Use were provided to communities on April 28, 2020, the determination of significance is premature given the lack of baseline information from MCCN.	Provide a supplementary baseline and project-MCCN Rights interaction and impact study developed in collaboration with MCCN that specifies how MCCN input has considered in the assessment definitions.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
			19.9.1.6 Input from Indigenous Communities on Methods		
MCCN-92	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised	19.9.2 Existing Conditions for Indigenous or Treaty Rights 19.9.2.1 Methods	The EIS states that the "assessment considered information from the Project-specific TLRU studies" in addition to other publicly available literature to establish existing conditions. However, a TLRU and/or rights-based activities study has yet to be completed and submitted by MCCN rendering the EIS incomplete.	To address the existing gap in the EIS in respect to the current conditions for MCCN rights-based activities, provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN.
MCCN-93	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised	19.9.3.2 Mathias Colomb Cree Nation	Assessment of the Indigenous and Treaty rights of the Mathias Colomb Cree Nation is profiled in Section 19.9.3.2 of the EIS. The profile of potential effects to MCCN Treaty and Indigenous rights is incomplete without baseline information for rights-based activities. Moreover, the profile notes that impacts to MCCN rights "may occur through the six effect pathways identified in Section 19.7.1.3; this section does not exist in the EIS. It is also implied that although residual effects to Indigenous health may occur, the impacts are lessened because effects are not expected at a population level (of plants, animals, and fish species). The same logic is applied to vehicular collisions and human-wildlife conflicts. However, an impact to rights does not require population level effects. Section 19.9.3.2 also states that the exercise of Indigenous or Treaty rights associated with MCCN socio-economic conditions will be able to continue at a similar level as baseline, however baseline has not yet been established and so such a conclusion is premature. A logic that only a small percentage of Crown land in the LAA for assessing impacts to MCCN Rights will be taken up by the Gordon and MacLellan site PDAs, and therefore the impacts to MCCN	Provide a supplementary submission that sets out an appropriate methodological approach to Rights Based Methodology, taking into consideration approaches already well-established in federal impact assessment (for example, the federal guidance on Rights Impact Assessment, https://www.canada.ca/en/impact- assessment-agency/services/policy- guidance/practitioners-guide-impact-assessment- act/interim-guidance-assessment-potential-impacts- rights-indigenous-peoples.html)

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				rights minimal, ignores that the severity of impacts are correlated with both the historical context in which the right is exercised, and the remaining ability of MCCN members to exercise their rights at preferred locations, at preferred times and with preferred means. Depending on these factors, large effects are still possible even if impacts are in relatively small areas.	
MCCN-94	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised	Table 19-2 VC and potential effect pathways related to Indigenous health conditions Table 19-4 VCs and potential effect pathways to Indigenous Physical and Cultural Heritage	Current Use and effects to Current Use are listed as effect pathways for Indigenous health conditions. However, a Current Use baseline has not been completed for MCCN and therefore an assessment on Indigenous Health appears premature. Current Use and effects to Current Use are listed as effect pathways for Indigenous Physical and Cultural Heritage. However, a Current Use baseline has not been completed for MCCN and therefore an assessment on Indigenous Physical and Cultural appears premature.	Provide a supplementary baseline and project-TLRU interaction and impact study developed in collaboration with MCCN. Revisit the effect pathways for Indigenous health conditions based on the above.
MCCN-95	MCCN	4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised 6.1.9 Indigenous peoples	19.2.2 Overview 19.2.2.1 Indigenous Health Conditions 19.2.2.2 Indigenous Socio- Economic Conditions 19.2.2.3 Indigenous Physical and Cultural Heritage	Extremely little information specific to MCCN is provided in the baseline descriptions of these VCs. Moreover, First Nations are aggregated despite the requirement that each group be assessed separately (Section 6.1.9 of the EIS guidelines).	 i) Provide a supplementary health effects analysis, based on current community-based baseline data, using a population health/social determinants of health model to guide health impact assessment. ii) Through collaboration with MCCN, and based on current community-based baseline data (within past 2 years), please provide a supplemental baseline socio- economic conditions study for MCCN. iii) Work with MCCN to develop project-specific baseline data regarding MCCN heritage resources in the study area. An assessment of project effects on MCCN heritage resources should only be made once adequate information is obtained.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-96	MCCN	 4.2.2 Community knowledge and Aboriginal traditional knowledge 5. Engagement with Indigenous groups and concerns raised 	19.5.2 Changes to Indigenous Health Conditions 19.5.2.1 Cumulative Effect Pathways 19.5.2.3 Cumulative Effects 19.5.4.1 Cumulative Effect Pathways 19.5.4.3 Cumulative Effects	The conclusion that, "Cumulative effects on Indigenous health conditions are expected to be adverse and low in magnitude as the harvest of country foods will be able to continue with minor alteration of behaviour such as changes in patterns of access or travel routes", is premature without baseline information. Similarly descriptions of the cumulative effect pathways to physical and cultural heritage are inadequate, consisting of a single sentence. Conclusions that cumulative effects are of low magnitude and reversible are premature and unsubstantiated.	Provide a supplementary health effects analysis, based on current community-based baseline data, using a population health/social determinants of health model to guide health impact assessment. In addition, revisit the cumulative effects assessment to include a greater level of detail on how specific project effects will combine with specific developments or other cumulative effects sources to impact environmental conditions that support MCCN community health.
