Consolidated Comments from Indigenous Nations and Communities and the Public on the Wheeler River Project Draft Environmental Impact Statement

For Denison's Response (Posted June 2023, updated with comments 564-568 on April 2024)

Number	Source	Reference to EIS[1], appendix, or TSD	Comment Summary (all original submissions can be found on Canadian Impact Assessment Registry reference: 80171)	Denison Response
1.	Lac La Ronge Indian Band (LLRIB) (February 9, 2023)	General	Resource development projects in the Traditional Territory of LLRIB have had significant impact to community members and their traditional way of life. LLRIB is concerned about potential adverse impacts to the ability to hunt, fish and trap for food and/or carry out traditional uses including cultural, spiritual or other important sites near the proposed project area. LLRIB encourages Denison Mines to: • reach out to the LLRIB to engage LLRIB members and impacted land users. • support the LLRIB Heritage Fund which enables community members to practice traditional activities • reach out to LLRIB's economic development company, Kitsaki Management, to ensure local and Indigenous involvement	
2.	Birch Narrows Dene Nation (BNDN) (February 28, 2023)	Section 5.7; 5.8.1	Comment #1: The Project is located within the treaty and ancestral lands of BNDN and maintains both current and historical significance to the community. BNDN Indigenous Knowledge, Land Use and Occupancy are not currently considered within the EIS. Should the Project proceed without the consideration of BNDN's Knowledge, Land Use and Occupancy, it may cause irreparable loss of culturally significant sites and access to resources that the community depends upon. It may also contribute to a loss in cultural transmission. Request/recommendation: a) Denison should provide BNDN with funds to conduct a community-led Indigenous Knowledge, Land Use and Occupancy Study for consideration within the EIS process. At minimum, the Study should consider BNDN's Indigenous Ecological Knowledge, commercial and non-commercial harvesting practices, and cultural occupation of the region (including historical sites). The Study should also consider cultural transmission, information about the history of the area and BNDN community members' perspectives on the Project.	

[1] Refers to EIS, unless otherwise noted

			b) The community-led Indigenous Knowledge, Land Use and Occupancy Study should be a component of a broader process agreement between BNDN and Denison that serves as a pathway for obtaining BNDN's consent for the Project. c) Denison should work with BNDN to consider the appropriate integration of the results into all aspects of the EIS and management/monitoring plans, as well as any additional appropriate mitigation and/or accommodation measures. See Section 4.1 for additional information on this topic.	
3.	BNDN (February 28, 2023)	Heritage Baseline Study 2017 (Golder); Heritage Resource Impact Assessment 2020 (Golder); Heritage Resources Management Plan 2022 (Canada North)	Comment #2: Archaeology as a profession has been dominated in North America by non-Indigenous researchers, despite most sites being Indigenous in origin. It is positive that Golder Associates made efforts to engage and involve Indigenous communities (by including an ERFN representative in fieldwork and by considering ERFN and Pinehouse Kineepik Metis land use maps) in their 2017 heritage baseline study and 2020 heritage resource impact assessment. Notwithstanding, the proposed Project area is within BNDN's treaty and ancestral lands and there may be heritage sites that the community is aware of. BNDN was not involved in either of these studies and BNDN may have Indigenous Knowledge of important heritage sites within the Study Area that should be considered. Request/recommendation: a) Denison should provide BNDN with funds to conduct a community-led Indigenous Knowledge, Land Use and Occupancy Study for consideration within the EIS process. b) The Heritage Resources Management Plan should be updated following the consideration of Indigenous Knowledge, Land Use and Occupancy provided by BNDN. This may result in the requirement for further assessment and/or mitigation measures, which should be developed in consultation with BNDN. c) Denison should facilitate BNDN involvement in any additional archaeological fieldwork that takes place, including providing BNDN with capacity funding for members who participate. Terms to facilitate BNDN involvement in future archaeological work should be a component of a broader process agreement between BNDN and Denison. See Section 4.1 for additional information on this topic (p. 12-14).	
4.	BNDN (February 28, 2023)	Heritage Baseline Study 2017 (Golder) – methods; Heritage Resource Impact Assessment 2020 (Golder) – methods	Comment #3: The methodology within both the 2017 and 2020 heritage studies included 'judgmental' shovel probing and initial troweling through soil to identify cultural heritage material. While the discretion of a professional archaeologist needs to be taken into account, relying subjectively on which areas to shovel test and not employing a systematic approach is not reproduceable and may result in sites being missed; this is of particular concern given that large sections of the areas retaining potential were not subject to shovel testing. Further, troweling through soil rather than subjecting all excavated soil to sifting through 6mm mesh means that artifacts/ecofacts may easily be overlooked. Given that the north of Saskatchewan has not been thoroughly investigated archaeologically, and given	

			that 76 sites and nine find areas were recorded just 35 km south of the Project area as part of Dr. David Meyer's multi-year archaeological investigation, the results of these assessments do not seem rigorous. Request/recommendation: a) BNDN recommends that Denison undertake further archaeological investigations based on the results of the BNDN TKLU study prior to construction of the project. b) Future archaeological assessment programs should be designed collaboratively with BNDN and other Impacted Indigenous Nations. See Section 4.1 for additional information on this topic (p. 12-14).	
5.	BNDN (February 28, 2023)	Heritage Baseline Study 2017 (Golder) – methods; Heritage Resource Impact Assessment 2020 (Golder) – methods	Comment #4: The presence of strandlines are noted as being an indicator of archaeological potential; however, it is unclear within the reports whether any strandlines are present within the Study Area. Most of the investigations and shovel probes that took place were around existing waterbodies. Request/recommendation: • Please indicate whether strandlines are present anywhere in the Study Area. See Section 4.1 for additional information on this topic (p. 12-14).	
6.	BNDN (February 28, 2023)	Heritage Baseline Study 2017 (Golder) – methods; Heritage Resource Impact Assessment 2020 (Golder) – methods	Comment #5: It is unclear whether the locations identified by other Indigenous communities in their Land Use maps were investigated archaeologically and subject where appropriate to shovel testing. Knowing this will give confidence to BNDN that areas they may identify as retaining potential may undergo further assessment if necessary. Request/recommendation: • Please indicate whether the areas identified by other Indigenous communities in their Land Use maps were investigated archaeologically. See Section 4.1 for additional information on this topic (p. 12-14).	
7.	BNDN (February 28, 2023)	Heritage Resources Management Plan 2022 (Canada North) – 4.0	Comment #6: The archaeological context provided is very Western/Scientific. Denison must also include historical/pre-historical accounts of Indigenous communities to provide an appropriate and comprehensive assessment of the archaeological context of the region. Request/recommendation: • Denison must include a write-up of Indigenous historical and prehistorical accounts in consultation with relevant Indigenous communities. This write up must include historic context provided through oral history interviews as part of BNDN's community-led Indigenous Knowledge, Land Use and Occupancy Study for the Project.	

			See Section 4.1 for additional information on this topic (p. 12-14).	
8.	BNDN (February 28, 2023)	Heritage Resources Management Plan 2022 (Canada North) – 5.1 1e & 1f	Comment #7: BNDN notes that there has been limited engagement of our Nation as part of the archaeological baseline studies undertaken at the site. The Wheeler River Project is within our Treaty and Ancestral Lands where our members have deep ancestral ties and continue to exercise our rights to this day. As stewards of the land since time immemorial and holders of both Treaty and Aboriginal rights in the Project area, Denison must engage with us as partners on their activities on our lands. This includes their planning and decision-making related to archaeological materials to which our members have ancestral and spiritual ties. Request/recommendation: • Indigenous communities should be consulted and engaged in decision making rather than merely informed if the archaeological material is expected to be Indigenous in origin. See Section 4.1 for additional information on this topic (p. 12-14).	
9.	BNDN (February 28, 2023)	Heritage Resources Management Plan 2022 (Canada North) – 5.1 7	Comment #8: Given the Ancestral and Treaty ties our members have to the project area, our members have valuable knowledge and context to inform the Heritage Resource Impact Assessment (HRIA) for the Project that must be considered prior to being reviewed or approved by any regulatory body. Request/recommendation: • The draft HRIA should be reviewed by BNDN and other impacted Indigenous Nations prior to being submitted for regulatory approval. See Section 4.1 for additional information on this topic (p. 12-14).	
10.	BNDN (February 28, 2023)	Heritage Resources Management Plan 2022 (Canada North) – 5.1 1	Comment #9: Discerning archaeological artifacts/ecofacts is difficult at times even to the trained eye; consequently, it is important to undergo training to understand what you could be looking for. Request/recommendation: a) Staff should undergo training regarding the cultural material they may encounter while on site b) BNDN and other Indigenous communities should be invited to attend this training See Section 4.1 for additional information on this topic (p. 12-14).	

11.	BNDN (February 28, 2023)	Heritage Resources Management Plan 2022 (Canada North) – 5.3	Comment #10: In numerous instances the Heritage Resources Management Plan (HRMP), Denison has used noncommittal language to describe future Indigenous engagement related to heritage resources. BNDN notes that engagement of impacted Nations is essential for proper heritage resource management and as such the language in the HRMP should reflect the necessity of this engagement. Request/recommendation: • Throughout the HRMP, Denison must change the language of "should" to "will" where appropriate. For example: management options will be presented to the applicable Indigenous communities for feedback and will include consultation. See Section 4.1 for additional information on this topic (p. 12-14).	
12.	BNDN (February 28, 2023)	Heritage Resources Management Plan 2022 (Canada North) – 5.3.1	Comment #11: BNDN notes that Section 5.3.1 does not confirm that impacted Indigenous Nations will have the opportunity to participate in future archaeological fieldwork. While BNDN understands that many impacted Nations will have arrangements directly with Denison to facilitate member participation, this should additionally be made available to all impacted Indigenous Nations as part of best practices at the Project. Request/recommendation: • In addition to any provisions developed in a Project Agreement between BNDN and Denison for the Wheeler River Project, Denison should include a clause that confirms that all impacted Indigenous communities will be invited to have monitors participate in any additional fieldwork and that Denison will provide capacity funding for Nations that wish to participate. See Section 4.1 for additional information on this topic (p. 12-14).	
13.	BNDN (February 28, 2023)	Section 13	Comments #12, 14 and 15: BNDN is not included as a Local Study Area (LSA) Community despite being closer to the Project than other LSA Communities. The Project is situated on BNDN's ancestral lands. BNDN members currently and historically use the LSA for harvesting (commercial and personal) and ceremonial purposes. Without the LSA Community designation, BNDN members are less likely to be employed or trained through the Project. BNDN members are not entitled to priority training and employment provisions from Denison on the Project. Further, BNDN businesses and partnerships are not entitled to priority procurement provisions from Denison on the Project. Request/recommendation:	

			• BNDN must be identified as a LSA Community. BNDN members and businesses must be eligible for LSA priority status for employment, training, and contracting opportunities. The EIS should be revised accordingly. • A formal agreement between BNDN and Denison is required to outline socioeconomic offsetting measures and benefits should the Project move forward. This must include ways for BNDN businesses and member owned businesses to participate in the Project. Denison references a Human Resource Development Plan (HRDP) as a mitigation measure to ensure local and regional community members are hired in priority. However, Denison does not provide sufficient details to allow Birch to assess the adequacy of the HRDP. Request/recommendation: • BNDN requests the ability to review and comment on Denison's Human Resource Development Plan to provide input and recommendations to encourage community participation and employment in the Project. See Section 4.2 for additional information on this topic (p. 19-23).	
14.	BNDN (February 28, 2023)	Section 12.0 and 13.0	Comment #13: There is no BNDN specific Indigenous Knowledge or socioeconomic data presented in the EIS. Request/recommendation: • Denison must conduct Indigenous Knowledge and Community well-being Study (or similar) to gather BNDN specific information. These studies will allow for a more fulsome assessment of the Project on BNDN rights and interests. Additionally, BNDN specific data will enhance Denison's baseline data and help to inform mitigation and monitoring measures. See Section 4.2 for additional information on this topic (p. 19-22).	
15.	BNDN (February 28, 2023)	Section 12.0	Comment #16: While EIS does consider the effects of population changes related to the Project on social adaptability, demand for services and housing, it does not address the full range of potential impacts associated with a transient workforce. Significant research has been conducted to demonstrate the negative impacts of remote workers and work camps on Indigenous women and girls. This must be considered in the EIS. The EIS must include an assessment of all potential effects of a transient workforce and changes to population dynamics, including those disproportionately experienced by Indigenous women and girls, and other segments of the population. This must incorporate findings of research like the 2017 study completed by Lake Babine Nation and Nak'azdli	

			Whut'en (Indigenous Communities and Industrial Camps), and/or related research in the context of the LSA. See Section 4.2 for additional information on this topic (p. 19-21).	
16.	BNDN (February 28, 2023)	Section 12.0 and 13.0	Comment #17: BNDN notes that no specific management or monitoring plan has been included in the EIS documentation related to the verification of residual socio-economic impacts, both positive and negative, for the local economy. Request/recommendation: a) Denison must develop a Socio-Economic Monitoring Plan for the life of the Project to verify the effects assessment included in the EIS and to be included in the Project's approach to adaptive management. This Plan would include an approach, co-developed with Indigenous groups in the LSA (including BNDN), to monitoring the realization of the benefits and impacts of the Project (e.g., employment and procurement targets, training and capacity building, community investments, etc.) as mitigation and enhancement measures are implemented. Monitoring and subsequent regular evaluation would allow for the real-time adjustment of targets and/or an approach to adjusting enhancement measures or identifying offsetting benefits where targets are not met. See Section 4.2 for additional information on this topic (p. 19-21). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
17.	BNDN (February 28, 2023)	Section 12.0 and 13.0	Comment #17: BNDN notes that no specific management or monitoring plan has been included in the EIS documentation related to the verification of residual socio-economic impacts, both positive and negative, for the local economy. Request/recommendation: b) The Crown must include the development of a Socio-Economic Monitoring Plan as a condition of approval for the Project. See Section 4.2 for additional information on this topic (p. 19-21). [Additional questions on this topic directed to the proponent are included in the CNSC table]	
18.	BNDN (February 28, 2023)	Appendix 9B Section 2.5.1	Comment #18: In several instances in the draft EIS Denison has noted that Indigenous Nations are concerned with the possibility of mercury contamination from mining operations. BNDN shares these concerns with other Indigenous Nations. Due to the very	

		Appendix 8E Table 4	low concentrations of mercury present in the Phoenix deposit, Denison has not meaningfully studied the potential impacts the Project may have on altering mercury biogeochemistry in the downstream environment. BNDN notes that background mercury concentrations can be elevated in many unexpected and remote locations due to atmospheric deposition (often due to coal plants) (Jackson, 1997). BNDN is very concerned that Denison has not analyzed for mercury as part of their baseline soil geochemistry assessments for the Project, especially in wetlands downstream of the Project. Mercury concentrations in wetland soils are sensitive to changes in water chemistry that can lead to increased mercury methylation. This is especially acute from increases in nutrients and sulphates which can active sulfate reducing microorganisms that methylate mercury (Liu, Li, & Cai, 2012). Table 4 of Appendix 8e shows that the effluent discharged to Whitefish Lake will have mercury concentrations almost 5,700 times background concentrations. This dramatic increase in sulfate loading to Whitefish Lake may not exceed water quality objectives unto itself but may be sufficient to meaningfully change mercury biogeochemistry in downstream wetlands. BNDN is very concerned with the complete lack of assessment and analysis of baseline mercury concentrations and the potential changes to mercury cycling that could be induced by the Project. Request/recommendation: a) BNDN requests that Denison undertake baseline studies of mercury concentrations in soils, with a focus on baseline concentrations of mercury in organic wetland soils downstream of the project. Note that mercury sampling should sample total mercury and methylmercury in all analyses, as well as porewater total mercury and methylmercury. The study design and implementation should be undertaken collaboratively with BNDN. b) BNDN recommends that the CNSC requires Denison to undertake a baseline assessment of mercury in soils (with a focus on wetlands) prior to construction of the Project. This may be established as a condition of approval for the Project. c) Depending on the findings of the baseline mercury in soils and wetlands studies, the CNSC should include a condition of approval on the Project that requires Denison to monitor mercury biogeochemistry in the receiving environment over the life of mine. See Section 4.3 for additional information on this topic (p. 25-28). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
19.	BNDN (February 28, 2023)	Appendix 7C Section 3.5.6.2.1	Comment #19: Figure 7.6-10 and 7.6-11 of the draft EIS show the results of Denison's modelling of uranium mobility and adsorption from the ore body following the	

		Figures 7.6-10 and 7.6-11	decommissioning of the mine. The figures show that the model indicates that all dissolved uranium will be effectively removed from solution within a short distance of the orebody via adsorption to clays present in the bedrock. In Section 3.5.6.2.1 of Appendix 7c of the draft EIS Denison notes that there is very limited literature available on uranium fate and transport, especially in similar environments to the Wheeler River Project. Denison's uranium speciation model relies almost entirely on a single academic article studying the partitioning of uranium in the alteration halo surrounding the Cigar Lake uranium deposit. Of very important note is that this paper is focused on the pre-mining environment at Cigar Lake and does not examine how uranium partitioning may be dramatically altered by ISR mining. Health Canada published a document on uranium in drinking water in 2017 literature review of uranium mobility, complexation and chemistry in groundwater which documents the widely varying behaviour of uranium in groundwater depending on redox conditions, pH, pressure, and other ions available for complexation which may increase or decrease uranium mobility (Health Canada, 2017). Uranium will be present in extremely high concentrations (100 mg/l) in the restoration solution. Many other anions and cations which uranium is known to form complexes with will also be present in the solution at very high concentrations. The limited literature upon which Denison has developed their models to predict uranium mobility post-decommissioning is insufficient to confidently assert that the very concentrated restoration solution will behave as predicted. Uranium is a common groundwater contaminant around the world and is known to be stable in dissolved forms in groundwater in many locations. Furthermore, some studies have indicated that the effectiveness of adsorption as a mechanism for attenuation of uranium in solution is significantly overstated, especially in environments where there is competition from other ions, as there will be in the restoration solution (Gandhi, Sampath, & Maliyekkal, 2022). BNDN is very concerned that Denison has portrayed their groundwater contamination model in Appendix 7c with an inappropriate level of confidence given the level of uncertainty reasonably inferred from the lack of foundational literature relevant to the circumstances at Wheeler River and the well- understood complexity of uranium fate and transport in groundwater. It is not impossible to imagine that surface water contamination could eventually occur, especially given the exceptionally high concentrations of uranium in the restoration solution. By consenting to the Wheeler River Project, BNDN is supporting a process that will be irreversible once it commences and may be very difficult to manage should the underlying modeling assumption prove to be inaccurate by a significant margin. As a Nation whose members put a very high emphasis on the protection of groundwater resources, BNDN requires substantially greater reassurance through dialogue with Denison and further studies to have confidence that the Project will not irreparably degrade the natural environment in our Ancestral Lands.	

			Request/recommendation: • Denison must develop a process agreement with BNDN to work through our concerns related to long-term groundwater contamination from the Project. This process agreement would lay out the pathway to obtaining BNDN consent for the Project through providing our Nation with confidence that the groundwater and surface water near to the project will not be irreparably contaminated. The process agreement will include additional studies and consultation activities with BNDN that Denison must undertake. The satisfaction of all terms in the process agreement would be defined by the signing of a Project Agreement between Denison and BNDN. • BNDN recommends that Denison commit to funding bench-scale studies to validate the outputs from their FEFLOW and PHREEQC modelling. The bench-scale studies should be undertaken by an independent academic. See Section 4.3 for additional information on this topic (p. 25-28).	
20.	BNDN (February 28, 2023)	Section 7.6.2.1 Appendix 7C Section 4.6	Comment #20: In Section 7.6.2.1 of the draft EIS, Denison mentions that they anticipate the outward migration of lixiviant as is observed at other ISR operations globally, and has incorporated their assumed concentrations of metals and the extent of area affected by flare from the ISR operations. Section 4.6 of Appendix 7c states that the flare zone is expected to extend 11 to 13 m but have modelled with a “conservative 50 m flare zone. It is not clear how Denison derived their assessment that the flare zone would extend 11 to 13 m and that a 50 m flare zone is considered conservative for the purposes of modelling. BNDN requires further information to have confidence that the design is as conservative as the Proponent has suggested. Request/recommendation: • BNDN requests that Denison provide further information on how the size of the area above the deposit affected by flare was calculated and how they determined that 50% restoration solution was determined as the appropriate concentration to base water quality modelling. This item would be best addressed and resolved with BNDN through the process agreement to address BNDN’s concerns related to long term groundwater contamination from the Project. See Section 4.3 for additional information on this topic (p. 25-28).	
21.	BNDN (February 28, 2023)	Appendix 7C Section 3.2.2.1	Comment #21: Section 3.2.2.1 of Appendix 7C of the draft EIS describes the natural redox conditions in the ore zone as naturally reducing. The operation of the wellfield will result in the groundwater in the ore zone becoming oxidizing. Post decommissioning, the	

			groundwater in the ore zone can be reasonably anticipated to return to baseline (reducing) redox conditions. BNDN notes that as redox conditions becoming increasingly reducing post closure, adsorption kinetics of contaminants adsorbed to clays could shift so that contaminants desorb from clays and are remobilized into solution. It is not clear to BNDN that the evolution of redox geochemistry and its implication on adsorption kinetics has been adequately considered by Denison. Request/recommendation: • BNDN requests further information on how increasingly reducing groundwater conditions post decommissioning may impact adsorption kinetics of contaminants expected to adsorb to clays. This item would be best addressed and resolved with BNDN through the process agreement to address BNDN's concerns related to long term groundwater contamination from the Project. See Section 4.3 for additional information on this topic (p. 25-28).	
22.	BNDN (February 28, 2023)	Appendix 7C Section 3.4	Comment #22: In Section 3.4 of Appendix 7C Denison reports that they have excluded colloids from their post- decommissioning geochemical modelling. Denison has also noted that colloids would serve to enhance mobility of contaminants and they could precipitate out of solution. BNDN is concerned that by excluding the precipitation of colloids with adsorbed contaminants as a pathway for contaminant transport, Denison has significantly underestimated the mobility of contaminants and the consequent risks to the receiving environment. Request/recommendation: • BNDN requests that Denison prepare an additional geochemical model that considers the roles that colloids could potentially contribute to contaminant transport. The findings of this additional model (along with the other models) should be reviewed with BNDN. This item would be best addressed and resolved with BNDN through the process agreement to address BNDN's concerns related to long term groundwater contamination from the Project. See Section 4.3 for additional information on this topic (p. 25-28).	

23.	BNDN (February 28, 2023)	Appendix 7C Section 4.0	Comment #23: In Section 4.0 of Appendix 7c of the draft EIS, Denison reports that the composition of restoration solution 1 and restoration solution 2 were derived from metallurgical testing. While this is likely the best, BNDN notes that the initial solution used in the geochemical modelling is enormously consequential in the accuracy of the modelling and require further confirmation and confidence that the restoration solutions are accurate to within a reasonable margin of error for the geochemical modelling. Request/recommendation: • BNDN requests that Denison provide further information on how the chemistry in restoration solution 1 and restoration solution 2 were derived and any evidence they can provide that gives them confidence that these solutions are an accurate reflection of what will be observed in the wellfield. This item would be best addressed and resolved with BNDN through the process agreement to address BNDN's concerns related to long term groundwater contamination from the Project. See Section 4.3 for additional information on this topic (p. 25-28).	
24.	BNDN (February 28, 2023)	Appendix 7C	Comment #24: BNDN notes that Denison has not provided any discussion on the extent to which the lixiviant and the solution used to flush the wellfield at the end of operations will interact with the underlying paleoweathered bedrock. BNDN notes that is it possible that there are mineral phases within the paleoweathered bedrock that are also readily soluble when exposed to the lixiviant. While BNDN recognizes that the paleoweathered bedrock has a low permeability, it is unclear to BNDN as to whether the lixiviant will contribute to mobilization of contaminants from the paleoweathered bedrock that requires consideration in the post- decommissioning groundwater model. Request/recommendation: • BNDN requests that Denison provide any available information on how the bedrock may be altered (through dissolution of soluble mineral phases) by the lixiviant and the flushing of the wellfield during decommissioning, and whether this has been factored into their post- decommissioning groundwater model. This item would be best addressed and resolved with BNDN through the process agreement to address BNDN's concerns related to long term groundwater contamination from the Project. See Section 4.3 for additional information on this topic (p. 25-28).	

25.	BNDN (February 28, 2023)	Appendix 7C Section 5.2.2	Comment #25: In section 5.2.2 of Appendix 7c of the draft EIS Denison reports the assumptions built into their post- decommissioning groundwater modelling. BNDN notes that Denison has assumed that adsorption reaction sites are assumed to be available uniformly throughout the subsurface parameter zones. The presence of sufficient adsorption sites is a primary variable which determines the outcomes of the groundwater modelling, as adsorption of ions out of solution is the primary means by which contaminant transport is attenuated in Denison's modelling. BNDN is concerned that the presence of a variable that is so consequential to the findings of the model is based primarily on assumptions with limited information to base the assumptions upon. Request/recommendation: • BNDN requests that Denison provide justification for the assumption that adsorption sites will be uniformly available throughout the sub-surface parameter zones. BNDN requests that Denison provide information on how they estimated the extent to which adsorption sites are already saturated prior to mining. This item would be best addressed and resolved with BNDN through the process agreement to address BNDN's concerns related to long term groundwater contamination from the Project. See Section 4.3 for additional information on this topic (p. 25-28).	
26.	BNDN (February 28, 2023)	Appendix 7C Table 3-10	Comment #26: Table 3-10 of Appendix 7c of the draft EIS shows the expected adsorbing mineral properties of the mineral phases to which contaminants are expected to adsorb out of solution. BNDN notes that the lixiviant and restoration solution could affect the ability of adsorption. In particular, the clays immediately surrounding the orebody are within the freeze wall and will be directly exposed to the lixiviant during operations, which may impact the clays ability to adsorb contaminants out of solution. BNDN notes that the clays immediately surrounding the orebody may be soluble in the presence of the lixiviant or may be altered to have a lower capacity to adsorb metals. BNDN requires further information from Denison to have confidence that the clay phases which play a crucial role in contaminant attenuation will not have their adsorptive capacity impacted by the operation of the wellfield. Request/recommendation: • BNDN requests that Denison provide available information on whether clay mineral phases are anticipated to dissolve through the ISR mining process, and whether the restoration solution will impact the ability of clays to effectively adsorb contaminants.	

			This item would be best addressed and resolved with BNDN through the process agreement to address BNDN's concerns related to long term groundwater contamination from the Project. See Section 4.3 for additional information on this topic (p. 25-28).	
27.	BNDN (February 28, 2023)	Section 1.1.1	Comment #26: In Section 1.1.1 of the Draft EIS, Denison notes that "the Gryphon deposit is not amenable to ISR mining and, accordingly, is not included in the EIS". Denison has previously reported that the Gryphon deposit has nearly as much uranium as the Phoenix deposit. While the Gryphon deposit is not amenable to ISR, it is potentially still an economic resource which Denison may wish to mine. While the Gryphon deposit is not in scope for this environmental assessment, BNDN expects to be kept informed of future potential mining activities on the Wheeler River Project which Denison may be considering, including additional exploration on the Property, as future activities on the Property will also have impacts on our Treaty and aboriginal rights and interests. Request/recommendation: • Given the potential longer term mining activities at the Wheeler River project beyond the Phoenix deposit, BNDN requests that any project agreement between BNDN and Denison include terms for ongoing dialogue related to future exploration and project development activities at the Wheeler River Project and at all Denison Projects on BNDN Ancestral Lands. See Section 4.3 for additional information on this topic (p. 25-28).	
28.	BNDN (February 28, 2023)	Section 2.3.3.1.3	Comment #28: In Section 2.3.3.1.3 of the draft EIS Denison describes the proposed decontamination, demolition and disposal activities at the Project. BNDN notes that Denison has described a detailed process for decommissioning the injection and recovery wells but has not described how the freeze wells will be decommissioned. BNDN notes that the freeze well holes may serve as preferential pathways for contaminated groundwater movement. Given the proximity of freeze wells to the orebody and the number of freeze wells proposed to be drilled, proper closure of freeze wells is also important for protection water quality long term. Request/recommendation: a) BNDN request that Denison clarify the process by which they will decommission the freeze wells. b) BNDN requests that Denison decommission the freeze wells using the same process as is proposed for the decommissioning of the injection and recovery wells.	

			See Section 4.3 for additional information on this topic (p. 25-28).	
29.	BNDN (February 28, 2023)	Section 2.3.3.1.3	Comment #29: Denison describes the thawing of the freeze wall as part of the decommissioning of the mine. BNDN notes that water expands when frozen and could potentially be capable of expanding pre-existing joints and fractures within the host rock. BNDN is concerned that the thawing of the freeze wall could lead to expanded joints and fractures which would allow for far more rapid contaminant transport away from the ore body and restoration solution than is modelled in the post-decommissioning groundwater model. Request/recommendation: • BNDN request that Denison provide evidence from academic literature or other mine sites employing freeze wall technology to determine the extent the freeze wall could expands joints and fractures within the rock once thawed, including at unconformities or other pre-existing structural weaknesses within the host rock. See Section 4.3 for additional information on this topic (p. 25-28).	
30.	BNDN (February 28, 2023)	Figure 2.2-15 Section 2.2.3	Comment #30: Denison notes that they have made the conservative assumption that no water would be recycled as mining solution as part of their water balance calculations. BNDN agrees that this conservative assumption is appropriate for assessment of potential impacts of the Project. While this assumption is appropriate for the environmental assessment, BNDN wishes to understand the proportion of industrial wastewater that may be recycled on site and any commitments Denison is willing to make regarding continual refinement of the water treatment process to increase the proportion of water that is recycled. Request/recommendation: a) BNDN requests that Denison commit to continual refinement of the Industrial Waste Water Treatment Plant (IWWTP) treatment process to maximize the amount of water that is recycled to the deposit. b) BNDN recommends that the Crown include a condition of approval for the project regarding continual improvement of water treatment to maximize recycling. c) BNDN requests that Denison share available information on the proportion of water that they currently anticipate being able to recycle. See Section 4.3 for additional information on this topic (p. 25-28). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
31.	BNDN (February 28, 2023)	Figure 2.2-15	Comment #31: In Section 2.2.3.2 and Figure 2.2-15 of the draft EIS, Denison describes their water balance for the project and anticipated water needs to operate the ISR wellfield.	

		Section 2.2.3.2	BNDN notes that the EIS does not describe how Denison derived their estimate for the quantity of water required to operate the ISR wellfield. BNDN is concerned that the volume of water required to operate the wellfield may be substantially greater than is estimated in the draft EIS. Utilizing greater volumes of water in the wellfield would have cascading effects throughout the water balance, including greater demand on the IWWTP, greater storage volumes required in the process water storage pond, greater UBS holding pond capacity and greater volumes of effluent discharge to Whitefish Lake. BNDN is concerned with the potential cascading risks associated with an inaccurate assessment of the volume of water required to operate the ISR wellfield. BNDN also wishes to understand whether it is possible that Denison will be required to operate the wellfields at a higher pressure, even if only temporarily. BNDN notes that operating wells at higher pressure come with additional workplace and environmental hazards, especially when dealing with a strongly acidic lixiviant. Request/recommendation: a) To demonstrate that Denison has not significantly underestimated the volume of water required to operate the wellfield, BNDN requests that Denison provide evidence that the volume of water required to operate the wellfield is accurate. This should include an assessment of their level of confidence they have in their estimated water consumption. b) BNDN requests that Denison provide BNDN with information on potential contingency measures (such as constructing additional process water pond capacity) should their estimated water consumption be underestimated c) Denison must commit to updating their mixing zone assessment should they find it necessary to discharge greater quantities of effluent to Whitefish Lake than is estimated in the draft EIS. d) Denison must document the implications of operating the wellfield at a substantially higher pressure than currently expected. See Section 4.3 for additional information on this topic (p. 25-28).	
32.	BNDN (February 28, 2023)	Table 2.3-3	Comment #32: Table 2.3-3 of the draft EIS shows Denison's proposed mining area decommissioning objectives, which are the groundwater quality objectives for the residual water in the ore zone following the flushing of the system during mine decommissioning. BNDN is surprised to see that relatively high concentrations of metals are expected to remain in the restoration solution as a final objective, such as 100 mg/l uranium and 2 mg/l cobalt, amongst many other metals. BNDN notes that potential risks to groundwater and surface water could be dramatically reduced through more stringent mining area decommissioning objectives. It is also feasible that processing efficiencies and high uranium prices may allow for substantially lower	

			concentrations of uranium to be mined economically. The long-term contamination of groundwater from the high concentration of metals in the restoration solution is one of BNDN's primary concerns with the Wheeler River Project, and BNDN would strongly prefer that Denison strive to minimize the residual contamination remaining in groundwater following decommissioning to the greatest extent possible. Request/recommendation: a) BNDN requests that Denison provide documentation that estimates the time, efforts and costs associated with reducing concentrations of metals in the restoration solution by 1 order of magnitude and 2 orders of magnitude. Note that these calculations should include costs that could be recovered by processing subeconomic UBS. b) BNDN requests that Denison work with BNDN through terms defined in a BNDN project agreement to establish achievable decommissioning objectives that would be satisfactory to BNDN. c) BNDN requests that the Crown place a condition of approval upon the Wheeler River Project that Denison is required to work with BNDN to establish mutually agreeable mining area decommissioning objectives. d) BNDN requests that Denison undertake a study of ISR operations elsewhere in the world to determine the lowest concentrations of UBS that could be processed economically utilizing industry best practices and commit to exceeding global standards. See Section 4.3 for additional information on this topic (p. 25-28). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
33.	BNDN (February 28, 2023)	Section 2.2.2.2.2 Figure 2.2-18	Comment #33: In Figure 2.2-18 of the draft EIS, Denison shows the proposed design of the double composite liner system for the ponds on site and the uranium bearing solution (UBS) holding area. BNDN notes that the risks associated with temporary storage of UBS is much greater than other contact water on site which is proposed to be stored in a similar means. As such, BNDN is concerned that the proposed UBS holding area does not have adequate leak detection given the additional risk associated with the UBS relative to contact water on site. BNDN also notes that open air storage of UBS presents the risk of incidental interactions with wildlife near to the project (such as birds), which would potentially be acutely toxic. BNDN is also concerned that there is no leak detection system below the secondary HDPE geomembrane and geosynthetic clay liner. Should the secondary containment layers also become compromised, Denison does not have a system planned to detect this. Request/recommendation:	

			a) BNDN requests that Denison commit to storing UBS in appropriate tanks as opposed to open air storage. b) BNDN requests that Denison include a leak detection pipe in the prepared subgrade below the secondary containment as well as between the primary and secondary containment layers. BNDN also requests that the prepared subgrade be engineered to facilitate maximum utility of the leak detection below the secondary containment. See Section 4.3 for additional information on this topic (p. 25-28).	
34.	BNDN (February 28, 2023)	Figure 2.3-1	Comment #34: Denison shows an additional ore body to the Southwest of Phase 5. Denison has not included this additional ore body in the mine plan in the draft EIS and has not discussed whether they have intentions to mine this ore body or undertaking a project change at a later date to include this additional ore body. It is unclear whether this additional ore body has any implications for the long term groundwater quality modelling either through the additional orebody altering anticipated groundwater chemistry, or the restoration solution dissolving metals in the additional orebody increasing overall metal loading. Given the probable difference in groundwater and mineral geochemistry in the additional orebody relative to the overlying sandstone and underlying basement rock, there is likely to be interaction between the restored solution and the additional orebody post-closure. Request/recommendation: a) BNDN requests that Denison clarify whether they are considering adding the additional orebody to the southwest of Phase 5 into the mine plan, including clarifying whether the additional ore body is amenable to ISR mining. b) BNDN requests that Denison clarify what the anticipated permitting associated with the additional ore body would be. c) BNDN requests that the post- decommissioning groundwater modelling for the Project include interactions between the additional ore body and the restoration solution to understand if the ore body poses a risk of additional metal loading to groundwater. See Section 4.3 for additional information on this topic (p. 25-28).	
35.	BNDN (February 28, 2023)	Section 2.2.1.3 Section 7.6.2.1	Comment #35: Denison intends to use a freeze wall as tertiary containment for the operation of the wellfield during operations. In general BNDN is supportive of this containment measure but requires further information to have confidence that the freeze walls will operate as designed. In particular, BNDN notes that while the freeze wall will be continuous from the ground surface all the way into the basement rocks underlying the orebody, the freeze wall is by far the most consequential immediately around the ore body itself. The orebody is approximately 400 m below the ground surface (where the earth would be significantly warmer) and the lixiviant is expected to be at least 10 degrees	

			warmer than the surrounding groundwater would be. Considering that the cold brine will need to be injected nearly half a kilometer into the earth where warm lixiviant will be injected into the wellfield, BNDN is concerned that the freeze wall may be ineffective in and around the ore body where it is required. Furthermore BNDN is concerned that the monitoring system for assessing the stability of the freeze wall may not adequately detect the continuity of the freeze wall at depth. As such, BNDN is concerned that the freeze wall may be ineffective and in fact obscure our ability to recognize contamination of the surrounding groundwater from the freeze wall operating ineffectively. Request/recommendation: a) BNDN requests that Denison provide information to demonstrate that the freeze wall will in fact be frozen in and around the ore body. If there is any doubt that the freeze wall will indeed be frozen around the ore body, Denison should describe further measures they can undertake to ensure that the freeze wall is frozen as intended around the ore body. b) Denison must provide BNDN with further information on how they will monitor the performance and continuity of the freeze wall. c) BNDN requests further information on the proposed groundwater monitoring program around the wellfield. d) BNDN requests the opportunity to review the groundwater monitoring plan and to review groundwater monitoring data as part of a BNDN-Denison environmental committee developed through a BNDN-Denison project agreement. See Section 4.3 for additional information on this topic (p. 25-28).	
36.	BNDN (February 28, 2023)	Section 2.9.1.3.1	Comment #36: Denison documents their conceptual level environmental protection program, including several proposed management and monitoring plans which they will develop to manage operations on site. The environmental protection measures which Denison undertakes at the Project site are highly consequential to BNDN, and BNDN requires the opportunity to provide our knowledge and input into environmental protection measures developed for activities within our Ancestral Lands. Request/recommendation: a) BNDN requests that Denison commit to involving BNDN in the development, review and approval of all environmental monitoring plans developed for the Project. Details of BNDN involvement in the development of environmental monitoring plans should be undertaken within an Environmental Committee, with specific terms defined within a BNDN-Denison Project Agreement for the Wheeler River Project	

			b) BNDN requests that the CNSC impose a condition of approval on the project which states the requirement for Denison to consult with BNDN on all environmental management and monitoring plans for the project. See Section 4.3 for additional information on this topic (p. 25-28). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
37.	BNDN (February 28, 2023)	Section 7.6.2.3	Comment #37: In Section 7.6.2.3 of the draft EIS and the geology and groundwater summary table in Appendix 16A, Denison states that they expect no residual effects to groundwater quality during the operations, decommissioning or future centuries period of the Project. Denison has also not placed a significance determination on the impacts to groundwater quality based on the findings of the draft EIS due to groundwater being considered an intermediate VC. BNDN disagrees with both the residual effects assessment and the fact that groundwater quality has been assessed solely as an intermediate VC. The protection of groundwater resources is highly important to BNDN. Our members place immense value on clean spring water and the protection of groundwater more generally. The advancement of the Wheeler River Project will permanently impair groundwater resources in and around the Wheeler River Project. The contamination of groundwater at the Project will have a significant impact on our members' connection to the land and ability to exercise our Treaty and Aboriginal rights. BNDN see the limited interpretation of residual effects and the lack of inclusion of groundwater quality as a receptor VC as a significant oversight in the assessment of impacts of the Project on the environment and BNDN Treaty and Aboriginal rights. This must be corrected to properly assess the Project and thus ensure that project impacts are appropriately mitigated and accommodated. Request/recommendation: a) Denison must apply a significant determination to groundwater quality and quantity for all projects phases, including the future centuries period. The significance determination must be developed following consultation and engagement with BNDN. b) Denison must re-evaluate the residual effects of the project on groundwater quality including the future centuries period. This re-evaluation must be following consultation and engagement with BNDN. c) BNDN requests that the CNSC work with our Nation to understand the significant impacts that the permanent contamination of groundwater caused by the project will have on our Treaty and Aboriginal rights. See Section 4.3 for additional information on this topic (p. 25-28).	

			[Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
38.	BNDN (February 28, 2023)	Section 7.8.2	Comment #38: Section 7.8.2 of the draft EIS documents the groundwater monitoring proposed for the surface facilities and the ISR recovery area. It also describes a conceptual excursion contingency plan wherein Denison has proposed their plans to manage situations where groundwater contamination occurs beyond what is predicted in the EIS. BNDN notes that Section 7.8.2 lacks information on the involvement of Indigenous Nations related to groundwater monitoring. As stated previously, BNDN is highly concerned with the level of impact the Project will have on groundwater resources. As such BNDN requires Denison to communicate excursions of groundwater and the consequent management of excursions to our Nation. Request/recommendation: a) BNDN requests that Denison revise Section 7.8.2 to include Indigenous engagement and input for groundwater monitoring results and the management of observed groundwater excursions. The manner in which Denison engages BNDN on groundwater monitoring and management will likely occur through an Environmental Committee, which should be defined in a BNDN-Denison Project Agreement. b) BNDN requests that the CNSC impose a condition of approval on the Project that clarifies that Denison is required to engage with impacted Indigenous Nations such as BNDN on groundwater monitoring and management. See Section 4.3 for additional information on this topic (p. 25-28). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
39.	BNDN (February 28, 2023)	Appendix 8D	Comment #39: In Appendix 8d, Denison documents their baseline aquatics studies undertaken for the Wheeler River EIS. Denison has included some lakes and rivers upstream of the Project as background sites for understanding project impacts to the aquatic environment. BNDN notes that there are many additional sites throughout our Ancestral Lands which would benefit from ongoing aquatic monitoring and would be potentially suitable for the Project as background sampling sites. Request/recommendation: • BNDN requests that Denison work with our Nation to identify potential additional background sampling sites within our Ancestral Lands for aquatic monitoring for the life of Project. The details of such should be defined in the BNDN-Denison project agreement.	