21.0 Assessm	nent of Potential	Effects of the Environmer	nt on the Project		
MCCN-97	MCCN	Section 6.6.2. Effects of the environment on the project	Section 21.4.1.3 Mitigation	The EIS states that the tailings management facility (MacLellan site) is equipped with an emergency spillway to allow safe routing of increased flows due to precipitation. The EIS does not indicate where the spilled TMF water will be routed to in the event of a flooding event, or consequent potential effects on valued components and Indigenous rights and interests.	Please describe where the TMF water will be routed to in the event of extreme precipitation. Please provide an assessment of potential effects on valued components and Indigenous rights and interests resulting from spilling of excess TMF water from the TMF in the event of an extreme precipitation event.
22.0 Assessm	nent of Potential	Accidents or Malfunction	s		
MCCN-98	MCCN	Section 6.6.1. Effects of potential accidents or malfunctions	Section 22.5.1.3 Environmental Effects Assessment	The EIS Guidelines require the Proponent to identify the probability of potential accidents and malfunctions related to the project. The EIS states that the likelihood of a potential dam breach will be calculated during final design of the TMF.	Please provide a supplementary filing that assesses the likelihood of a potential TMF dam breach and accompanying rationale for this estimation.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
23.0 Environ	mental Manager	nent and Monitoring		The likelihood of a potential TMF dam breach should be calculated as part of the assessment of potential accidents and malfunctions. This information is required as a dam breach would result in significant adverse effects on MCCN's current use of lands and resources for traditional purposes and MCCN's treaty and aboriginal rights and interests.	
MCCN-99	MCCN	Section 8 Follow-up and Monitoring Programs	Section 23.2 Adaptive Management Section 23.3 Communication Sharing and Reporting	Section 23.2 of the EIS states that review of the proponent's Environmental Management and Monitoring Program will include "community complaints, enquiries and corrective actions." Section 23.3 of the EIS states that the proponent will establish a "A communication mechanism for providing data will be established to distribute information and accept inquiries from Indigenous communities []". The EIS does not provide sufficient detail on how community complaints will be registered, tracked and addressed. Best practice requires establishment of a specific grievance mechanism that is culturally-appropriate, transparent, legitimate, accessible, holistic, predictable, equitable and rights-compatible (International Council on Mining and Metals 2020). References International Council on Mining and Metals. 2020. Tool 13 – Designing and Implementing Grievance Mechanisms. In Good Practice Guide to Indigenous Peoples and Mining. https://guidance.miningwithprinciples.com/good-practice-guide- indigenous-peoples-and-mining/tool-13-designing-and- implementing-grievance-mechanisms/	Please provide an example of the grievance mechanism that will be developed for this project, with accompanying rationale for the approach that will be adopted.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
MCCN-100	MCCN	Section 8 Follow-up and Monitoring Programs	Section 23.4 Section Engagement and Consideration of Indigenous Knowledge	 Section 23.4 of the EIS states "Alamos will work with Indigenous communities and stakeholders, including local and regional government agencies, in the design and implementation of follow-up programs, and evaluation of follow-up results and subsequent updates to the program. Alamos will further work with Indigenous communities in monitoring on a go-forward basis, where appropriate." The Proponent's commitment to "work with" Indigenous communities in monitoring and follow up programs is welcome but insufficiently specific. MCCN requires active collaboration in the design and implantation of monitoring and follow up programs. 	Please provide a supplementary discussion on how the Proponent will support the active collaboration of affected Indigenous groups in the design and implementation of project monitoring and follow-up programs.
MCCN-101	MCCN	Section 8 Follow-up and Monitoring Programs	Section 23.5 Environmental Monitoring and Management Plans	Section 23.5 of the EIS states "Incidents such as accidents and malfunctions (i.e., spills, fires, explosions, collisions) and environmental damage will be reported immediately to the construction supervisor and applicable regulatory authority." The section also states that "summary reports from follow-up programs will be submitted on a regular basis to regulatory authorities, as required." Incidents such as accidents and malfunctions and environmental damage should be reported immediately to affected Indigenous groups. Additionally, summary reports from follow-up programs should be provided to affected Indigenous groups.	Please revise the statement in section 23.5 to indicate that incidents such as accidents and malfunctions and environmental damage will reported immediately to affected Indigenous groups. Additionally, please revise the statement in section 23.5 to indicate that summary reports from follow-up programs will be provided to affected Indigenous groups.