			See Section 4.3 for additional information on this topic (p. 25-28).	
40.	BNDN (February 28, 2023)	Section 2.2.1.4.2	Comment #40: In Section 2.2.1.4.2 of the Draft EIS Denison discusses the operation of the wellfield during the operations phase of the mine. BNDN notes that many of the details in this section are conceptual in nature and thus could require significant refinements in design to achieve the desired recovery consistently throughout the life of mine. Amongst other concerns related to operations of the ISR wellfield, BNDN is concerned that Denison may alter the chemical composition of the lixiviant used in the ISR wellfield which could cause inadequately understood changes in potential effects of the Project to the environment. These effects could include significant changes to the final restorative solution at the end of mine life or significant changes in the treatment requirements for the IWWTP that impact the ability of Denison to achieve effluent quality criteria for significant periods of time. Request/recommendation: a) BNDN requests that Denison provide information on: • The likelihood of the chemical composition of the lixiviant changing throughout the life of project • Potential changes to the lixiviant composition • The implications for long term groundwater quality and effluent treatment from changes in lixiviant chemistry b) BNDN requests that Denison commit to ongoing communications and engagement with BNDN regarding changes to the wellfield operation throughout the life of mine. The terms of engagement should be defined in a BNDN-Denison project Agreement. See Section 4.3 for additional information on this topic (p. 25-28).	
41.	BNDN (February 28, 2023)	Appendix 8E Table 4	Comment #41: Table 4 of Appendix 8e of the draft EIS shows the predicted site discharge concentrations of the contaminants of potential concern (COPCs). BNDN notes that the concentrations of a number of COPCs do not achieve water quality objectives that is the best available technology economically achievable (BATEA). Example COPCs include copper, molybdenum, selenium, uranium, vanadium, zinc and ammonia. BNDN requires proponents operating on our Ancestral Lands to, at a minimum, achieve BATEA standards for effluent treatment and discharge. This takes reasonable and appropriate precaution without imposing unreasonable costs on the operation. Request/recommendation: a) BNDN requests that Denison commit to achieving BATEA criteria for all COPCs in their effluent.	

			b) Denison must work with BNDN to identify mutually agreeable and appropriate effluent discharge criteria for their effluent. BNDN expects that identifying suitable effluent discharge criteria will be undertaken through an Environmental Committee with a terms of reference defined in a BNDN-Denison project agreement c) BNDN requests that the CNSC impose a condition of approval on the Project that BNDN is engaged. See Section 4.3 for additional information on this topic (p. 25-28). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
42.	BNDN (February 28, 2023)	Appendix 8E Table 7	Comment #42: Table 7 of draft EIS Appendix 8e shows the anticipated size of the mixing zone under 3 different flow conditions, including the calculated 7Q10 flow. While BNDN understands that Denison expects to discharge relatively small volumes of effluent to Whitefish Lake compared to a conventional open pit or underground mining operation, BNDN is concerned that the mixing zone assessment underestimates the magnitude of impact that the project will have on Whitefish Lake. Request/recommendation: • BNDN requests that Denison undertake a plume delineation study and provide BNDN the opportunity to review the findings of the study through the BNDN-Denison Environmental Committee for the Wheeler River Project. See Section 4.3 for additional information on this topic (p. 25-28).	
43.	BNDN (February 28, 2023)	Appendix 10A	Comment #43: BNDN notes that the environmental risk assessment (draft EIS Appendix 10a) makes no mention of potential impacts the project may have on mercury biogeochemical cycling and the consequent risks to the environment and human health. This is unsurprising given the lack of baseline sampling of mercury in sediments and soils, especially wetland soils. The lack of baseline mercury sampling is a significant oversight given the significant impact that mining operations can have on mercury biogeochemistry, including mercury methylation, and mobility of mercury species within the environment. BNDN is very concerned with the complete lack of assessment of this important consideration for the project and the consequent inability for our members to adequately understand the potential risks to our Treaty and Aboriginal rights from these risks. Note that the absence of baseline information gathered can be reasonably considered an impact on our Treaty and Aboriginal rights as our members will avoid exercising our rights if BNDN lack the information to have confidence that it is safe to do so.	

			Request/recommendation: • Denison must revise Appendix 10a of the draft EIS to incorporate findings from the mercury baseline studies in wetland soils and sediments requested by BNDN. See Section 4.3 for additional information on this topic (p. 25-28).	
44.	BNDN (February 28, 2023)	Table 2.2-4	Comment #44: In Table 2.2-4 of the Draft EIS, Denison documents their planned chemical used for the project. BNDN notes that Denison intends to use zero-valent iron (ZVI) in the IWWTP, but not as part of the remediation solution for the mine. BNDN notes that ZVI is used to treat contaminants in groundwater around the world. Denison has not discussed whether they have investigated the possibility of utilizing ZVI to remediate the wellfield during decommissioning. Protection of groundwater is of exceptional importance to BNDN. BNDN is concerned that Denison has not made a complete or comprehensive effort to understand how to minimize negative impacts to groundwater from the project using proven technologies that may be suitable for remediating the restoration solution in the wellfield during the decommissioning phase of the mine. Request/recommendation: • BNDN requests that Denison investigate the suitability of using zero-valent iron to remediate the groundwater within the wellfield as part of the decommissioning process. See Section 4.3 for additional information on this topic (p. 25-28).	
45.	BNDN (February 28, 2023)	8.2.4.1.1 Site Water Management	Comment #45: BNDN is concerned that the small volume of Effluent Monitoring and Release Ponds may create a lack of operational flexibility. For example, in the EIS, it is stated that: “Treated water from the IWWTP will be pumped to the three Effluent Monitoring and Release Ponds (each 3,300 m3). These ponds will be designed to hold effluent for 72 hours for testing before discharge to the environment.” – EIS, pp 723 If water quality in these ponds exceeds discharge criteria then there may be a need to store water so that additional treatment and monitoring can occur prior to discharge. However, only having capacity for three days of storage means it is unlikely the Proponent would be able to adequately treat water prior to reaching storage capacity, resulting in a need for emergency release of poor- quality water. Request/recommendation:	

			a) BNDN requests that additional storage capacity be included as part of the design for water management system. This must include adequate storage capacity to ensure Denison has the ability to retain water for sufficient time to allow treatment, in the event that exceedances of water quality discharge criteria occur. Alternatively, Denison can commit to halting discharge (and operations if required) should water quality exceed discharge criteria. Discharge into Whitefish Lake would resume once water quality in the Effluent Monitoring and Release Ponds has been returned to below discharge criteria. b) BNDN requests that the CNSC impose a condition of approval for the Project that requires Denison to must meet effluent discharge criteria prior to discharge and must halt operations if treated effluent in the monitoring and release ponds does not meet effluent discharge criteria. See Section 4.4 for additional information on this topic (p. 48-51). [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
46.	BNDN (February 28, 2023)	Appendix 8D Aquatic Environment Baseline Study	Comment #46: Fish community sampling is an important component of baseline studies for many reasons, including identifying species present (including any species at risk) and evaluating relative abundance (e.g. CPUE). A robust program should include multi- season and multi-year approach. This allows improved characterization of seasonal habitat use and accounts for natural variability. In the baseline aquatic assessments, the Proponent has focused fish community sampling in fall 2016, with some limited additional sampling of in spring 2017. This low level of effort will make it difficult to draw meaningful comparisons with monitoring work that will occur during the life of mine. Furthermore, CPUE has only been reported for electrofishing effort. As a result, there is very limited information available for relative abundance of fish in important waterbodies, including Whitefish Lake, McGowan Lake, and Russell Lake. **BNDN notes that a raw representation of total effort is provided in table A-13 of Appendix 8D but requests that an assessment of total effort, total catch, and CPUE be presented in the EIS for each capture method/location** Request/recommendation: a) BNDN requests that the Proponent build on the existing data for fish community sampling by collecting an additional round of spring and fall sampling. b) BNDN requests that an assessment of total effort, total catch, and CPUE be provided for each capture method/location where fish sampling has occurred.	

			See Section 4.4 for additional information on this topic (p. 48-51).	

47.	BNDN
	(February 28, 2023)
		8.2.5 Mitigation Measures	Comment #47: The Proponent has identified one mitigation measure that includes sharing of monitoring results to assess performance of water management system (EIS, pp 8-90, 8.2.5 Mitigation Measures). BNDN is supportive of this type of information sharing and believes that it can be an important component of transparency and trust- building between the Proponent and other parties. However, it is important that information sharing be done in a way that is accessible to community members.
			
			Request/recommendation:
			• BNDN requests involvement in discussions with Denison about sharing of information related to water quality monitoring (and environmental monitoring more broadly). Some methods of communication that may support accessibility of data include:
			  ○ Public-facing summary reports on a regular schedule (e.g. quarterly or annually)
			  ○ Real-time access to environmental monitoring data through online database portals.
			  ○ Semi-regular community meetings hosted in Turnor Lake (e.g. every 12-18 months, as decided in conjunction with BNDN leadership within a Project Agreement with BNDN).
			  ○ Presentations to BNDN staff, leadership, and/or community members by BNDN Environmental Monitors. The specific methods used for information sharing and appropriate levels of support from Denison can be determined through consultation with BNDN.
			
			See Section 4.4 for additional information on this topic (p. 48-51).	

48.	BNDN (February 28, 2023)	8.5 Fish Health	Comment #48: The Proponent has completed predictive modelling for concentrations of contaminants in fish tissue. For example, results of modeling for selenium indicate that concentrations will fluctuate throughout operations but remain below the recommended criterion of 2.83 mg/kg wet weight (from the US EPA). Should the Project proceed, information on contaminants in fish tissues will be highly relevant for BNDN and land users who eat fish from the area. Request/recommendation: • BNDN requests that results of fish tissue monitoring (e.g. EEM studies) be shared in a publicly available and accessible way. This must include comparisons with guidelines and information on other contaminants of importance (e.g. mercury). Discussions regarding how this information can be shared with BNDN should occur alongside the discussions related to water quality monitoring results (see comment above). See Section 4.4 for additional information on this topic (p. 48-51).	

49.	BNDN (February 28, 2023)	8.3 Fish and Fish Habitat	Comment #49: Increased fishing pressure in Whitefish Lake from employees working at the Project site and increased ability for visitors due to improved access could negatively impact fish populations. Preferred species, large-bodied fish, and older individuals are most likely to be targeted. This may have negative consequences on the population structure of fish in the lake as well as the ability of BNDN members to exercise fishing rights. Request/recommendation: • BNDN recommends that the policies Denison sets related to staff and contractors fishing while on site are determined collaboratively with BNDN through the Environmental Committee defined in a BNDN-Denison project agreement. See Section 4.4 for additional information on this topic (p. 48-51).	
50.	BNDN (February 28, 2023)	8.3.4 Assessment of Project-related Effects	Comment #50: The EIS provides very few details regarding how spills, leaks, and other accidents and malfunctions will be managed to mitigate the impacts on fish and fish habitat. Over the life of the mine there will inevitably be accidents and malfunctions. One of the most common environmental issues that will be encountered is leaks and spills. These can typically be managed through good monitoring and preparedness, though if they occur near water, the ability to clean them quickly is difficult and can result in harm to aquatic communities. Request/recommendation: • BNDN request additional information regarding the development of spill prevention programs, emergency management procedures, and monitoring and remediation programs for accidents and malfunctions. Representatives from BNDN need to be included in the planning and execution of monitoring and remediation activities to provide community perspectives in Project activities. One method through which BNDN can be involved in these discussions is through the development of an Environmental Committee (see comment #51 also). See Section 4.4 for additional information on this topic (p. 48-51).	
51.	BNDN (February 28, 2023)	8.3.8 Monitoring and Follow-up	Comment #51: There is no discussion on how Indigenous communities, such as BNDN, will be included in environmental management, emergency management, monitoring, and remediation. This includes issues related to ongoing permitting or specific remediation such as in the case of an accident or malfunction. Request/recommendation:	

			• To support BNDN's ongoing participation in monitoring and oversight of the Project, BNDN request the establishment of an Environmental Committee or similar oversight mechanism. The purpose of the committee will be to review monitoring data and monitoring reports produced during the life-of-mine to ensure that the environmental protection is sufficient for all VCs. The committee can also participate in permitting throughout the life-of-mine for all relevant applications (e.g. Fisheries Act Authorizations, water permits, Closure Plan updates etc.) and provide input to management plans (e.g. EPPs, Surface Water Management Plan, Environmental Monitoring Plans, etc.). The specific details of such a committee can be developed through consultation with BNDN and must be formalized through a BNDN-Denison project agreement. See Section 4.4 for additional information on this topic (p. 48-51).	
52.	BNDN (February 28, 2023)	8.3.5 Mitigation Measures	Comment #52: Mitigation measures are an important component of Project management which are critical for environmental protection. Upon review of the suggested mitigation measures, BNDN has identified some opportunities for additional mitigation. Request/recommendation: • BNDN request that the following standard mitigation measures be included as part of the list described in Section 8.3.5: o Maintain vegetated buffers of at least 100m with all waterbodies wherever practical; o All equipment must be inspected prior to use on-site to ensure that they are clean and free of soil or other contaminants; o Maintain spill kits on all vehicles used on-site; o All machinery will be kept in good working order and inspected regularly for drips, leaks, and spills; o In the event of a spill, Denison will take all necessary actions, where it is safe to do so, to immediately stop the spill, contain contaminants, clean up and dispose of contaminated materials; o Denison will maintain a record of all spills and report upon each spill within 48 hours, including information on spill response, cleanup, and remediation; o Vehicle refueling will occur at a distance of at least 100m; o Fuel tanks will be located in areas that are lined and contained; o Fuel tanks will be located at least 500m from known waterbodies. See Section 4.4 for additional information on this topic (p. 48-51).	
53.	BNDN (February 28, 2023)	8.3 Fish and Fish Habitat	Comment #53: Unfortunately, due to the nature of planning and licensing for complex projects such as the Wheeler River mine, there are many documents, plans, licenses and approvals which may not be available for review during the environmental assessment	

			process or which will take place subsequent to completion of the assessment. For example, Denison will be preparing important documentation governing environmental management of the Project following the Environmental Assessment. While these are not currently available, there is a need to engage with BNDN to obtain input on these documents as planning progresses. Request/recommendation: • BNDN requests that Denison consult with our staff members and advisors on important environmental documentation/plans/licenses that are not available as part of the EA process. This list includes, but is not limited to: ○ Surface Water Management Program ○ Erosion and Sediment Control Plan ○ Fish Salvage Plan ○ Spill Response Plan ○ MDMER approvals and EEM plans ○ Saskatchewan Water Security Agency permits for ○ Aquatic habitat protection ○ Operating a waterworks ○ Operating a sewage works ○ Effluent Monitoring Plan ○ Environmental Monitoring Plan(s) ○ Decommissioning and Reclamation Plan Engagement with BNDN on these plans should occur through an Environmental Committee or similar oversight mechanism (see above). The specific details of such a committee can be developed through consultation with BNDN and must be formalized through a BNDN-Denison project agreement for the Wheeler River Project. See Section 4.4 for additional information on this topic (p. 48-51).	
54.	BNDN (February 28, 2023)	8.4.3.1 Methodology and Metrics	Comment #54: The collection of sediment samples was completed using cores and grab petit Ponar in three upstream reference locations (LA-7A, LA-8, and LA-9), Whitefish Lake (LA-5 and LA-6), McGowan Lake (LA-1), and Russell Lake (LAB-1 and LAB-2). Sediment quality testing was conducted to characterize COPC including nutrients, metals, and radionuclides. Only the top 2 cm of cores of grab samples were analyzed in the lab. It is not clear in the methodology why laboratory analysis was limited to the top 2 cm. Request/recommendation: • BNDN requests additional information on the rational for only analyzing COPC within the top 2 cm of sediment samples. This should include information on whether this	

			limited data will negatively affect the ability to evaluate potential impacts of groundwater contamination entering Whitefish Lake from below during operations, decommissioning, and future centuries. See Section 4.4 for additional information on this topic (p. 48-51).	
55.	BNDN (February 28, 2023)	8.4.3.2.3 Metals	Comment #55: Despite significant concerns regarding the presence of mercury in water and sediment, the Proponent has elected not to test sediments for it. BNDN acknowledges that the mining process does not use mercury and it is present in low levels in the background environment. However, for the purposes of good stewardship, communications, and trust, having an assessment of the background levels of mercury is important to BNDN. Request/recommendation: • BNDN requests that the proponent sample sediments for mercury to establish background levels. This is information that is culturally important given the potential harm and the psychological toll of mercury in aquatic ecosystems. Background levels can then be compared with ongoing monitoring throughout the life of mine. See Section 4.4 for additional information on this topic (p. 48-51).	
56.	BNDN (February 28, 2023)	Table 8.5-2: Baseline Fish Tissue Chemistry Summary	Comment #56: In Section 8.5 Fish Health, the Proponent has included a summary table with information on contaminants in fish tissue and bone tissue. The information provided does not include total number of samples. Request/recommendation: • BNDN requests table 8.5-2 be updated with information on total number of fish (n) samples for each location. See Section 4.4 for additional information on this topic (p. 48-51).	
57.	BNDN (February 28, 2023)	9.2.5.2 Additional Vegetation-specific Mitigation Measures	Comment #57: The Proponent has committed to using seed that is certified weed-free, with a valid “Certificate of Seed Analysis” for the revegetation process. Request/recommendation: • BNDN recommends that, in addition to using weed-free certified seeds, consultation occur with Indigenous communities, including BNDN, to select an appropriate seed mix that closely mimics the pre- construction plant community and includes plants of medicinal and traditional importance. This could be done by either sourcing seed mix from a local seed distributor, or using wild seed propagated from plants collected from the Project Area. In addition, the seed mix should contain native plant species only.	

			See Section 4.5 for additional information on this topic (p. 59-60).	
58.	BNDN (February 28, 2023)	9.3.4.2.1 Alteration and/or Loss of Habitat Figure 9.3-9 Available Habitat for Moose	Comment #58: The EIS uses a 500 m buffer around the Project Area to define indirect habitat alteration for moose (Figure 9.3-9). This includes habitat alteration from sensory disturbance such as anthropogenic noises, vehicle traffic, aircraft traffic, and increased predator access. However, the EIS references scientific research that states that roads and vehicle traffic can affect moose habitat selection, resulting in habitat avoidance up to 1 km from roads (Shanley and Pyare 2011). Furthermore, the EIS acknowledges uncertainty concerning the available background and baseline information used to identify available moose habitat in this assessment. Without considering a larger avoidance buffer (as demonstrated in various research) around proposed anthropogenic disturbances, BNDN believe that the EIS underestimates the potential extent of moose habitat alteration. To be more conservative, a 1000 m buffer should be used surrounding the Project area. Request/recommendation: • BNDN recommends using a 1000 m buffer surrounding the Project Area to measure the extent of moose habitat alteration. BNDN believe this analysis will provide a more accurate and conservative outcome with respect to potential project impacts to moose. See Section 4.5 for additional information on this topic (p. 59-60).	
59.	BNDN (February 28, 2023)	9.3.5.2.7 Mitigation Measures	Comment #59: One of the mitigation measures implemented to protect ungulates, furbearers, and Woodland Caribou includes de-icing the Project roads for winter traction, which will result in fewer wildlife collisions. Salt used for de-icing is likely to attract ungulates, including moose, to roadways to satisfy their mineral requirements (Rea et al 2021). Request/recommendation: • BNDN requests that the Proponent revise this mitigation measure to explicitly state that salt will not be used for de-icing Project roads to avoid attracting ungulates to the Project Area. This mitigation measure can be found in section 9.3.5.2.7 Road and Traffic Management. See Section 4.5 for additional information on this topic (p. 59-60).	
60.	BNDN (February 28, 2023)	9.3.6.4.1 Alteration and/or Loss of Habitat	Comment #60: The EIS uses a 500 m buffer around the Project Area to define Woodland Caribou habitat alteration from sensory disturbance. However, scientific research expects	

		Figure 9.3-14	up to 5 km (or greater) of Caribou avoidance around mining Projects, and that related semi-permeable barriers, such as roads, likely exacerbate this effective habitat loss [(Smith et al. 2000; Dyer et al. 2001; Courtois et al. 2008; Vistnes and Nellemann 2008; Nagy 2011; Polfus et al. 2011; Leblond et al. 2011, 2013; CPAWS Wildlands League 2013; Johnson et al. 2015)]. Without considering a larger avoidance buffer (as demonstrated in various research) around proposed anthropogenic disturbances, we believe that the EIS underestimates the potential extent of Caribou habitat alteration. Request/recommendation: • BNDN requests that the Proponent present the extent of caribou habitat alteration/loss from the proposed Project within a range of uncertainty informed by scientific research. Specifically, the percent alteration of habitats must be presented using a 500 m (low end) up to a 5,000 m (high end) buffer. BNDN believe this analysis will provide a more accurate range of outcomes with respect to potential project impacts to caribou. See Section 4.5 for additional information on this topic (p. 59-60).	
61.	BNDN (February 28, 2023)	9.4.3.3 Bird Species at Risk Appendix 9-B	Comment #61: Incidental observations of Barn Swallow (Hirundo rustica) occurred during baseline studies (Appendix 9- B). This bird SAR was not included as a Key Indicator for this Valued Component. Instead, the EIS represents the Barn Swallow using two other SAR birds including the Olive-sided Flycatcher (Contopus cooperi), and Common Nighthawk (Chordeiles minor). This does not make ecological sense because Barn Swallows use distinct habitat and exhibit distinct breeding behaviour from these other SAR. Therefore, the barn swallow should be its own key indicator because it will have unique levels of habitat alteration/loss and levels of mortality than the other species. In addition, Barn Swallows have a higher likelihood of being impacted by project activities than the other representative SAR, because they nest directly on artificial structures. The EIS states that species that nest on buildings are more susceptible to entrapment in Project components. This species is listed as Threatened on SARA Schedule 1. In Canada, the *Migratory Birds Convention Act*, 1994 protects Barn Swallow, its nests, and eggs. Request/recommendation: a) BNDN requests that the Barn Swallow is included as its own key indicator for the VC Bird SAR within the EIS. b) Additional surveys should be conducted to confirm the presence of any Barn Swallow nests on all buildings in the Project Area prior to commencement of construction. c) If Barn Swallow nests are located, contact the SK MOE for regulatory advice on the appropriate actions given the specific situation.	

			d) The Proponent should monitor all barn swallow nests found within the Project Area to confirm their continued usage throughout the lifecycle of the mine. If avoidance of nests is observed near Project activities, the Proponent should adopt an adaptive management approach and provide additional nesting sites elsewhere. Specifically, the Proponent could consider installing nesting structures in suitable areas to provide alternative nesting options for Barn Swallows. e) Staff should be trained to identify and report barn swallows and their nests. f) Future monitoring programs during the life of the project must include the barn swallow. See Section 4.5 for additional information on this topic (p. 59-60).	
62.	BNDN (February 28, 2023)	9.4.3.3 Bird Species at Risk Appendix 9-B	Comment #62: Incidental observations of Horned Grebe (Podiceps auratus) occurred during baseline studies (Appendix 9- B). This species is listed as Special Concern on SARA Schedule 1. The Horned Grebe was not included as a Key Indicator for this Valued Component. Instead, the EIS represents this species with two other bird SAR, Yellow Rail (Coturnicops noveboracensis), and Rusty Blackbird (Euphagus carolinus). The Horned Grebe uses distinct habitat from these other species. Therefore, the Horned Grebe should be its own key indicator because it will have different levels of habitat alteration/loss and levels of mortality. Request/recommendation: a) BNDN requests that the Horned Grebe is included as its own Key Indicator for the VC Bird SAR within the EIS. b) b. Future monitoring programs during the life of the Project must include the Horned Grebe. See Section 4.5 for additional information on this topic (p. 59-60).	
63.	BNDN (February 28, 2023)	9.4.3.3 Bird Species at Risk	Comment #63: The Bank Swallow (Riparia riparia), a bird SAR may be present within the terrestrial RSA. This species was not included in the EIS as a key indicator for bird SAR. This species is listed as Threatened on SARA Schedule 1. The breeding range of the Bank Swallow (Riparia riparia) overlaps with the terrestrial RSA. Bank swallows breed in varying natural and artificial habitat with sand-silt substrates including vertical banks, riverbanks, bluffs, stockpiles, aggregate pits, and roadcuts (COSEWIC 2013). Suitable habitat may be present because soil surface textures across the RSA are predominantly sand textured (sand, loam sand/sandy loam and silty sand). The creation of soil stockpiles during construction may create suitable breeding habitat for this species. Request/recommendation:	

			a) BNDN requests a justification for excluding the Bank Swallow from the EIS. b) If a valid justification does not exist, BNDN requests this species be added as a Key Indicator for bird SAR unless it can be proven not present in the RSA. c) All soil stockpiles should be monitored for Bank Swallow nesting activity before the stockpiles are disturbed when needed for site reclamation. d) If Bank Swallow nests are located, contact the SK MOE for regulatory advice on the appropriate actions given the specific situation. See Section 4.5 for additional information on this topic (p. 59-60).	
64.	BNDN (February 28, 2023)	9.4.3.3.2 Information from Indigenous Knowledge, Local Knowledge, and Engagement	Comment #64: The EIS states that knowledge providers reported that multiple Whooping Cranes (Grus americana) have been observed along the Wheeler River, Moore River, and along the Cree River (outside of the terrestrial RSA) (19-LK-ERFNTrap- 134.169) (19-LK-ERFNTrap-134.170). Whooping Cranes are listed as Endangered on SARA Schedule 1. The EIS does not include this species as a key indicator for SAR birds, nor does it include an explanation why this species was omitted despite being reported by a knowledge provider from English River First Nation. Request/recommendation: a) BNDN requests an explanation for excluding this species despite being reported by a Trapper from English River First Nation. If a valid justification does not exist, the species Whooping Crane (Grus americana), should be included as a key indicator for SAR birds. b) Future monitoring programs during the life of the Project must include surveys for the Whooping Crane. See Section 4.5 for additional information on this topic (p. 59-60).	
65.	BNDN (February 28, 2023)	9.4.3.3.3 Baseline Studies	Comment #65: Short-eared Owls (Asio flammeus) were not observed during the baseline surveys (Appendix 9-B). This is likely because targeted surveys for this species were not conducted. The detection probability of Short-eared Owls is very low at sunrise when the breeding songbird point count surveys were conducted. Short-eared Owls are most detectable from one hour before sunset to half an hour after sunset. Request/recommendation: a) BNDN requests that short-eared Owls continue to be assumed present within suitable habitat, unless proven otherwise by a qualified biologist using the Short-Eared Owl Survey Protocol (Saskatchewan Ministry of Environment 2015). b) Future monitoring programs should utilize the protocol developed by the Saskatchewan Ministry of Environment to better (2015) understand whether this species is present.	

			See Section 4.5 for additional information on this topic (p. 59-60).	
66.	BNDN (February 28, 2023)	9.4.3.3.3 Baseline Studies	Comment #66: Yellow Rail (Coturnicops noveboracensis) were not observed during the baseline surveys (Appendix 9-B). This is likely because targeted surveys for this species were not conducted. The Yellow Rail is nocturnal; therefore, survey effort must take place between 23:00-3:00. Therefore, this species would not have been observed when the breeding songbird point count surveys were conducted. Request/recommendation: a) BNDN requests that Yellow Rail should continue to be assumed present within suitable habitat, unless proven otherwise by a qualified biologist using the Yellow Rail Survey Protocol (Saskatchewan Ministry of Environment 2014). b) Future monitoring programs should utilize the protocol developed by the Saskatchewan Ministry of Environment (2014) to better understand whether this species is present. See Section 4.5 for additional information on this topic (p. 59-60).	
67.	BNDN (February 28, 2023)	Appendix 9-B	Comment #67: Two bat species, Little Brown Bat (Myotis lucifugus) and Northern Myotis (Myotis septentrionalis) were detected during passive acoustic surveys in 2019 (Appendix 9-b). These species are listed as Endangered by COSEWIC and SARA schedule. Despite being present, bats were completely excluded from the EIS. Areas that will be cleared for mine development and operations could contain maternity roost trees. Based on Appendix 9-b, this habitat was not adequately evaluated through field surveys. Request/recommendation: a) BNDN requests justification for excluding bat species from the EIS despite two Endangered species confirmed present. b) BNDN also request the Proponent put protocols in place to identify and assess bat maternity roost trees prior to clearing and employ mitigation measures such as retaining maternity roost trees, modifying the timing of clearing, and offsetting for the destruction of habitat for endangered species. See Section 4.5 for additional information on this topic (p. 59-60).	
68.	BNDN (February 28, 2023)	9 Terrestrial Ecology 9.1.8 Monitoring and Follow-up 9.2.8 Monitoring and Follow-up 9.3.8 Monitoring and Follow-up	Comment #68: Denison's proposed terrestrial ecology mitigations described are generalized and conceptual in the EIS. With the level of detail provided in the EIS, it is not possible for BNDN to comment on the adequacy or effectiveness of the proposed mitigation measures or whether proposed mitigations will meaningfully diminish Project impacts on BNDN rights and interests. Request/recommendation:	

		9.4.8 Monitoring and Follow-up	• BNDN holds invaluable indigenous knowledge related to terrestrial ecology topics including traditional and medicinal plants, ungulates, furbearers, game birds etc. within the RSA. BNDN must be meaningfully involved in the development and implementation of the various management and monitoring plans mentioned throughout Chapter 9 of the EIS to ensure that proposed impacts are sufficiently reduced. These plans include but are not limited to the wildlife monitoring plan, avian monitoring, and Woodland Caribou Management Plan. The role that BNDN will have in developing management and monitoring plans should be defined within a project agreement between BNDN and Denison. See Section 4.5 for additional information on this topic (p. 59-60).	
69.	BNDN (February 28, 2023)	Section 6.0	Comment #69: Denison's air dispersion model does not include any receptor locations related to BNDN traditional land and resources use (TLRU) and Indigenous Knowledge (IK) sites. BNDN members use the lands and waters in the Project area for TLRU and ceremonial purposes. Request/recommendation: • BNDN TLRU and IK sites should be considered in Denison's air quality assessment. The geographic locations for TLRU and IK should be inputted into the air dispersion model as special receptors. This will provide site specific data for BNDN land users who use the LSA so they can effectively assess the Project's impact on land use and rights. See Section 4.6 for additional information on this topic (p. 67-71).	
70.	BNDN (February 28, 2023)	Section 6.0	Comment #70: Denison states in the EIS "the Cameco McArthur River Operation and Key Lake sites are currently in Care and Maintenance mode; therefore, there is currently no truck traffic between the sites on Highway 914. When these sites are to become operational again, there is potential for a cumulative effect at sensitive locations near the highway." On November 28th, 2022, operations resumed at Cameco's McArthur River Uranium Mine and Key Lake Mill. Denison did not model Cameco related air emissions in their air dispersion model. The EIS model does not account for any of Cameco's air emissions from the mill, mine, and associated truck traffic between sites. Without this data included in the model, the EIS does not adequately account for the cumulative effects of Cameco's McArthur River Mine and Key Lake Mill on the atmospheric environment. Request/recommendation: • Denison must redo air dispersion modeling to account for the Cameco McArthur River Uranium Mine and Key Lake Mill which have resumed operations since the EIS was	

			released. Without this data included in the model the EIS does not accurately capture baseline conditions or cumulative effects on the atmospheric environment. Fugitive dust and uranium emissions (and potentially other contaminants) have increased potential for exceedances with the resumption of Cameco's operations, as exceedances are already predicted with the Wheeler River Project alone. See Section 4.6 for additional information on this topic (p. 67-71).	
71.	BNDN (February 28, 2023)	Section 6.0	Comment #71: The Project is predicted to produce exceedances for TSP of 313% over the regulatory limit. 24-hour TSP concentrations exceed the criterion 28% of the time during Construction, 21% of the time during Operations. These exceedance conditions do not include TSP emissions from Cameco's McArthur River Mine and Key Lake Mill which have now resumed operations. There is also the potential for wildfire smoke to further exacerbate dust emissions. TSP exceedances represent a potential health risk for land users and workers near the Project site. Especially for at-risk groups such as elders, youth, and people with existing respiratory conditions. Request/recommendation: a) Denison must employ additional mitigation measures to reduce TSP emissions on site including enhanced dust suppression efforts. b) Denison must remodel TSP to include emissions from Cameco's McArthur River Mine and Key Lake Mill. c) Please provide information on how TSP will be monitored during the Project and how Denison will know when exceedance conditions are occurring. d) Please provide information on how adaptive management will be used when a TSP exceedance is discovered. Including discussion on how the Project will be managed during poor air quality events caused by wildfire smoke. e) Please provide information on how exceedances conditions near the Project site will be communicated to the public. See Section 4.6 for additional information on this topic (p. 67-71).	
72.	BNDN (February 28, 2023)	Section 6.0	Comment #72: The Project is predicted to produce exceedances for PM10 of 232% over the regulatory limit. 24- hour PM10 concentrations exceed the criterion 17% of the time during Construction, 12% of the time during Operations.	

			These exceedance conditions do not include PM10 emissions from Cameco's McArthur River Mine and Key Lake Mill which have now resumed operations. There is also the potential for wildfire smoke to further exacerbate dust emissions. PM10 exceedances represent a potential health risk for land users and workers near the Project site. Especially for at-risk groups such as elders, youth, and people with existing respiratory conditions. Request/recommendation: a) Denison must employ additional mitigation measures to reduce PM10 emissions on site including enhanced dust suppression efforts. b) Denison must remodel PM10 to include emissions from Cameco's McArthur River Mine and Key Lake Mill. c) Please provide information on how PM10 will be monitored during the Project and how Denison will know when exceedance conditions are occurring. d) Please provide information on how adaptive management will be used when a PM10 exceedance is discovered. Including discussion on how the Project will be managed during poor air quality events caused by wildfire smoke. e) Please provide information on how exceedances conditions near the Project site will be communicated to the public. See Section 4.6 for additional information on this topic (p. 67-71).	
73.	BNDN (February 28, 2023)	Section 6.0	Comment #73: The Project is predicted to produce exceedances for uranium of 148% over of the regulatory limit. These exceedance conditions do not include uranium emissions from Cameco's McArthur River Mine and Key Lake Mill which have now resumed operations. Uranium exceedances represent a potential health risk for land users and workers near the Project site. Additionally, uranium deposition in the aquatic and terrestrial environment can cause effect pathways to humans through the food chain through the consumption of edible/medicinal plants, berries, fish, and wildlife. Request/recommendation: a) Denison must employ additional mitigation measures to reduce uranium emissions on site including enhanced scrubber systems and containment measures. b) Denison must remodel uranium to include emissions from Cameco's McArthur River Mine and Key Lake Mill. c) Please provide information on how uranium emissions will be monitored during the Project and how Denison will know when exceedance conditions are occurring.	

			d) Please provide information on how adaptive management will be used when a uranium exceedance is discovered. e) Please provide information on how exceedance conditions near the Project site will be communicated to the public. See Section 4.6 for additional information on this topic (p. 67-71).	
74.	BNDN (February 28, 2023)	Section 6.0	Comment #74: The Saskatchewan MOE Air Quality Modelling Guidelines specifies that the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) should be used for assessments in Saskatchewan. Denison opted to use the CLAMET/CALPUFF dispersion model for the EIS. Request/recommendation: • Please provide additional rationale for the selection of the CALPUFF model over the provincially recommended AERMOD. See Section 4.6 for additional information on this topic (p. 67-71).	
75.	BNDN (February 28, 2023)	Appendix 6-C Climate Baseline and Greenhouse Gas Emissions Report	Comment #75: Carbon dioxide emissions related to air travel for Project personnel were not included in the GHG emissions calculations. Project related emissions from air travel would be significant source due to the remote nature of the site. The GHG emission estimate included in EIS Appendix 6-C does not provide a fulsome representation of Project related GHG emissions. Request/recommendation: • Denison must include emissions from air travel for project personnel in the GHG emissions calculations. This will provide a more accurate representation of project-related GHG emissions. See Section 4.6 for additional information on this topic (p. 67-71).	
76.	BNDN (February 28, 2023)	Section 6.0	Comment #76: Denison acknowledges the Project's contribution to climate change through GHG emissions but does not outline a plan to offset GHG emissions. Other mines in Canada, including the Canadian Malartic Mine in Quebec have GHG offset plans in which carbon emissions are tracked and offsetting activities are developed in collaboration with local First Nations (Canadian Malartic, 2014). Request/recommendation: • Denison must develop a GHG/Carbon offsetting plan to mitigate potential impacts of the Project to climate change. Denison could work with BNDN and other local First Nations on initiatives that help to offset the Project's GHG emissions (e.g. tree planting, wetland restoration, carbon offsets). This would demonstrate a commitment	

			to corporate social responsibility, climate stewardship and reconciliation on Denison's behalf. See Section 4.6 for additional information on this topic (p. 67-71).	
77.	BNDN (February 28, 2023)	Section 6.0	Comment #77: The Project is reliant on burning diesel for construction, supplementary power generation, mine processing activities, and mine equipment. The GHG intensive nature of the Project's construction and operation phases are a concern for BNDN and not consistent with federal or provincial directives to reduce GHGs. Cleaner technology and fuel sources are available to reduce the Project's GHG emissions. For a project based around supplying fuel for the energy transition, a more progressive approach that utilizes Best Available Technology is required in order to reduce GHG emissions. Request/recommendation: • Where feasible Denison must implement the use of low carbon technology and fuels in the final Project design to reduce GHG emissions. Specifically, Denison should redesign the Project to: ○ Replace all diesel electricity generation with LNG/CNG generators (and add in renewables where feasible) for construction phase ○ Replace all diesel powered mine equipment and vehicles with electric or LNG/CNG models ○ Use renewable energy sources for electricity generation (e.g. wind, solar) as early in the project lifecycle as possible See Section 4.6 for additional information on this topic (p. 67-71).	
78.	BNDN (February 28, 2023)	Section 6.0	Comment #78: Denison does not specify how it will monitor air contaminant concentrations during all phases of the Project. Continuous on-site ambient air monitoring for all COPCs (including particulates, metals, and radon) is the only way to truly assess the Project's impact on air quality and compliance with government standards. Request/recommendation: • Denison must conduct continuous on-site monitoring for all contaminants of concern (including particulates, metals, and radon) in order to assure regulatory compliance and verify the accuracy of air dispersion models and EIS predictions. See Section 4.6 for additional information on this topic (p. 67-71).	
79.	BNDN (February 28, 2023)	Section 6.0	Comment #79: Denison does not specify how BNDN will be involved in air quality monitoring during construction, operations and decommissioning phases of the Project.	

			Request/recommendation: a) BNDN requests the implementation of robust and long-term environmental monitoring to verify protection of the environment, including community-led monitoring during Construction and Operations of the Project. b) Denison must develop specific roles and responsibilities to BNDN members in relation to air quality monitoring and site wide environmental monitoring. This should include, at a minimum, one environmental monitor position for BNDN. This would provide increased transparency and confidence to Denison's environmental management practices and performance. See Section 4.6 for additional information on this topic (p. 67-71).	
80.	BNDN (February 28, 2023)	Section 2.2.2.2.2 Uranium Bearing Solution Holding Area	Comment #80: The Proponent states that the UBS holding area will have leak detection (Figure 2.2-18). The system is shown as a pipe running under the pond. Request/recommendation: a) BNDN requests more details on the leak detection system used for all ponds shown in Figure 2.2-18. b) BNDN requests that Denison respond to all the following questions in writing: • Is the pipe connected to an automated sensing system? • If not, how frequently is the system monitored? • What chemical or physical indicator(s) are used to detect a leak? • What are the detection limits/thresholds for each indicator? • What is the precision of each indicator? • Who is notified, and how quickly would a response be mobilized? See Section 4.7 for additional information on this topic (p. 77).	
81.	BNDN (February 28, 2023)	Section 2.2.2.2.2 Uranium Bearing Solution Holding Area Section 2.2.4.5 Process Precipitate Pond	Comment #81: The Proponent states that the UBS holding area will have leak detection (Figure 2.2-18). The system is shown as a pipe running under the pond. Request/recommendation: • BNDN requests to know what specific containment/restoration methods will be used in the event that a leak is detected, and how quickly they would be implemented. This applies to both the UBS holding area and process precipitate pond. See Section 4.7 for additional information on this topic (p. 77).	
82.	BNDN (February 28, 2023)	Section 2.2.2.2.2 Uranium Bearing Solution Holding Area	Comment #82: The Proponent states that the UBS holding area will be designed as a pond contained by a double composite liner system (Figure 2.2- 18), and that options to use tanks instead of holding area will be evaluated as engineering advances.	