MCCN-102	MCCN	Section 8 Follow-up and Monitoring Programs	Section 23.5 Environmental Monitoring and Management Plans	The EIS Guidelines state that the follow up and monitoring programs will include specific details, such as the parameters to be measured, the planned implementation timetable for follow up studies, monitoring methods, and reporting mechanisms.	Please provide a description of the follow up and monitoring programs for aquatic and terrestrial VCs that meet the specific requirements described under sections 8.1 and 8.2 of the EIS Guidelines.

Reference IR#	Expert Dept. or group	EIS Guideline Reference	EIS Reference	Context and Rationale	Information Request - The Proponent is Required to
				Follow up and monitoring programs for aquatic and terrestrial VCs have yet to be developed in sufficient detail and do not currently meet specific requirements outlined in the EIS Guidelines. Without this information, MCCN cannot have confidence that information gaps and Indigenous concerns will be adequately addressed in subsequent studies and monitoring activities.	
MCCN-103	MCCN	Section 8 Follow-up and Monitoring Programs	Section 23.5 Environmental Monitoring and Management Plans (related to Section 10, 11 and 12)	 The EIS Guidelines require a description of proposed engagement with Indigenous groups in the planning and implementation of follow-up and monitoring. Follow up and monitoring programs for aquatic and terrestrial VCs, as currently presented in Chapters 10, 11, and 12, lack a meaningful role for MCCN and other Indigenous groups. MCCN has substantial concerns that Indigenous groups will not be involved in the development and implementation of the follow up and monitoring programs. This involvement is crucial for addressing Indigenous concerns about the project and promoting the respectful integration of Indigenous knowledge or perspectives. 	Please describe how MCCN will be involved in the development and implementation of follow up and monitoring programs. This should include time and resources to support MCCN's participation in the co- development of appropriate follow up and monitoring programs that will address the community's concerns.
MCCN-104	MCCN	Section 8 Follow-up and Monitoring Programs	Section 23.5.11 Heritage and Cultural Resources Protection Plan	Section 23.5.11 of the EIS states "Where heritage or cultural resources are discovered, appropriate notification, salvage, and documentation will be undertaken, including engagement with Indigenous communities (as appropriate)." The section should outline the Proponent's plan to develop a chance find procedure in collaboration with affected Indigenous groups.	Please provide a supplementary submission that describes the Proponent's plan for developing a chance find procedure in collaboration with affected Indigenous groups.

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MCCN-105	MCCN Human Health a	Section 8 Follow-up and Monitoring Programs	Appendix 23B - Conceptual Closure Plan, Section 8.1 Land Use	Section 8.1 of the EIS states that "The site will remain open to the public after final closure, and recreational activities such as hunting, trapping and snowmobiling will be permitted. Access roads from the provincial highway PR391 will remain []". The section also states that "The Indigenous community engagement process will continue throughout the life of the project, and concerns with respect to the long-term appearance of the sites will be addressed to the extent possible." Post-closure land use objectives, including decisions to maintain access, should be developed in collaboration with affected Indigenous groups.	Please provide a supplementary submission that describes the Proponent's plan(s) to collaborate with MCCN in the development of post-closure land use objectives and plans.
MCCN-106	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions	Vol.5 Section 4.3.1 Traditional Plants (Gordon Region)	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects. The EIS states that baseline Case metal concentrations in traditional plants (i.e., berries and tea) were based on 61 samples and seven field duplicates collected throughout the Gordon region in 2015 and 2016, including Berries (blueberries [Vaccinium corymbosum], bog cranberries [Vaccimum oxycoccos], cloud berries [Rubus chamaemorus] [n=38]) and Labrador tea (n= 30)" (p. 25).	Please verify with MCCN that the baseline case of metal concentration in traditional plants should be sampled from blueberries, bog cranberries, cloud berries and Labrador tea to verify they are of key concern.
				These species may not be valid for sampling purposes and need to be verified as there has not been a traditional land use study completed.	

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MCCN-107	MCCN	Part 2, Section 6.1. Project Setting and Baseline Conditions	Vol.5 Section 4.4.1 Small Mammals (Gordon Region)	The EIS Guidelines state that the EIS will present baseline information in sufficient detail to enable the identification of how the project could affect the VCs and an analysis of those effects The EIS states that "baseline Case metal concentrations in small mammals were based on the maximum concentration of individual metals from three red-backed voles and three deer mice collected in the Gordon region" (p. 29). The sampled small mammals do not represent direct cultural link to MCCN.	Please indicate that red-blacked voles and deer mice are not traditionally used animals by MCCN. If these are the samples being used in the baseline case it should be made clear for transparency.