			Request/recommendation: • BNDN requests that Denison undertake a risk assessment for the design of the UBS holding area. BNDN recommends the safer, less environmentally risky option be selected and that BNDN can review and provide input into the decision that Denison makes. See Section 4.7 for additional information on this topic (p. 77).	
83.	BNDN (February 28, 2023)	Section 2.2.1.4.5	Comment #83: The Proponent states that the wellfield pipelines will be designed to have secondary containment or catchment and have leak detection systems in place at key locations. BNDN requests more details on the leak detection system used for wellfield lines. Specifically, BNDN requests that Denison respond to the following questions: • Is an automated sensing system used? • Will automated controls shut off pressure in the event of a significant leak? • If no automation is used, how frequently is the system monitored? • What chemical or physical indicator(s) are used to detect a leak? • What are the detection limits/thresholds for each indicator? • What is the precision of each indicator? • Who is notified, and how quickly would a response be mobilized? See Section 4.7 for additional information on this topic (p. 77).	
84.	BNDN (February 28, 2023)	Section 2.2.1.4.5 Primary Containment of Mining Solution – Wells	Comment #84: The Proponent states that the well designs and operational monitoring of the wellfield will mitigate accidental release of mining solution or UBS in the sandstone above the mining area Request/recommendation: • BNDN requests to know how Denison will monitor the integrity of wells once in production. Will tests be conducted at regular intervals? See Section 4.7 for additional information on this topic (p. 77).	
85.	BNDN (February 28, 2023)	Section 2.2.1.4.5 Fuel Storage and Dispensing Facility	Comment #85: The Proponent states that fuels will be stored in approved, above-ground, 25,000 L double-walled storage tank(s) equipped with secondary containment in accordance with provincial regulations and standards. Request/recommendation: • BNDN requests to confirm when the permanent fuel storage facility will be constructed. If temporary fuel storage for construction is required, indicate how much,	

			how it will be stored and dispensed, and show on a sketch where it will be located. Construction fuel requirements for site development may be significant. See Section 4.7 for additional information on this topic (p. 77).	
86.	BNDN (February 28, 2023)	Section 2.2.4.5 Process Precipitate Pond	Comment #86: The Proponent states that process precipitates may be stored in totes inside the process precipitate pond. Request/recommendation: • BNDN requests details on the procedures for placement and handling of precipitate totes within the pond. Care should be taken to ensure that equipment and totes do not compromise the pond lining. Totes should be sealed and transport of totes from the plant to the pond should be carefully planned to minimize the risk of a spill, and in the event of a spill ensure that runoff is captured on the site. See Section 4.7 for additional information on this topic (p. 77).	
87.	BNDN (February 28, 2023)	Section 2.8 Project Design Features	Comments #87 and 88: Denison states that they will maintain an up-to-date record of the various hazardous substances on site and will maintain Safety Data Sheets and appropriate procedures for spill management, handling, and clean up in an accessible location Request/recommendation: • BNDN requests a description of the safety and spill response training programs that employees will undergo. What is the duration of each training program and how often will retraining be conducted? • BNDN requests to know what resources will be kept on site for management and clean-up of spills, for example spill kits, absorbents, neutralization agents, vacuum trucks, PPE, hand tools, etc. See Section 4.7 for additional information on this topic (p. 77).	
88.	BNDN (February 28, 2023)	Section 2.2.2.2.4 Yellowcake drying and packaging	Comment #89: The Proponent describes various measures used to mitigate yellowcake dust emissions: the yellowcake drying and packaging area will be outfitted with hygiene systems to capture dust generated during the material handling of the yellowcake product and sent to either the dryer or calciner venturi scrubbers. All equipment located after the dewatering of the yellowcake will be selected to provide minimal dust generation and outfitted with dust collection systems where required. The ventilation system in this area of the processing plant will also be adequately designed to provide safety of workers and control fugitive dust emissions. Request/recommendation:	

			• BNDN recommends redundant hygiene systems be installed (n+1 units) to ensure continuity of air filtration in the event of equipment failure. See Section 4.7 for additional information on this topic (p. 77).	
89.	BNDN (February 28, 2023)	Draft EIS 9.3.5.1 Project Design Measures	Comment #90: The Proponent states that all contaminated areas will be fenced to avoid contact with workers and wildlife. Fences will be monitored and maintained. Request/recommendation: • BNDN requests to know the size and type of fence considered for each project area. • Confirm if the wellfields will be fenced. Show all fences on a site layout drawing like Figure 2.2-1. See Section 4.7 for additional information on this topic (p. 77).	
90.	Peter Ballantyne Cree Nation (PBCN) (March 3, 2023)	General	The Wheeler River project falls within PBCN traditional territory, where traditional land use activities have historically been and are currently practiced. PBCN has traditional territory spanning Treaty 10 with the nearest community of Southend located 185km away from the Project. PBCN has exercised aboriginal rights in and around the Project site and currently exercises Indigenous and Treaty Rights in proximity to the Project. PBCN is concerned that the Project has potential adverse environmental, cultural and socio-economic impacts to PBCN members, lands and uses, including hunting, fishing and gathering in all seasons. Both Denison and CNSC indicate that they have fulsome aboriginal engagement policies and guidelines and appear to be undertaking their delegated Crown duty to consult in good faith, as informed by those policies, principles, legal and regulatory requirements. However, there has been an initial error in the assessment, both by Denison and CNSC, as PBCN was erroneously exlcluded from indigenous engagement, ostensibly due to distance from Wheeler and a lack of understanding of PBCN lands and Indigenous activities potentially impacted by the project. PBCN wishes to participate fully in the regulatory review of the Wheeler River project. PBCN requests that the CNSC ensure that it's review timelines be adjusted, as required, to ensure fulsome participation by PBCN with the roponent and the regulator, going forward. PBCN's goals are to: • Meet with CNSC to share PBCN knowledge of its land, and Indigenous uses, and how these may be impacted by the Project and methods to addresss any adverse impacts. • Establish a shared understanding of how PBCCN would like to be engaged in the regulatory review, including, but not restricted to, timely project updates, information	

			and an opportunity to discuss concerns throughout the EA process, including the review of the dEIS, CNSC's staff's EA Report, and other project-related documentation [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
91.	PBCN (March 3, 2023)	General	The Wheeler River project falls within PBCN traditional territory, where traditional land use activities have historically been and are currently practiced. PBCN has traditional territory spanning Treaty 10 with the nearest community of Southend located 185km away from the Project. PBCN has exercised aboriginal rights in and around the Project site and currently exercises Indigenous and Treaty Rights in proximity to the Project. PBCN is concerned that the Project has potential adverse environmental, cultural and socio-economic impacts to PBCN members, lands and uses, including hunting, fishing and gathering in all seasons. Both Denison and CNSC indicate that they have fulsome aboriginal engagement policies and guidelines and appear to be undertaking their delegated Crown duty to consult in good faith, as informed by those policies, principles, legal and regulatory requirements. However, there has been an initial error in the assessment, both by Denison and CNSC, as PBCN was erroneously exlcluded from indigenous engagement, ostensibly due to distance from Wheeler and a lack of understanding of PBCN lands and Indigenous activities potentially impacted by the project. PBCN meets nearly all of Denison's stated criteria to evaluate Indigenous communities located within the Sasketchewan Northern Administration District that would be engaged by Denison. A full and accurate description of PBCN's rights and interests is an essential part of the Wheeler dEIS and is necessary to ensure a fulsome environmental assessment. PBCN is interested in the opportunity to collaborate with Denison mines to comprehensively identify PBCN's rights and interests that may be impacted by the project. PBCN's goals are to: • Work together with Denison in a spirit of mutual respect to cooperate to collectively identify means to avoid, mitigate or otherwise address potential negative impacts of the project on PBCN's territory and the exercise of its Indigenous rights and interests. • Participate in a funding agreement with Denison to facilitate and support PBCN participation and meaningful engagement in the EA process. • Meet with Denison to share PBCN knowledge of its land, and Indigenous uses, and how these may be impacted by the Project and methods to addresss any adverse impacts.	

			• Explore employment and job opportunities related to the Project. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
92.	PBCN (March 3, 2023)	General	PBCN has concerns regarding potential impacts to Valued Components including but not limited to water quality, fish, wildlife, aquatic vegetation, Human health, country food consumption, resource use, and socio-economic factors. Areas of specific concern are: • What are the potential impacts to the landscape, including aquatic and terrestrial environments? • What are the effects on the growing/carrying capacity of both aquatic and terrestrial environments for Country Foods due to potential changes to the landscape and risk of contaminants? • What are potential accident or spill impacts on the harvesting of plant specific country foods? • Will there be limitations to access lands for country food harvesting due to mining traffic or operation of the mines? • How will Denison use freshwater from Whitefish Lake? • What are the potential impacts to boreal shield woodland caribou? • How will Denison contain effluent from the mine and manage anticipated downstream impacts? In particularly interconnected waterbodies? • What are the socio-economic impacts of the Project, including vulnerable populations, from construction through operation? • What is the proposed means and haul route of yellowcake product to the market? • Are there employment or procurement opportunities for PBCN members or Group of Companies? • How will PBCN be included in the development and execution of long-term environmental effects monitoring and follow-up programs?	
93.	Kineepik Metis Local #9 (KML) and the Northern Village of Pinehouse (NVP) (February 17, 2023)	Water Security Education of In-Situ Recovery and Freeze Wall Technology	Section 1.5 and 3.4 of KML and NVP submission: KML as a community wishes to understand the technical background of water protection processes, the Lixiviant solutions, interactions of chemical compounds with water and toxicity. The KML Community will require this knowledge to have confidence in the continued success of the new mining application on our traditional territories. What are the potential effects to the aquifers and waters around Denison andWheeler River? KML describes that they need to understand: • how water protection processes such as reverse osmosis and water treatment are used in the mining operations.	

			• the exact molecular compounds that are part of the "Lixiviant" solution • how this chemical compound interacts with water and at what concentrations that is becomes toxic. KML further states: "If these processes are not well understood by our communities, how can we state that we are prior informed and offer consensus to the process?" Ultimately, as noted in their summary of Primary Concerns: 1) There is a need for funding for education and training to reach a standard of knowledge in mining, science and math required to understand the impacts of uranium mining industry that is expected for an Indigenous community to be able to make free and prior informed decision on impact and expectation of that industry. 2) Development of a centre of Excellence in Pinehouse to organically develop the knowledge transference required for Indigenous community to understand the uranium mining industry including regulations, materials used, transportation, end use of products, education required mitigation efforts etc. 3) Support for training and education to support KML and Pinehouse on uses of artificial intelligence in the mining projects and to what level this activity can be managed by and in the community. A strategy to build capacity for matriculation graduates with the following classes English 30A 30B Chemistry 30, Physics 30, Math 30. KML wants to increase the community western education levels so that they are knowledgeable and have the capacity to protect themselves and the environment. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
94.	KML and NVP (February 17, 2023)	Language and Culture Restitution	Section 2.2 of KML and NVP submission: KML note that loss of language can be correlated to the introduction of the Saskatchewan Uranium Industry. Prior to the industry development, Pinehouse was among the most fluent speaking communities in northern Saskatchewan. All children in Pinehouse spoke Cree with limited English and French capacity. Since the collateral effect of industry became the prominent community discourse the support for Cree language was diminished and marginalized by industry as English is the primary language used by industry. KML and NVP are actively working to determine how to stop the current language extinction process with strategies around creating more resources for culture and language. KML is leading the process for recovering from this loss. KML are using our own source revenue and resources to bring pride in the language and culture for community members of KML. KML will continue to bring this attention to all proponent activities that occur on	

			the KML territory for KML are all are responsible to remove the effects of colonisation and institutional racism.	
95.	KML and NVP (February 17, 2023)	Mining methods and education Education of In-Situ Recovery and Freeze Wall Technology	Section 3.1 and 3.4 of KML and NVP submission: KML and NVP must be educated on all aspects of the Denison project to remove limited understanding of the processes that occurred within our traditional territories. They note that they cannot learn how to protect the land if they cannot understand the math and science involved in mining and environmental protection. KML people require higher education levels because of the collateral effect, on their population, caused by industry [which the proposed Wheeler River project adds to]. They further assert that they must understand the technological advantages being employed in the Denison Wheeler River Project. This transference of knowledge can occur through a sustained and supported education program. The community will also require confidence that any environmental incidents are managed in a way that is fully understood by the community. A long term plan would be to develop and build that capacity in the community to manage the incidents and monitor any environmental cleanup processes. They want assurance that the standards being followed and that as a community, KML are able to action a response to mitigate potential environmental impact. This knowledge must become an integral part of the community knowledge and capacity for this project and for uranium exploration and mining in general. As noted in their summary of Primary Concerns, this includes: • Begin training and education support for community to prepare for employment at the mining operations with a focus on females, youth, and previously marginalized land users. Effort to increase employment in trades and drilling related work. See also other related Primary Concerns from Document, #1-3.	
96.	KML and NVP (February 17, 2023)	Road safety concerns Maintenance of 914 road with 914 Extension	Section 5 and 5.2 of KML and NVP submission: When determining community safety with respect to need for increased transportation for a new operation, the Indigenous people of KML have the following concerns: • The state of the existing road from 165 to 914: The road has received upgrades up to the kilometer 75 on highway 165. From Kilometer 75 to Kilometer 112 where Highway 165 ends and Highway 914 begins, Highway 914 needs an upgrade in width all the way to Pinehouse to create a more industrialized road. KML are not looking forward to the spring road conditions with just the current industry activity. • Every community member has reported near miss incidents with the increased traffic caused by the general resurgence of the Uranium Industry using semi truck and heavy hauls to transport material to the operations and project sites. With the increase in incidents and near misses the opportunity for a major incident is inevitable, with the	

			current road conditions. Adding the development of a new Denison mining operation will only increase this potential for incidents for people using this road. • When you add the rough road conditions, visibility reduction in the winter and summer with dust and snow flurry from large vehicles. This causes unsafe conditions and increases the potential for incidents. • The current capacity for road maintenance from the community members of Pinehouse are not prepared for the additional maintenance requirements for the road becoming a connected road. The road must be developed to an industrial rating to allow for the increase in industrial use so that members of KML do not experience safety issues. KML is requesting that the Transport Canada, Ministry of Highways respond to the concerns of Pinehouse and inform the community of the plans for road infrastructure development. KML would request the road be developed to the standard that the Key Lake and McArthur River road is managed all the way to Junction of Highway 165 and Highway 2. KML and NVP request further capacity to develop road management capacity so KML can provide the support necessary to manage the integrity of the road. As also noted in their summary of Primary Concerns, this includes a requirement for: • Immediate efforts to build and increase emergency response capacity with community people from KML and NVP to support capacity for road incidents. • Significant improvements to the road to an industrial grade from Highway 2 to the Key Lake gatehouse to support the massive increase in heavy traffic from Industry [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
97.	KML and NVP (February 17, 2023)	Emergency Response Services	Section 5.1 of KML and NVP submission: Pinehouse will inherit significant impacts from the transportation of goods and services to the mining operations. Safety of our community member is a paramount concern for the community. KML will be impacted from increased heavy haul traffic and this will impede our ability to hunt for food. KML will also bear the effects of needed emergency services from our community first from the increased need for emergency response, which could dilute the limited emergency response services KML currently are provided. KML will also inherit any future security emergency requirement and expanded exploration and developmental impacts. The expectation is that within the life of the mine the community and industry will co-develop capacity to engage in emergency response including environmental spills, traffic incidents, air traffic incidents, emergency road security, search and rescue, fire fighting, and water rescue.	

			See also other related Primary Concerns from Document, #5.	
98.	KML and NVP (February 17, 2023)	Waste management of new development and historical issues	Section 6.1 of KML and NVP submission: KML is concerned with cumulative impacts from historical legacy exploration and mining practices. Not specific to Denison, Cameco or Orano, KML notes that land users have often found remnants of past poor exploration practices which are now affecting our continued land use. The abandoned camps and industrial and domestic waste left with no known program for clean up are the most significant of these remnants. They would like the EIS to host in partnership with provincial government regulators to host a conversation on progressive reclamation of these legacy sites. This conversation should prioritise the community capacity and an environmental agent for process that occur on our traditional territories. This conversation could include changing the policies of waste (future waste) being brough into the NAD. KML's contention is that waste that is brought into the region should be removed entirely from the region. The need for a regional waste management facility or a transfer station must be developed in partnership with KML. As noted in their summary of Primary Concerns, this includes a requirement for: • Immediate efforts to build capacity in a regional waste management operation within or near the community. To build current and future expertise in domestic waste, special waste, recycling, and the development of a transfer station in Pinehouse to support all mining activity including current operation and exploration. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
99.	KML and NVP (February 17, 2023)	Loss of Use and Access to Traditional Lands and Resources	Section 6.2 of KML and NVP submission: While one project or mining operation does not materially affect KML's land use practices, the substantial and growing projects and mineral exploration activity severely limits their ability to practice land use for the region north of Haultain River. KML land users are now experiencing loss of use with some areas leading to complete exclusion for food sovereignty and traditional activities. As an example of this, hunting practices currently use high powered rifles to engage with big game including moose, bear, deer, and caribou in the area. How will Denison ensure the community can continue to practice this method of food gathering in a safe method?	
100.	KML and NVP (February 17, 2023)	UNDRIP and TRC Protocols	Section 6.3 of KML and NVP submission: KML sees limited mention that this project has respected the intent of the United Nations Declaration on the Rights of Indigenous People or the Recommendations of the Truth and Reconciliation Commission. There is limited opportunity for this project to review the implications of UNDRIP and TRC and how this	

			project will cause to effect for the Indigenous rights bearing members of Pinehouse. This is not case for other agencies providing information for this project. KML request advocacy to increase education for external agencies on the need to develop greater understanding of UNDRIP and TRC calls to actions. These agencies can be contractors, regulators, and managers within the companies. This process could be developed if the agencies co develop a centre of excellence in Pinehouse. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
101.	KML and NVP (February 17, 2023)	Co-Management, Food Sovereignty and Metis Land Access	Section 6.4 of KML and NVP submission: Potential impacts to KML are from increased development and access to their territory. Current provincial regulation of hunting, fishing, tourism, resources development and increase human traffic will affect and limit our ability to practice our protected rights. Western business with greater acumen may displace economic activity as they note that they are still evolving their understanding of the industry business practices. KML request further study on how current provincial regulations including opportunity for co-management so lessen the impacts from this project and from increased encroachment. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
102.	KML and NVP (February 17, 2023)	Waste Management Plan	Section 6.5 of KML and NVP submission: Waste generated from the operation, construction and maintenance of mines and exploration projects need to be better understood by the community. KML is of the view that waste management may represent the greatest source of environmental liability arising from this project and the mining industry in northern Saskatchewan in general. KML request that planning for waste management including capacity for Pinehouse to host a waste management company and a transfer station in Pinehouse to be considered. As a community that uses this land for food, shelter and culture KML want the capacity and responsibility to manage waste for this project and the industry in general and prepare for future development. See also other related Primary Concerns from Document, #6.	
103.	KML and NVP (February 17, 2023)	Waste Management Plan	Section 6.5 of KML and NVP submission: KML describes **Indigenous Economic Leakage** and **Triggered Response Capacity** as concerns:	

			• Indigenous Economic Leakage: the lack of capacity within Indigenous communities like Pinehouse prior to massive development projects like uranium mining operations. No ability in existing community development to capitalize on industrial activity in their areas because of historic colonization and racism. There are limited businesses, stores, materials and infrastructure within community to support and build upon. • Triggered Response Capacity: the respond required by the Indigenous people of KML to meet the need of industry. The community is required to change focus away from Indigenous community needs to focus on the needs of Industry. This includes time to respond to the industrial education, safety protocols, regulatory responses. The need as a community to participate in the Duty to Consult on exploration requests, feasibility studies, Environmental impact studies, negotiate agreements, industry training requirements. All of this removes the community ability for practicing Indigenous cultural activities, less time of Cree language retention. This response increases as the Collateral Effect increase. It is acknowledged by KML that these are factors are exacerbated by an additional mine. As noted in their summary of Primary Concerns, this necessitates: • Systemic increases in the use of services in Pinehouse including COOP store and PBNLP, Pinehouse Housing Corporation, Pinehouse Fishing COOP and Wild Rice, and KML Metis Local to prevent the continuation of Indigenous economic leakage. • Consideration to build industry supporting infrastructure such as warehousing, hotels, bulk fuels parts and mining necessities in Pinehouse to support community development and to stop the Indigenous economic leakage which has occurred over the last 50 years of development. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
104.	English River First Nation (ERFN) (February 22, 2023)	Section 6.1.1.2.3 Other Guidelines and Standards	Comment #ERFN-001: Background radon concentrations were used for predicted concentrations for the Project without an appropriate rationale for why CNSC criteria are not used. Question/Recommendation: Provide rationale why background radon concentrations were used in favour of air quality emissions standards/criteria from CNSC for predicted radon concentrations from the Project.	
105.	ERFN (February 22, 2023)	Section 6.1.1.3 Spatial and Temporal Boundaries	Comment #ERFN-002: For simplicity, a single criterion and time-averaging period were selected for each COPC based on the most stringent criteria or standard presented (federal/provincial). Time period effects are expected to occur in relation to project phases and activities (scenarios), and that the prediction of effects are applicable to/driven by MPs	

			and air quality criteria (1-hour, and 24-hour – short term emissions; and, 30-day, and annual averaging periods). Average compositions from dustfall data during baseline studies was limited to two sampling events (September and October 2021) and presented as a percentage of fixed dustfall – the lowest average of measurable concentrations was used to represent background levels. Question/Recommendation: The AQ modelling assumptions used for the Project are heavily reliant on conversion calculations and average baseline measurable concentrations from passive monitoring methods, instead of a more conservative approach using maximum measurable concentrations. Denison iterates that maximum concentrations for each scenario were extracted from modelling results and compared to criteria to determine effects; however, for dustfall, the lowest average measurable baseline concentrations were used to represent background levels in the modelling.	
106.	ERFN (February 22, 2023)	Section 6.1.1.2.4 Summary of Assessment Criteria (KIs and MPs) Section 6.1.3.2 Existing Environment Air Quality	Comment #ERFN-003: As KIs associated with the Air Quality VC pertain to levels of dust, combustion products, uranium, metals, and/or radionuclides; passive monitoring methods (commenced in 2016) were used to characterize the baseline air quality for the Project (included particulate matter [dustfall], NO_2, SO_2, radon, and external gamma). Provincial regional background concentrations were used for TSP, PM10, PM 2.5, NO_2, SO_2, CO; while Key Lake ECCC background data were used to represent concentrations of uranium, arsenic, and nickel; and Cigar Lake data were used for copper, lead, selenium, and zinc background concentrations. Question/Recommendation: Passive methods represent averaged concentrations for deployment periods, and in some cases are not directly comparable to the regulatory criteria identified in Table 6.1-5. Conversion calculations were used on the passive monitoring data to compare the minimum requirements of averaged baseline results gathered, against identified provincial/federal criteria for use in modelling effects for the Project. Only predicted short- term (less than 3 years) and medium-term exceedances of modelled COPC concentrations of TSP, PM10, uranium (24- hour), and NO_2 (1-hour) to exceed air quality criteria at receptors located outside of the Property Boundary (6.1.4.2); however, as per the Saskatchewan Air Quality Modelling Guideline (SK MOE 2012), the eight highest 1- hour predictions and the single highest 24-hour prediction at each receptor can be discarded.	
107.	ERFN (February 22, 2023)	Section 6.1.1.2.4 Summary of Assessment Criteria (KIs and MPs) Section 6.1.3.2 Existing Environment Air Quality	Comment #ERFN-004: Table 6.1-15 shows 24-hour Arsenic concentrations met criteria established in Table 6.1-5 for background level comparisons (0.003 µg/m³ - used conversion calculation due to passive sampling techniques used for baseline). Question/Recommendation:	

			The EIS lacks clarity with respect to COPCs, as there was no discussion on the effects of 24-hour Arsenic concentrations meeting established criteria, nor was rationale included for the addition of Zinc as a COPC.	
108.	ERFN (February 22, 2023)	Section 6.1.3.2.7 Adopted Background Considerations	Comment #ERFN-005: Ontario criteria for uranium in PM10 were conservatively selected as the Project criteria although particle size information for ISR stacks (main source of Project uranium emissions) remains unknown. Input data to run the dispersion modelling included meteorological data from one year (2016 - minimum under guidelines). Question/Recommendation: Information is lacking on how uranium emissions can be mitigated if ISR plant stacks demonstrate particle sizes other than inhalable particulate matter (i.e., respirable particulate matter [PM2.5] levels). Adjustments and refinements to the modelling and thus conclusions were made, heavily based on assumptions.	
109.	ERFN (February 22, 2023)	Section 6.1.3.1 Climate (Existing Environment) Section 6.1.7.1 Climate Change Considerations (Cumulative Effects)	Comment #ERFN-006: Climate considerations within the EIS do not address the potential for permafrost in the project area or potential disruption of permafrost by the Project (i.e., contributing GHG emissions directly and indirectly related to the project or as it relates to climate change). Question/Recommendation: Update Section 6 to include permafrost implications from interactions with the Project.	
110.	ERFN (February 22, 2023)	Section 6.1.3.1 Climate (Existing Environment)	Comment #ERFN-007: Baseline wind direction blowing predominantly from the west (~10%), followed by south and east directions (Appendix 6-C) with an average wind speed of 3.5 m/s. Proponent doesn't demonstrate relative maximums and minimums of wind speed over the averaging periods and wind data are not available for the climate normals period or from baseline studies for comparison and integration into project design/seasonal mitigations. Question/Recommendation: Update baseline information to reflect seasonal wind speed maximums and minimums and integrate it into mitigations.	
111.	ERFN (February 22, 2023)	Section 6.1.4.2 Potential Project-Related Effects	Comment #ERFN-008: "The propagation of air emissions from Project activities associated with Construction, Operation, and Decommissioning was predicted using version 7 of the CALMET/CALPUFF modelling package (Exponent 2015). ... While the Saskatchewan Air Quality Modelling Guideline identifies that the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) should be used for most assessments in Saskatchewan, Section 3.3 of the guideline does allow for the use of more sophisticated models, including CALPUFF, where justified (SK MOE 2012a)." (pp. 6-30)	

			Question/Recommendation: From the Saskatchewan Air Quality Monitoring Guideline (Section 3.3) "The use of specialized models [CALPUFF] requires consultation… [and] may be approved by the ministry on a case-by-case basis. This justification should clearly state the reasons why the approved models are not appropriate…" (SKMOE 2012). Provide a rationale for why the approved models were not appropriate based on the limited meteorological dataset available.	
112.	ERFN (February 22, 2023)	Section 6.1.5 Mitigation Measures	Comment #ERFN-009: Additional mitigation measures include the use of chemical dust suppressants to address Air Quality. Denison does not provide evidence discussing the potential impacts on Air Quality from the use of chemical dust suppressants. Question/Recommendation: ERFN requests that Denison provide discussion regarding the potential impacts of using chemical suppressants to mitigate dust including whether there are there any risks to air quality associated with the chemical suppressants themselves.	
113.	ERFN (February 22, 2023)	Section 6.1.6.2 Significance and Confidence (Residual Effects Evaluation)	Comment #ERFN-010: Denison states that a gap analysis memo and model input summary was prepared as part of the draft EIS. The memo appears to be missing from the EIS appendices. Question/Recommendation: Please either provide ERFN with the memo or clearly indicate where in the appendices this information is available.	
114.	ERFN (February 22, 2023)	Section 6.2.3.1 Baseline Noise Measurement Program (Existing Environment)	Comment #ERFN-011: Baseline data are not sufficient to support the assessment of noise impacts. Data were only collected for 2 locations during 1 week in May 2021 and did not include a portion of Highway 914 (like atmospheric component and identified traffic impacts from Project Activities). Unrepresentative data (meteorological events – temperature, relative humidity, precipitation, wind speed) were removed prior to summarization (14 hours, or 7.5% of measurement data). One of the two monitoring locations was disturbed during the monitoring period and these data were also discarded in the analysis. Question/Recommendation: Denison must provide further baseline information to support sound level criteria conclusions, project level-, residual-, and cumulative effects evaluations for modelling that links noise receptors with other VCs; as compliance determination is based on baseline measurements. Noise significance determination for receptor VCs may not be representative of actual conditions.	

			Per the EIS, "based on professional experience, the SK MOE has considered the Alberta Directive 038 (AER 2013) as a suitable stand in for provincial guidance..." Please clarify how the current baseline data collection for noise aligns with this recommended guidance.	
115.	ERFN (February 22, 2023)	Section 2.3.3.1.1 Mining Area Remediation	Comment #ERFN-012: Section 2.3.3.1.1 states that "the mining area decommissioning objectives have been developed through groundwater modelling work and are achievable based on metallurgical testing." Section 7.6.2.1 refers to decommissioning objectives. The objectives are not appropriate for environmental protection. Table 2.3-3 decommissioning objectives portrays water quality that represents a substantial environmental risk and would need generations of monitoring to assess migration of this highly impacted plume. pH 4 is highly acidic and metal/radiation levels are concerning (200 Bq/l radium is 200 to 1,000 times over safe limits). For species where baseline levels are higher than safe levels, baseline levels should be used a target. Question/Recommendation: (i) Further effort should be taken to define the remediation goals that are achievable with best available technology and a commitment should be made to remediate to the maximum extent possible (until baseline levels are reached or the water is deemed suitable with no risk or need to monitor further). Funds spent to remediate will reduce the need for multi- generational monitoring and an unreasonable burden and risk on future generations (to monitor for a very long period of time). (ii) An options assessment for decommissioning objectives should be conducted based on Best Available Technologies (BAT) for treatment of contaminated groundwater and non-degradation approaches for the decommissioning objectives. Consultation on decommissioning objectives is required. Please revise the project closure plan to reflect updated decommissioning objectives. Also noted in Appendix B, Comment #1 (Source Environmental Associates).	
116.	ERFN (February 22, 2023)	Section 2.3.3.1.1 Mining Area Remediation	Comment #ERFN-013: To determine groundwater targets for decommissioning, the levels for groundwater protection from contaminated sites should be used for this project. This would involve use of typical numerical standards rather than the risk-based approach used in the EIS. A minimum level of protection is to define baseline groundwater levels where baseline is greater than water quality guidelines for groundwater. It is acceptable to use the higher value as the target, with baseline being defined as 95% background. Question/Recommendation: As a point of reference, any groundwater decommissioning objective should be compared to the 95% background levels and/or numerical groundwater standards for contaminated sites at the depth of impact compared.	

			Also noted in Appendix B, Comment #2 (Source Environmental Associates).	
117.	ERFN (February 22, 2023)	Section 2.3.3.1.1 Mining Area Remediation	Comment #ERFN-014: Over the course of the project, a certain mass of acid will be added into solutions for injection into the formation. Use of peroxide/ferric may indirectly add acid load via oxidation of sulphide minerals or other oxidation-reduction reactions. Some of the acid used in the project will be neutralized on surface as part of water treatment and discharge. The difference between total acid added to the formation and acid neutralized on surface through treatment represents the net acid load added to the formation and left underground. The EIS describes one mitigation for the leach area as being pumping alkali solution (i.e. caustic) into the leach formation to neutralize residual acid. Question/Recommendation: The mass load of alkali used during decommissioning should be commensurate with the net acid load added to the formation throughout the Project. Mitigation planning along these lines is recommended for consideration to support development of more environmentally responsible decommissioning targets. Also noted in Appendix B, Comment #3 (Source Environmental Associates).	
118.	ERFN (February 22, 2023) Source 4.	Section 2.3.3.1.1 Mining Area Remediation	Comment #ERFN-015: Section 2.3.3.1.1 on decommissioning and remediation of the mine area is vague and should be expanded. For example, certain reagents "may" be used, freshwater will be mixed with contaminated water as a remediation method, and remediation plans will be further refined. Question/Recommendation: Without prejudice to previous comments on the suitability of proposed decommissioning objectives (i.e. Table 2.3-3), the EIS requires a more specific plan on how decommissioning objectives will be achieved and how remediation targets will be assessed to be met. Also noted in Appendix B, Comment #4 (Source Environmental Associates).	
119.	ERFN (February 22, 2023)	Section 2.3.3.1.1 Mining Area Remediation	Comment #ERFN-016: To be able to plan for decommissioning, it is essential that targets developed now, at the EIS stage. Otherwise, the project could be unacceptable to communities in the long term and there is no recourse. Question/Recommendation: Mitigation planning to meet the closure targets must be outlined conceptually so that bonding can be put in place to ensure the targets are met and the project is acceptable. With that in mind, development of targets and an approach to achieve these targets is required at the EIS level and should not be deferred.	

			Also noted in Appendix B, Comment #5 (Source Environmental Associates).	
120.	ERFN (February 22, 2023)	Section 2.3.3.1.1 Mining Area Remediation	Comment #ERFN-017: The EIS states that the freeze wall will be allowed to thaw once recovered water meets the proposed mining decommissioning groundwater quality objectives and has been demonstrated to be "stable over sufficient time." The freeze wall should be maintained until there is no longer a groundwater plume. It is not environmentally responsible to leave the risk in the ground to monitor for many generations with the optimistic assumption that such a plume will not reach receiving environments. There is no precedent in Canada for the approach of purposefully leaving heavily impacted mine water injected underground with the expectation that it will not reach surface water. Modelling of such a plume is inherently uncertain and the highly impacted water represents a significant environmental hazard/liability. Question/Recommendation: (i) The approach should be to fully mitigate the groundwater zone impacted until the targets are reached. The stress on communities is too high if a groundwater plume of acidity is left in the ground. Adequate neutralization is critical for the groundwater impact zone so that a plume does not develop. Similar to regulation of contaminated sites source areas and plumes, the site is not remediated until it meets this standard of care. (ii) It is unclear from the EIS how it will be determined that the freeze wall is no longer required at the site. ERFN must be engaged in decision-making for thawing of the freeze wall after Decommissioning objectives have been met. Also noted in Appendix B, Comment #6 (Source Environmental Associates).	
121.	ERFN (February 22, 2023)	Section 7.8.2.2.4 Post-Decommissioning	Comment #ERFN-018: Section 7.8.2.2.4 groundwater monitoring, post-decommissioning outlines that monitoring will continue indefinitely, until "transfer of the site into the provincial institutional control program." This ongoing monitoring requirement and stress on communities and ongoing governance should be avoided or minimized to the extent possible by increasing the amount of remediation of the fluids to background levels. Purposely avoiding remediation efforts by passing the responsibility to ongoing monitoring adds significant uncertainty about whether objectives will be achieved, and should further mitigation be required, funds for execution would not be available from the closed project. Question/Recommendation: Monitoring should be done as a last approach after all efforts have been made to maximize remediation and minimize/remove the groundwater plume. For this project, the timelines and risks are too great to avoid mitigation measure for source control. The freeze wall, remediation pumping and treatment should continue until no further improvements are possible or targets are reached that reduce the need for long-term plume monitoring.	

			Also noted in Appendix B, Comment #7 (Source Environmental Associates).	
122.	ERFN (February 22, 2023)	Section 7.8.2.2.3 - Decommissioning Operation; Figure 7.8-2	Comment #ERFN-019: Please clarify what changes to the groundwater monitoring network established during Operations will be anticipated during Decommissioning, including potential pathways of water from the mine site to the receiving environment. Figure 7.8-2 on PDF p. 618 of the EIS is meant to illustrate the conceptual groundwater monitoring network during Decommissioning; however the figure does not show the proposed monitoring locations. Question/Recommendation: A conceptual map similar to Figure 7.8-1 would be valuable and aid ERFN in determining the adequacy of the monitoring network and assessing potential impacts to important water courses. Also noted in Appendix B, Comment #8 (Source Environmental Associates).	
123.	ERFN (February 22, 2023)	Section 7.8.2.2.3 Decommissioning	Comment #ERFN-020: The EIS mentions progressive reclamation in general terms. Question/Recommendation: The concept of progressive reclamation is recommended to be applied to remediation of groundwater in the different zones of the leach field after leaching of the zone is complete. For example, progressive reclamation/remediation of the Phase 1 and 3 could be started while leaching of Phase 4 and 5 is underway. Also noted in Appendix B, Comment #9 (Source Environmental Associates).	
124.	ERFN (February 22, 2023)	EIS Section 2.2.1.4.6 Mining Solution	Comment #ERFN-021: The way water recycle is discussed and assessed in the EIS is inconsistent. Section 2.2.1.4.6 states "*once [Uranium Bearing Solution] UBS is recovered to surface, it will be pumped from the wellfield into the processing plant where uranium will be removed from the UBS (Section 2.2.2). The treated solution created can be refortified with reagents as required and pumped back into the mining area to maximize water recycling during the life of the mine. No water recycling has been included in the water balances, although it is expected to occur.*" Similarly, Section 2.2.3 states, *"Denison intends to recycle process water to the greatest extent possible, thereby reducing the demand for freshwater supply and volume of treated effluent. To develop a conservative assessment basis for the EA, the water recycled flows from the industrial wastewater treatment plant back into the processing plant and wellfield have not been incorporated into the estimates for freshwater withdrawal and treated effluent discharge."* All models must be updated to include the operational strategy employed by Denison and actual conditions to occur during operations as best as possible.	

			From the perspective of fresh water withdrawal from the environment, evaluating the project water balance with the assumption that no water is recycled is conservative. However, from a water management and water treatment perspective the opposite is true as use of water recycle reduces risks by reducing the total amount of solution requiring management, reducing the rate of discharge of treated effluent and associated contaminant load going to Whitefish Lake. Question/Recommendation: (i) The EIS should incorporate assessment of water recycling into a separate case for the water balance/water quality model (similar to the way base/upper case modeling is used for other phenomenon). The EIS should discuss limits of water recycling, such as the minimum amount of water required to operate the project or the potential for contaminant accumulation in leachate that prevents effective recycle. (ii) Further, recycling all or portion of the process water may increase the concentration of contaminants reporting to the IWWTP and may impact the effluent quality achievable. Accumulation of contaminants in the recycled solution and its impact on the performance of the IWWTP and effluent quality must be assessed and discussed. Incorporating water recycle may reduce the amount of process water requiring treatment and discharge and so may help ameliorate the concern with the high salinity of treated water. Also noted in Appendix B, Comment #10 (Source Environmental Associates).	
125.	ERFN (February 22, 2023)	Section 2 General	Comment #ERFN-022: The EIS describes several water storage ponds on surface including precipitate ponds and process water ponds. The design basis for these ponds in terms of how much solution storage is required is not clear in the EIS. Question/Recommendation: The EIS should discuss the sizing basis for these ponds in more detail, including storage capacity for probable-maximum-flood, pond capacity used by precipitate, freeboard volume, and normal operations volume. This should also be discussed in the context of the total amount of solution requiring management at a given time (underground and on surface) and the extent of water recycle achievable. The ability to safely manage process water on surface is a critical mitigation measure for the project and so understanding the design basis for these features is required to assess risk to the environment. Also noted in Appendix B, Comment #11 (Source Environmental Associates).	
126.	ERFN (February 22, 2023)	Section 2.2.2.2.1 Radon Purge Tank	Comment #ERFN-023: Figure 2.2-13, the Processing Plant Overview shows the 5,000 m^3 uranium solution holding area would include tanks. This is incongruent with Section 2.2.2.2.1,	

			which states that the UBS holding area will be contained by a double composite liner system with leak detection adjacent to the processing plant and under a fabric tension building system. Question/Recommendation: It is unclear if Figure 2.2-13 shows what is currently being considered for the design. Also noted in Appendix B, Comment #12 (Source Environmental Associates).	
127.	ERFN (February 22, 2023)	Section 7.4.2 Potential Project-related Effects; EIS Section 7.6.1 Life of Mine (0 to 38 years)	Comment #ERFN-024: Section 7.4.2 and section 7.6.2.1 describe scenarios for upward migration of acidic, impacted mining waters and include discussion of upward migration distances of 11 to 50 m. The basis for these scenarios is not made clear in the work and the rationale for why these scenarios are conservative is not sufficient. Upward migration could be a real risk for the project. For example, current and decommissioned boreholes for monitoring could be a pathway for migration of acidic, contaminated fluids to the surface. Question/Recommendation: The EIS should provide a compelling case for the conservatism of the current approach and/or more rigorously assess the impact of substantive upward migration of leach solution. Also noted in Appendix B, Comment #13 (Source Environmental Associates).	
128.	ERFN (February 22, 2023)	Section 2.2.1.3 Freeze Wall	Comment #ERFN-025: Section 2.2.1.3 states “current plans are for the freeze wall to be a minimum of 10 m thick, be installed 25 m away from the uranium deposit, and extend 30 m into the basement rock (Figure 2.2-6).” This is 20 m smaller than the maximum extent of the area approximated to be influenced by mining around the deposit (50 m). This increases the risk of contaminants leakage from the mining affected area with potentially negative impacts on the receiving environment especially considering that the primary means of containing containment within the leaching zone relies on maintaining an inward hydraulic gradient by recovering more solution than what is being injected (1%). This is subject to planned and unplanned operational downtime due to maintenance or other reasons. Question/Recommendation: Please explain the rationale for the selection of a 30-m thick freeze wall and how it ensures the containment of contaminants as predicted under a variety of different site and mining conditions. Also noted in Appendix B, Comment #14 (Source Environmental Associates).	
129.	ERFN (February 22, 2023)	Section 2.2.1.3.1 Freeze Plant	Comment #ERFN-026: The ammoniacal solution will be used in the freeze plant to maintain the freeze wall in place for the execution of mining activities. Section 2.2.1.3.1 states that “the freeze plant will be designed with ammonia safety in mind to monitor for and minimize	

			risks to workers and the environment from potential leakages." However, no information is provided on potential underground leakages and assessment of potential negative impacts on water quality/balance as well as any appropriate mitigation measures. This is important because as stated in the Application, "the sandstone hosting the uranium deposit is permeable and groundwater can flow horizontally through the deposit." Question/Recommendation: (i) Has the freeze-wall brine been evaluated as a potential source of groundwater contamination? (ii) How would leakage of freeze-wall liquid be detected or assessed? Also noted in Appendix B, Comment #15 (Source Environmental Associates).	
130.	ERFN (February 22, 2023)	Section 2.2.6.2 Back- up Power Supply	Comment #ERFN-027: Section 2.2.6.2 of the EIS states that "*to provide electrical service during times of utility outages, diesel generators will be installed to service the site and maintain essential functions. The generators will be used to maintain power to the processing plant and the camp, as well as to maintain other essential services as required.*" Given that maintaining the freeze wall as well as a negative water balance in the ISR area are key to the mitigation of environmental impacts, a plan must be developed for maintaining the operation of the ISR pumping and freeze systems during power outages. Question/Recommendation: The EIS should discuss the impact of short term power outages on freeze-wall operation and efficacy and on the water balance associated with solution injection/recovery. Also noted in Appendix B, Comment #16 (Source Environmental Associates).	
131.	ERFN (February 22, 2023)	Section 2.2.3.8 Industrial Wastewater Treatment Plant	Comment #ERFN-028: An important aspect of preventing environmental impacts is the industrial wastewater treatment plant (IWWTP) that is to treat excess process water and surface runoff. The EIS provides limited information about this system, its design basis, the Project-specific testing conducted, or how the predicted effluent quality provided in Table 2.2-1 of the EIS was developed. Section 2.2.3.8 states, "a metallurgical test program was completed at SRC to help define the IWWTP design and performance criteria." However, no reference is provided to this program, nor have its results or conclusions have been discussed in the Application. This is a key part of the mine design and it is important, for review, that the EIS provide the information needed to understand and evaluate the efficacy of the proposed mitigation measures. Question/Recommendation: Table 2.2-1 in Section 2.2.3.9 outlines the upper bound effluent quality proposed for the Project and states, *"the effluent quality was determined to be achievable through laboratory test results conducted by Denison at SRC."* However, this section does not	

			provide a comparison of the concentrations achieved at the bench scale with the upper bound limits. Also noted in Appendix B, Comment #17 (Source Environmental Associates).	
132.	ERFN (February 22, 2023)	Section 2.2.3.9 Treated Effluent Monitoring and Release Ponds	Comment #ERFN-029: The IWWTP process appears to use processes similar to those of other waste water treatment sites in the Canadian uranium mining sector. It would be useful if the EIS discussed the IWWTP relative to analogue sites in terms of the treatment technologies used and the quality of effluent achieved at other sites. Question/Recommendation: How does the predicted effluent quality shown in section 2.2.3.9 compare to effluent from analogue sites in the Canadian uranium sector, for example water treatment systems at Cameco and Orano's projects in the region? Also noted in Appendix B, Comment #18 (Source Environmental Associates).	
133.	ERFN (February 22, 2023)	Section 2.2.3.9 Treated Effluent Monitoring and Release Ponds	Comment #ERFN-030: Table 2.2-1 of the EIS shows predicted effluent quality for the IWWTP. This table includes a prediction that the total dissolved solids in effluent is predicted to be 6,420 mg/L, with 600 mg/L chloride and 3,915 mg/L sulphate. The table also includes predicted effluent for copper of 0.042 mg/L. These levels approach the British Columbia's water quality guidelines associated with acute toxicity and so may be acutely toxic at the end-of-pipe (i.e. prior to discharge via diffuser in Whitefish Lake and subsequent dilution). Section 36.3 of the Fisheries Act specifies that, no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish."[1] The Canadian Metal and Diamond Mining Effluent Regulations (MDMER) includes a definition of deleterioussubstance as effluent that is acutely lethal to several commonly tested species of fish and aquatic life. Question/Recommendation: Guidelines are not prescriptive and so the predicted effluent may or may not be acutely toxic, but since the levels of contaminants in predicted effluent are relatively high, it is recommended that the risk of acutely toxic effluent at end-of-pipe be assessed to support the EIS. Specifically, it is recommended that acute toxicity tests as described by MDMER be conducted on water quality matching the predicted effluent presented in the EIS. [1] https://laws-lois.justice.gc.ca/eng/acts/F-14/page-5.html#docCont Also noted in Appendix B, Comment #19 (Source Environmental Associates).	
134.	ERFN (February 22, 2023)	Section 2.2.3.8 and 2.2.3.9	Comment #ERFN-031:	

			(i) Sections 2.2.3.8 and 2.2.3.9 of the EIS describe the IWWTP and note that the design of the system is being informed by an ongoing Best Available Technology (BAT) study. The EIS is not clear if the system as described in the EIS is a reflection of application of BAT or if this is an interim design pending completion of the BAT study. (ii) Similarly, the EIS notes the use of zero valent iron (ZVI) as a treatment reagent but it is not apparent how this is to be used in the process. ZVI can be a very effective method for removing metals and metalloids from mine water, particularly for relatively small treatment systems (iii) Finally, the impact of different treatment technologies on TDS of effluent should be considered given the previous comment about potential for acute toxicity with the predicted effluent quality. Salt removal systems should be evaluated Question/Recommendation: (i) Given the predicted effluent quality in 2.2.3.9 and the relatively high predicted levels of copper, it is recommended that this BAT study include assessment of use of organosulphide reagents (i.e. trimercapto-triazine). This type of chemical is a common and inexpensive method of removing heavy metals such as copper and cadmium from water. Use of organosulphide is commonly incorporated into mine water treatment systems and is generally recognized as part of BAT treatment of mine water [1]. Copper levels in the range of single digit parts per billion (ppb) are achievable, below the 22 ppb predicted effluent quality. (ii) ERFN support the inclusion of this reagent in the process but requests additional information on how it is to be used. The predicted level of selenium in effluent (42 ppb) can likely be improved on through better application of ZVI (iii) Overall, ERFN support the use of a BAT study to inform design of the IWWTP and recommend that further bench testing be conducted in the future following the BAT study to improve on the predicted effluent quality presented in the EIS [1] https://mend-nedem.org/wp-content/uploads/MEND3.50.1BATEAAppAD.pdf Also noted in Appendix B, Comment #20 (Source Environmental Associates).	
135.	ERFN (February 22, 2023)	Section 2.2.3.8 Industrial Wastewater Treatment Plant	Comment #ERFN-032: According to the IWWTP flowsheet shown in section 2.2.3.8 of the EIS, treated effluent will be recycled Question/Recommendation: Considering that the leach is acidic and the IWWTP involves acid neutralization, it is recommended that drawing water for recycle from earlier in the treatment process be considered. This would reduce reagent demands from unnecessary acidification/neutralization as well as the amount of radionuclide and metals-laden treatment by-products that will have to be used and managed.	

			Also noted in Appendix B, Comment #21 (Source Environmental Associates).	
136.	ERFN (February 22, 2023)	Section 2.2.3.9 Treated Effluent Monitoring and Release Ponds	Comment #ERFN-033: Section 2.2.3.9 of the EIS states, "the effluent quality was determined to be achievable through laboratory test results conducted by Denison at SRC." However, Section 6.2 of Appendix 10- A (Sensitivity Analysis) states, "If treated effluent is released at the maximum upper bound discharge rate, cadmium concentration in Whitefish Middle/South and McGowan Lake (LA-1) would exceed its surface water quality guideline of 0.00004 mg/L, and chromium concentration in Whitefish Middle/South would exceed its surface water quality guideline of 0.001 mg/L. The modelled concentrations of other COPCs are expected to be below their corresponding surface water quality guidelines." Question/Recommendation: Methods of preventing these exceedances should be explored and incorporated into the project. For example, alternative treatment technology may reduce metal loading with treated effluent, and greater water recycle would reduce the volume of treated water discharged, reducing the load of metal introduced to Whitefish Lake via treated effluent. More generally, these exceedances caused by a higher rate of discharge is an example of how the assumption to exclude water recycling from water balance predictions is not entirely conservative. Also noted in Appendix B, Comment #22 (Source Environmental Associates).	
137.	ERFN (February 22, 2023)	Geology and Groundwater	Comment #ERFN-034: The Application lacks a clear discussion of the various source terms that were considered for water quality modelling. Most reagents utilized for the ISR process include highly soluble contents and must be considered for modelling purposes. The Application is lacking a clear discussion of the various source terms and information geochemical stability of various sources that were considered for water quality modelling. Question/Recommendation: Please clearly describe the sources of various contaminants in process water and how they inform water management/water treatment design. Distinguish between contaminants found in natural groundwater, contaminants released through leaching, and contaminants introduced as mill reagents (i.e. sulphate, TDS). Also noted in Appendix B, Comment #23 (Source Environmental Associates).	
138.	ERFN (February 22, 2023)	Section 2.2.1.4.3 Permeability Enhancement	Comment #ERFN-035: Section 2.2.1.4.3 lists options considered for enhancing leach solution permeability in the leaching zone and includes potential for use of propellant permeability enhancement.	

			Question/Recommendation: (i) How does this material compare to common blasting explosives (i.e. ANFO) in terms of potential for water soluble explosive residue to be left behind after use? (ii) ANFO is commonly an environmentally relevant source of ammonia, nitrite, and nitrate at mine sites. (iii) Please discuss the potential impact of propellant permeability enhancement products as a source of contaminants. Also noted in Appendix B, Comment #24 (Source Environmental Associates).	
139.	ERFN (February 22, 2023)	Section 2.2.2 Processing Plant Components	Comment #ERFN-036: Section 2.2.2 states "Denison's processing plans are based on numerous metallurgical tests completed as part of engineering activities. A detailed metallurgical testing program was developed and implemented in collaboration with the Saskatchewan Research Council (SRC) under the supervision of several third- party consultants and Denison. Around 1,000 L of UBS was produced by leaching over 64 kg of core samples recovered from the Phoenix deposit and the UBS produced was tested using variations of several parameters to define the processing plant design and its components." This work is critical for informing levels of contaminants expected to be leached in the in-situ process which in turn require treatment and management. This work is not discussed substantially in the EIS. Question/Recommendation: The EIS should discuss how this work was carried out, a summary of key conclusions including estimates of freshwater and recycled water use, recoveries expected, reagents consumed, waste produced and steady-state contaminant concentrations. Also noted in Appendix B, Comment #25 (Source Environmental Associates).	
140.	ERFN (February 22, 2023)	Section 2.2.4.8 Clean Waste Rock and Clean Waste Rock Pad	Comment #ERFN-037: Section 2.2.4.8 states that approximately 7,800 m3 of clean waste rock will be generated because of mining activities, and Section 2.2.3.6 states that "a pond may be constructed beside the clean waste rock pad (Section 2.2.4.8) to collect runoff if required. The pond would be a single geomembrane-lined pond (Figure 2.2-26). Water collected in the clean waste rock pond would be routed to the process water pond." Question/Recommendation: The Application however does not provide information on the geochemical stability of the waste rock and how waste rock is expected to impact water quality of runoff/pond inflow. Also noted in Appendix B, Comment #26 (Source Environmental Associates).	

141.	ERFN (February 22, 2023)	Section 2.2.3.8 Industrial Wastewater Treatment Plant	Comment #ERFN-038: Section 2.2.3.8 states that "the majority of the IWWTP precipitates formed during the second stage of treatment are gypsum and these precipitates are not expected to be radioactive." Question/Recommendation: (i) How much radioactivity is expected in these solids? (ii) Did the metallurgical test program include testing these solids for radioactivity and, if available, have these results been considered in the long-term management strategy for these solids? Also noted in Appendix B, Comment #27 (Source Environmental Associates).	
142.	ERFN (February 22, 2023)	Section 2.2.3 Water Management	Comment #ERFN-039: Figures 2.2-15 and 2.2-16 show that water from the IWWTP process precipitate pond will be recycled to the process pond at a rate of 5.35 m^3/h that then primarily reports back to the IWWTP for treatment with some used for drilling. The water from the IWWTP precipitate pond forms ~65% and 41% of the flow rate reporting to the IWWTP for treatment during the operations and Decommissioning phases, respectively, so this is a significant source of feed water to the IWWTP. Question/Recommendation: The geochemical stability of the precipitates in the two ponds should be evaluated and incorporated as source terms in water quality modeling. This should be discussed in the EIS. Also noted in Appendix B, Comment #28 (Source Environmental Associates).	
143.	ERFN (February 22, 2023)	Geology and Groundwater	Comment #ERFN-040: The EIS does not provide information on the mine's plans for events of care and maintenance (C&M) or temporary closure. C&M is an important potential phase of mine life that warrant assessment of potential impacts. During C&M, changes to the site-wide water balance would be expected, potentially requiring modifications to the water management strategies at the site. In particular, it is important that a conceptual plan for how solution would be recovered/injected/managed on surface during a period of care and maintenance. Question/Recommendation: The EIS should include a conceptual description of how each major piece of mine infrastructure would be operated during C&M maintenance and how risk of environmental impact would be mitigated under these conditions. The following topics are recommended for discussion in C&M planning at the EIS level: (i) Any significant changes to the water management strategies at the site, including whether the Industrial Wastewater Treatment Plant would be expected to continue operating during C&M.	

			(ii) Any significant changes in how the freeze wall would be operated. (iii) Discussion of how leachate and process solution would be managed, i.e. would injection/recovery continue or cease, would any recovered solution be subjected to uranium recovery, how solution would be managed on surface if re-injection ceased. (iv) If monitoring activities would change during care and maintenance. (v) If any new mitigation measures are required to address C&M specific risks. The development of the Care and Maintenance Plan must include input from ERFN. Also noted in Appendix B, Comment #29 (Source Environmental Associates).	
144.	ERFN (February 22, 2023)	Section 2.9.1 Environmental Management System Framework	Comment #ERFN-041: Section 2.9.1 includes discussion of several environmental management plans. Question/Recommendation: As a general comment, ERFN recommend that requirements for any project plan include the following, at a minimum, in addition to plan- specific topics: (i) Purpose and objectives of the plan; (ii) Roles and responsibilities of staff including identification of Qualified Professionals(s); (iii) Schedule for implementing the plan through relevant project phases; (iv) Means by which the effectiveness of the mitigation measures will be evaluated including the schedule for evaluating effectiveness; (v) Schedules and methods for the submission of reporting to specific regulatory agencies, ERFN, and the public and the required form and content of those reports; (vi) Process and timing for updating and revising the plan including consultation with regulatory agencies and ERFN that would occur in connection with such updates and revisions. Further, following the development of a plan, the plan should be provided to regulatory agencies and ERFN for review and consultation. Consultation should include invitation for agencies and ERFN to provide their views on the content of the plan in a reasonable timeframe. Subsequently, Denison should provide a written explanation to each party that provided comments describing how the views and information provided by the party has been considered in the revised plan or why such views and information were not addressed in a revised plan Also noted in Appendix B, Comment #30 (Source Environmental Associates).	

145.	ERFN (February 22, 2023)	Section 2.9.1 Environmental Management System Framework	Comment #ERFN-042: Section 2.9.1 of the EIS discusses environmental management activities including emergency response. As written, this section of the EIS focuses on the roles and responsibilities of Project staff. Communication to ERFN in the event of a mine emergency is critical for ERFN to evaluate potential impacts to rights and interests. Some mines in Canada overlook the importance of this communication and erode important partnerships with their Indigenous hosts by communicating information late or without transparency. Question/Recommendation: Recommendations for inclusion in the Plan include a communication protocol based on emergency risk ratings and communications with Nation representatives for high consequence near-miss incidents (i.e. near-miss incidents that could have resulted in major environmental impacts or medical emergencies), as these can be valuable opportunities to improve training and operating practices. It is recommended that management plans and emergency response planning include communication protocols with ERFN so that ERFN is alerted to any incident in a timely fashion. Collaboration with ERFN in plan development, communication protocol, involvement of ERFN members in monitoring/response planning is recommended. Also noted in Appendix B, Comment #31 (Source Environmental Associates).	
146.	ERFN (February 22, 2023)	Section 2.2.4.5 Process Precipitate Pond	Comment #ERFN-043: Section 2.2.4.5 states *"the precipitates generated in the processing plant will be transferred to the process precipitate pond….this pond design will allow the precipitate totes to be stacked below ground level…….any runoff collected in the pond will be directed to the process water pond and recycled through the plant."* The Application also states that the waste stored in this pond contains 2-3% uranium rendering it potentially economic for resale and recovery. Question/Recommendation: A plan for managing this material should reprocessing not be economically viable should be prepared and discussed in the EIS. Also noted in Appendix B, Comment #32 (Source Environmental Associates).	
147.	ERFN (February 22, 2023)	Section 2.2.4.3.2 Industrial Landfill	Comment #ERFN-044: Section 2.2.4.3.2 discusses the industrial landfill that accepts industrial waste including radiologically contaminated waste. Leachate from this landfill will be collected and sent to the leachate collection pond immediately north of the landfill and eventually to the process water pond. Although the Application states that "upon closure of the site, the industrial landfill will be covered with an engineered impermeable liner system to minimize infiltration of precipitation into the containment system," the leachate is not expected to stop. The Application however does not provide information on the management of the leachate from the industrial landfill post- closure.	

			Question/Recommendation: Considering the limited life of the double liner system used for the landfill area, management of radiologically contaminated waste and its impact on the receiving environment for all phases of the project must be discussed in the EIS. Also noted in Appendix B, Comment #33 (Source Environmental Associates).	
148.	ERFN (February 22, 2023)	Section 2.2.2.2.1 Radon Purge Tank	Comment #ERFN-045: Section 2.2.2.2.1 states "the radon purge tank will contain a mechanical ventilation system to facilitate the aeration of the solution and the removal of radon gas from the UBS to the air outside of the plant." Question/Recommendation: (i) Is radon stripping on the exhaust proposed or is it to be directed into the atmosphere? (ii) Has exposure outside the building been evaluated? Also noted in Appendix B, Comment #34 (Source Environmental Associates).	
149.	ERFN (February 22, 2023)	Section 8.1.3 Existing Environment	Comment #ERFN-046: Detailed baseline hydrology collected in 2011-2014, prior to the operation of Cameco Cigar Lake. Very little data have been collected since (~1 measurement per year 2016-2019) Question/Recommendation: Update continuous flow data to include more recent years, with emphasis on low-flow period and winter flows.	
150.	ERFN (February 22, 2023)	Section 8 General (Aquatic Environment)	Comment #ERFN-047: Surface water withdrawal Question/Recommendation: Please provide a description (of waterbody characteristics as well as the precise latitude and longitude proposed) of all water withdrawal points to be used at any point during this project.	
151.	ERFN (February 22, 2023)	Section 8 General (Aquatic Environment)	Comment #ERFN-048: Recycling of process water. Question/Recommendation: Please provide examples from existing ISR projects that support the efficacy of process water treatment and re-use.	
152.	ERFN (February 22, 2023)	Section 8.1 General (Aquatic Environment)	Comment #ERFN-049: Recycling of process water appears to not be meaningfully incorporated into water balance modelling.	

			Question/Recommendation: Please clarify and justify how recycled process water was incorporated into surface water quantity / water balance modelling.	
153.	ERFN (February 22, 2023)	Section 8.1.5 Mitigation Measures	Comment #ERFN-050: Denison makes "loose" promises with regard to maintenance and monitoring of water control structures, and avoiding sedimentation in local waterbodies/watercourses Question/Recommendation: Provide a water management plan (WMP) that addresses each phase of the project. Denison notes high confidence in assessments, implying few/no unknowns that would inhibit the creation of a sufficient WMP	
154.	ERFN (February 22, 2023)	Section 8.1.9 Surface Water Quality	Comment #ERFN-051: Notable lack of winter data for stream and lake sites. Question/Recommendation: Conduct at least 1 winter field visit to verify/refine field data. The focus should be on watercourses adjacent to and directly interacting with the project, and the proposed discharge zone in South Whitefish Lake.	
155.	ERFN (February 22, 2023)	Section 8.2.3.3; Tables 8.2-2 to 8.2-4 Existing Surface Water Quality	Comment #ERFN-052: Note these tables use different benchmark/guideline compared to the Water Quality baseline study for Molybdenum and Zinc. Question/Recommendation: Proponent to provide justification for use of different Water Quality guidelines, or else adjust tables to reflect guidelines used in baseline study.	
156.	ERFN (February 22, 2023)	Table 8.2-5 Existing Surface Water Quality	Comment #ERFN-053: Potential project interactions during construction. Question/Recommendation: (i) What about the potential for a grout/cement spill to the environment? (ii) Proponent should include recognition of potential deleterious interaction of construction materials (notably grout/cement) with the aquatic environment, and appropriate mitigation.	
157.	ERFN (February 22, 2023)	Section 8.2.4.1.1Site Water Management	Comment #ERFN-054: It is noted that the treated effluent holding ponds are designed to hold water for 72 hr. prior to discharge. Question/Recommendation: What laboratory will be used to test treated effluent samples to provide results within 72 hr? What if the water is deemed unfit to discharge?	

			Please provide a surface water quality monitoring plan that includes clear information regarding sampling and analysis timelines to ensure discharge water is sufficiently tested prior to release. "Emergency release" due to pond capacity overage is unacceptable.	
158.	ERFN (February 22, 2023)	Section 8.2.4.1.1Site Water Management	Comment #ERFN-055: "Loose" commitment to Water Quality monitoring – "Treated water…will be monitored prior to release." Question/Recommendation: At what locations? How often? Which parameters? Recommend the creation of a draft surface water monitoring plan to ensure appropriate actions are in place.	
159.	ERFN (February 22, 2023)	Section 8.2.4.1.1Site Water Management	Comment #ERFN-056: "Prior to release to a surface waterbody or injected into groundwater via deep well injection." Treated water discharge to South Whitefish Lake, where sufficient dilution of effluent would be anticipated, was the prior commitment. This is the first instance mentioned of deep well injection of effluent. No other aspect of this EIS discusses deep well injection of effluent. Question/Recommendation: Clarify the proposed effluent discharge method, and if Denison intends to use deep well injection, then the EIS should be updated to reflect the potential interactions associated with this method.	
160.	ERFN (February 22, 2023)	Section 8.2.4.2 Potential Project-related Effects	(applies elsewhere as well) Comment #ERFN-057: Section notes that "Whitefish Lake" will receive discharge during operation and decommissioning, however, EIS separates into North and South Whitefish Lake. Question/Recommendation: Clarify throughout which Whitefish Lake (north or south) will be the receiving environment for effluent discharge.	
161.	ERFN (February 22, 2023)	Section 8.2.4.2.1 Mobilization of Suspended Materials	Comment #ERFN-058: "acceptable levels" of TSS is noted as the deciding factor for safe discharge of treated water. Question/Recommendation: (i) What about other chemical constituents? All COPCs in the effluent are predicted to exceed long-term Water Quality Guidelines (CCME). (ii) What about MDMER requirements for the effluent to pass toxicity testing at end-of- pipe? (iii) Clarify whether Denison intends TSS to be the only factor contributing to the safety of effluent for discharge, and how the MDMER requirements for toxicity testing will be met.	

162.	ERFN (February 22, 2023)	Section 8.2.4.2.1 Mobilization of Suspended Materials	Comment #ERFN-059: Salinity does not appear to be included as a factor for considering effluent safe for discharge. Question/Recommendation: Predicted salinity of effluent is sufficiently high as to possibly result in failure of the acute toxicity testing required under MDMER. (i) Please justify the exclusion of salinity as a factor for considering effluent safe for discharge. (ii) Please ensure the potential impacts of salinity on aquatic VCs are recognized and discussed.	
163.	ERFN (February 22, 2023)	Table 8.2-10	Comment #ERFN-060: Sulphate is given 2 different values in the table in the LA-5 well-mixed column (633 and 63.83), but not in other columns. Question/Recommendation: (i) Clarify whether this is a typo, or whether these rows are referring to different constituents. (ii) Clarify why predicted sulphate is anticipated to be lower for the lower screening concentration.	
164.	ERFN (February 22, 2023)	Section 8.2.4.2.3; Table 8.2-11 Near-Field Water Quality Model	Comment #ERFN-061: Mixing zone modelling. Question/Recommendation: (i) Why is plume formation in South Whitefish Lake modelled based on mixing zones in rivers? (ii) Justify the use of a lentic mixing model to represent effluent plume formation in a lotic environment.	
165.	ERFN (February 22, 2023)	Section 8.2.4.2.3 Near- Field Water Quality Model	Comment #ERFN-062: Mixing zone modelling in winter; there are very minimal data for the receiving waterbody in the winter, other than 1 shallow sampling event in April. Assumption is under-ice temperatures at the diffuser will be 3-4oC, with effluent emerging at 5oC. April sampling event suggests that under- ice temperatures may be closer to 0.5°C. Question/Recommendation: (i) How much effect will temperature differences between effluent and surrounding water have on mixing? (ii) Please clarify how mixing changes if input current from Icelander R. drops to near zero. (iii) Please clarify the effect of effluent salinity on mixing during winter.	

166.	ERFN (February 22, 2023)	Table 8.2-11	Comment #ERFN-063: Average current velocity predicted in South Whitefish Lake at the discharge location is 0.23 m/s. However, in S. 4.3 of the Ecometrix aquatic baseline, average current velocity at S-6 (the channel feeding South Whitefish Lake) is 0.2 m/s. Question/Recommendation: (i) Why are the current velocities used to model the discharge mixing greater than the measured inflow velocities? (ii) Justify the disconnect between the current velocities measured upstream of the discharge location, and the velocities used to model the mixing zone.	
167.	ERFN (February 22, 2023)	Section 8.2.7 Cumulative Effects	Comment #ERFN-064: Meeting Water Quality benchmarks Question/Recommendation: ERFN recognizes and appreciates Denison's commitment to meeting Water Quality benchmarks within and downstream of South Whitefish Lake. How will "appropriate benchmarks" be determined?	
168.	ERFN (February 22, 2023)	Section 8.2.8 Monitoring and Follow-up	Comment #ERFN-065: Monitoring program expectations, guidance, and commitment. Question/Recommendation: The proposed monitoring seems, on its surface, reasonable. However, as noted above it is important to see a water quality monitoring plan integrated with a water management plan grounded in guidance and regulatory requirements (e.g., MDMER) that includes appropriate triggers, actions, and safeguards.	
169.	ERFN (February 22, 2023)	Section 8.2.9 Surface Water Quality Summary	Comment #ERFN-066: Site-specific effluent treatment: the EIS overall is vague about the treatment planned for effluent prior to discharge. Question/Recommendation: Please provide examples of successful existing effluent treatment, preferably from ISR projects, which will form the basis for the site- specific treatment.	
170.	ERFN (February 22, 2023)	Section 8.3.1.1 Valued Component Selection	Comment #ERFN-067: MDMER requirements and deleterious substances. Question/Recommendation: Per MDMER guidance, please include a recognition that testing for Ammonia (un-ionized) is required under MDMER, and the requirement that effluent (at end-of-pipe, prior to dilution) must pass lethality testing.	
171.	ERFN (February 22, 2023)	Section 8.3.3.1 Fish Habitat	Comment #ERFN-068: Fish habitat characterization.	

			Question/Recommendation: (i) What fish habitat characterization standards were used during field surveys? (ii) Were members of the field teams environmental professionals experienced in the assessment of fish habitat?	
172.	ERFN (February 22, 2023)	Table 8.3-5	Comment #ERFN-069: Burbot spawning habitat Question/Recommendation: What criteria were used to identify Burbot spawning habitat? Based on Burbot habitat preferences, SA-6 (at minimum) should be suitable for spawning.	
173.	ERFN (February 22, 2023)	Table 8.3-5	Comment #ERFN-070: Fish species distribution and spawning habitat. Table 8.3-4 suggests the presence of Lake Whitefish in South Whitefish Lake (LA-5). Question/Recommendation: • Clarify fish presence in South Whitefish Lake, specifically Lake Whitefish and Lake Trout. ERFN would like to emphasize the importance of Northern Pike, Lake Whitefish, Lake Trout, Walleye, and White/Longnose Sucker to community members.	
174.	ERFN (February 22, 2023)	Figure 8.3-8	Comment #ERFN-071: The proposed effluent discharge point appears to be extremely close to Northern Pike spawning habitat at the north/upstream end of South Whitefish Lake. Question/Recommendation: Please clarify the measures proposed to ensure effluent discharge does not affect Northern Pike spawning habitat, recognizing that Northern Pike spawning occurs shortly after ice-off, before high water.	
175.	ERFN (February 22, 2023)	Section 8.3.4.2.1 Construction	Comment #ERFN-072: First mention of potentially "necessary" releases to the environment during the construction phase. Question/Recommendation: (i) What defines a situation where the release of collected/stored water is "necessary" during construction? (ii) Are there any other parameters other than TSS that will be measured to determine that water collected during construction is "safe"? (iii) Where will the collected water be discharged in the event of a "necessary" release during construction? ERFN would like to emphasize that a water management plan would address many of these questions.	

176.	ERFN (February 22, 2023)	Section 8.3.4.2.1 (and elsewhere) Mobilization of Suspended Materials	Comment #ERFN-073: TSS as the parameter measured to determine the "safety" of effluent prior to discharge. Note that MDMER also requires that effluent at end-of-pipe must pass lethality testing. Question/Recommendation: (i) Please provide justification for only considering TSS with respect to the safety of effluent for discharge. (ii) If multiple parameters will be considered, please update the text to reflect this; at minimum, "e.g.," should be used rather than "i.e.,".	
177.	ERFN (February 22, 2023)	Section 8.3.4.2 Potential Project-related Effects	Comment #ERFN-074: Consideration of overprinting as the only potential effect to fish habitat. Defining harm to fish habitat based solely on area Question/Recommendation: Effects to the quality/usability of fish habitat should be considered as part of the EIS, rather than simply the surface area covered by project structures.	
178.	ERFN (February 22, 2023)	Section 8.3.4.2.3 Controlled Discharge to Receiving Environments	Comment #ERFN-075: "Discharge to the environment is not expected during construction." This directly contradicts the statements in other sections regarding the potential for necessary water releases during construction. Question/Recommendation: Provide clarification regarding potentially necessary releases during construction.	
179.	ERFN (February 22, 2023)	Section 8.3.4.2.3 (and elsewhere) Controlled Discharge to Receiving Environments	Comment #ERFN-076: "Effluent rates during Decommissioning are expected to be less than during Operation." Denison commonly uses "expected" but does not provide elaboration. Question/Recommendation: Please provide clarity and justification (e.g., examples) for expectations regarding effluent rates.	
180.	ERFN (February 22, 2023)	Section 8.3.5 Mitigation Measures	Comment #ERFN-077: Adherence to DFO Interim Code of Practice for Temporary Stream Crossings. The proposed crossings are clear span bridges, which do not classify as temporary crossings. Question/Recommendation: Based on DFO code of practice guidance, the proposed crossings do not meet the requirements for being "temporary." Please update this section to include adherence to: *Code of Practice for Clear Span Bridges and Code of Practice for Culvert Maintenance.*	

181.	ERFN (February 22, 2023)	Section 8.3.5 Mitigation Measures	Comment #ERFN-078: Monitoring and management of effluent. Question/Recommendation: Given that discharge is anticipated to trigger MDMER, adherence to the requirements for effluent quality within MDMER should be explicitly recognized as part of mitigation measures.	
182.	ERFN (February 22, 2023)	Section 8.3.5 Mitigation Measures	Comment #ERFN-079: Preparation of an environmental code of practice. Question/Recommendation: (i) Please provide clarification regarding a timeline for the preparation of an environmental code of practice. It is ERFN's preference that this document be in place prior to construction. (ii) Will the environmental code of practice include consideration and planning in the event of malfunctions, as required under S19 of CEAA 2012? (iii) Will the environmental code of practice include and adaptive management plan for effluent discharge and treatment?	
183.	ERFN (February 22, 2023)	Section 8.3.6.1 Construction	Comment #ERFN-080: Determination of effluent safety for release to environment. Question/Recommendation: Note again that earlier sections had asserted that contact water during construction would not be released to environment. Please revise the final sentence of paragraph 2 to be relevant to the fish & fish habitat section, as it currently refers to sediment chemistry and benthic invertebrate communities.	
184.	ERFN (February 22, 2023)	Section 8.3.6.1 Construction	Comment #ERFN-081: Upgrading two stream crossings to clear-span bridges. Question/Recommendation: ERFN would like to re-emphasize the above comment [reference to ERFN comment 77] related to adherence to DFO's *Code of Practice for Clear Span Bridges.* The proposed crossings are clear span bridges, which do not classify as temporary crossings.	
185.	ERFN (February 22, 2023)	Section 8.3.6.1 Operation	Comment #ERFN-082: Continued reference to deep-well injection of effluent. Question/Recommendation: Provide clarity throughout document on whether effluent will be discharged to South Whitefish Lake, or, to ground via deep well injection. If deep well injection is proposed, please revise EIS to reflect the potential interactions of this method.	
186.	ERFN (February 22, 2023)	Section 8.3.6.1 Operation (and elsewhere)	Comment #ERFN-083: The effluent discharge will be heated to avoid freezing during winter.	

			Question/Recommendation: (i) What are the implications for mixing during winter, given effluent will likely be considerably warmer than the surrounding water? (ii) How has Denison accounted for the potential for the warmer effluent creating an attractant effect, a reduction in DO, or other interaction that increases the risk of impacts to aquatic biota? (iii) Has Denison collected under-ice thermocline/isocline and in-situ WQ data during winter to support any assertions?	
187.	ERFN (February 22, 2023)	Section 8.3.6.1 Operation (and elsewhere)	Comment #ERFN-084: Effluent discharge point. Question/Recommendation: Bottom-feeding fish such as White Sucker are in extended contact with and will often ingest sediments. Effects on White Sucker were modelled based on sufficient dilution of effluent. What protections will be built into the effluent discharge outlets to ensure bottom-feeding fish such as White Sucker are sufficiently excluded from the mixing zone?	
188.	ERFN (February 22, 2023)	Table 8.3-9	Comment #ERFN-085: The magnitude of residual effect. ERFN disagrees that the parameters and decisions that form the basis for the mixing model and the IMPACT model are sufficient to reliably predict that constituents introduced by project activities will remain below applicable guidelines. Question/Recommendation: Mixing zone calculations should be revisited to account for actual hydrological conditions at the discharge point in South Whitefish Lake. IMPACT model calculations should be revisited to examine worst-case scenarios (e.g., maximum potential discharge of 81 m3/hr. during low-flow and winter) and use more accurate starting points for water quality (existing baseline conditions in South Whitefish Lake rather than a region-wide geometric mean).	
189.	ERFN (February 22, 2023)	Table 8.3-9	Comment #ERFN-086: Reversibility. The assertion of fully reversible Water Quality effects relies on the assumption that all COPCs in the effluent are well-mixed and eventually exit South Whitefish Lake. Question/Recommendation: Please provide clarification and justification for the assumption that COPCs in effluent remains in solution and exit South Whitefish Lake, rather than concentrating over time and/or sequestering in sediments with the potential for future release.	
190.	ERFN (February 22, 2023)	Table 8.3-10	Comment #ERFN-087: Magnitude. This row mentions changes to benthic invertebrate habitat.	

			Question/Recommendation: This table is supposed to be discussing residual effects to fish habitat. Please ensure the residual effect tables include the correct information.	
191.	ERFN (February 22, 2023)	Table 8.3-10	Comment #ERFN-088: Magnitude. The assertion of low magnitude relies on defining a change to fish habitat based solely on % of surface area affected. Question/Recommendation: Recommend revising this table and the associated written section to include discussion relating to potential changes to the *quality* of fish habitat in addition to the *amount*.	
192.	ERFN (February 22, 2023)	Section 8.3.6.2 Significance and Confidence	Comment #ERFN-089: The judgement of not significant is reliant on successful mitigation measures, and that ecological integrity won't be altered beyond "an acceptable level." Question/Recommendation: (i) Recommend updating this section upon revision of the mitigation section, per above comments. (ii) What does "ecological integrity" mean? How is it measured? How will it be monitored? (iii) How will "an acceptable level" be determined? Acceptable to whom? ERFN requests that any determination of acceptability include consideration of the rights and values of Indigenous Peoples	
193.	ERFN (February 22, 2023)	Section 8.3.6.2 Significance and Confidence	Comment #ERFN-090: "The predicted confidence with respect to the Fish and Fish Habitat VC is high as the mobilization of suspended materials can be readily mitigated." Question/Recommendation: Please clarify the justification for not considering other Water Quality-related factors (e.g., chemistry) and focusing on TSS mitigation.	
194.	ERFN (February 22, 2023)	Section 8.3.6.2 Significance and Confidence	Comment #ERFN-091: Conservative nature and accuracy of Water Quality modelling. Despite assumptions being conservative, the discharge model cannot produce conservative predictions if the inputs are inaccurate. Question/Recommendation: Please see ERFN comments 47-52, 55, 56, 58-64, 66-67, 73, 78, 80, 82-83, 85 and 86 for concerns regarding inaccurate model inputs.	
195.	ERFN (February 22, 2023)	Section 8.3.6.2 (and elsewhere) Significance and Confidence	Comment #ERFN-092: Focus on suspended materials. Sulphate in the effluent is predicted to be exceptionally high (almost 4,000 mg/L), with baseline values in South Whitefish Lake <1 mg/L.	

			Question/Recommendation: Why were potential cascading effects of Water Quality not considered in the residual effects assessment? Very high sulphate in effluent has the potential to instigate eutrophication and/or cyanobacterial blooms through sulphate reduction pathways.	
196.	ERFN (February 22, 2023)	Section 8.3.6.2 Significance and Confidence	Comment #ERFN-093: Assertion of conservative assumptions for Water Quality modelling. Year-round discharge at the average rate (36.5 m3/hr.) is not conservative. Question/Recommendation: Please revisit the modelling with sufficiently conservative assumptions, such maximum potential discharge (81 m^3/hr.) during low-flow and/or winter.	
197.	ERFN (February 22, 2023)	Section 8.3.6.2 Significance and Confidence	Comment #ERFN-094: Use of conservative 95th percentile for baseline Water Quality. According to the model documentation provided in the EIS appendices, the geometric mean condition across all regional waterbodies was used to define baseline WQ. Question/Recommendation: Recommend revisiting the Water Quality modelling using the 95th percentile specifically for South Whitefish Lake (LA-5) as the baseline.	
198.	ERFN (February 22, 2023)	Table 8.4-2	Comment #ERFN-095: Based on baseline data, 3 of 5 samples from LA-5 are >75% clay, and 2 of 5 are >70% sand. With only one year of data and without knowing where samples were collected in the lakes, it is unlikely that the classifications are truly representative of the average condition and variation of bottom sediments in study lakes. Question/Recommendation: (i) ERFN recommends Denison collect additional sediment samples to create a sufficient baseline (ii) ERFN recommends that Denison ensure future sediment sampling stations are located such that, at a minimum, sediments at the inlet, outlet, and potential discharge location of South Whitefish Lake are characterized.	
199.	ERFN (February 22, 2023)	Table 8.4-3	Comment #ERFN-096: Sediment chemistry tables. Question/Recommendation: Why is there no standard deviation or standard error associated with the mean values in this table? Note that for LA-5, 3 of 5 samples have chemistry much more similar to the "maximum" values in Table 8.4-3 than the "mean" values.	

200.	ERFN (February 22, 2023)	Table 8.4-4	Comment #ERFN-097: Benthic invertebrate endpoints. Note that diversity, evenness, and Bray-Curtis for the 2 of 5 sand- dominated samples from LA-5 are considerably higher than for the 3 of 5 clay-dominated samples. This seems to suggest that some areas in LA-5 are especially sensitive to stressors, as suggested in the above paragraph. Question/Recommendation: (i) Why is there no standard deviation or standard error associated with the mean values in this table? (ii) ERFN recommends Denison consider the potentially sensitive areas within the proposed receiving environment (LA-5) in addition to the average condition.	
201.	ERFN (February 22, 2023)	Table 8.4-4	Comment #ERFN-098: Benthic invertebrate endpoints for LA-5 appear to be miscalculated. Based on raw benthos baseline data, total family richness at LA-5 across all reps is 22 (however, mean is 13). %Cladocera, the dominant taxon (water fleas) is 65% across all reps (58% avg). Question/Recommendation: (i) Please revisit and confirm the summary calculations for Table 8.4-4. (ii) Why were more typically pelagic taxa, such as Cladocera, not excluded from benthic invertebrate community characterizations as is often recommended in analytical guidance?	
202.	ERFN (February 22, 2023)	Section 8.4.3.2.5 Benthic Invertebrate Chemistry	Comment #ERFN-099: Use of caddisfly larvae to characterize benthos tissue. Caddisflies are rare across the LSA, and extremely rare in South Whitefish Lake (LA-5) based on baseline data (only 4 individuals across all 5 replicates). Question/Recommendation: (i) Why were caddisfly larvae selected for benthic invertebrate tissue characterizations when they do not appear to be representative of the community? (ii) ERFN recommends Denison revisit the characterization of baseline benthic invertebrate tissue using taxa that are more relevant to the project or whole-community samples.	
203.	ERFN (February 22, 2023)	Table 8.4-5	Comment #ERFN-100: Benthic invertebrate tissue chemistry summary. Question/Recommendation: Please include any available tissue chemistry guidelines in this table.	
204.	ERFN (February 22, 2023)	Table 8.4-5	Comment #ERFN-101: Benthic invertebrate tissue chemistry summary. One sample per lake, representing only one year of baseline data, is insufficient to characterize baseline conditions.	

			Question/Recommendation: ERFN recommends Denison conduct at least one additional year of baseline data collection, including the collection of multiple benthic invertebrate tissue samples from South Whitefish Lake.	
205.	ERFN (February 22, 2023)	Section 8.5.3 Existing Environment	Comment #ERFN-102 to 104: Fish tissue collection. Question/Recommendation: (i) Why were Lake Whitefish and Walleye not collected for tissue analyses? These species were also identified by ERFN citizens as important resources. (ii) Please provide additional justification for only using 5 fish in a single sample year for the characterization of baseline fish tissue chemistry. (iii) Why were organs, such as livers, discarded? Liver chemistry analyses are commonly recommended in fish tissue characterization guidance.	
206.	ERFN (February 22, 2023)	Section 8.5.4.2.2 Construction	Comment #ERFN-105: "Discharge to the environment is not expected during Construction." There appear to be contradictions across sections regarding whether discharge during construction will not occur, or whether it would occur "if necessary." Any discharge, even emergency discharge, would have implications for the fish health VC and should be considered in this section. Question/Recommendation: Please provide clarity throughout the document with regards to the anticipated effects from discharge (including "if necessary" emergency discharge) during construction.	
207.	ERFN (February 22, 2023)	Section 8.5.4.2.2 Operation and elsewhere Section 8.5.6.2 Significance and Confidence in the Assessment	Comment #ERFN-106 and ERFN-111: "The Project was assessed as having…a continuous effluent discharge rate of 81.0 m3/hr." This statement appears to contradict earlier assertions (see comment # ERFN -093 regarding S 8.3.6.2, above) that the conservative WQ model was based on average discharge of 36.5 m3/hr. Question/Recommendation: Please provide clarification throughout document on whether the assessments were based on the greatest potential effects at a discharge rate of 81 m^3/hr., or a reduced potential effect at a discharge rate of 36.5 m^3/hr. If assessments were not conducted based on discharge at 81 m^3/hr., please provide additional justification for using less- conservative estimates.	
208.	ERFN (February 22, 2023)	Section 8.5.4.2.2 Operation	Comment #ERFN-107: "Sediment baseline concentrations were predicted from surface water concentrations." Question/Recommendation:	

			Why were sediment baseline concentrations not based on actual sediment baseline data?	
209.	ERFN (February 22, 2023)	Section 8.5.4.2.2 Operation	Comment #ERFN-108: "The dw to ww ratio of 0.25 to 1 from CSA N288.1-20 was used." Note that the recommended ww criterion after conversion, if site- specific data were used, would be closer to 2.28 mg/kg (ww) and White Sucker tissue predictions would exceed this criterion. Question/Recommendation: Why were site-specific %moisture data not used for this conversion? It would likely be closer to 0.2 to 1 based on actual fish tissue baseline data.	
210.	ERFN (February 22, 2023)	Figure 8.5-5	Comment #ERFN-109: Predicted tissue concentrations of selenium in Northern Pike and White Sucker. Based on the IMPACT model report, Northern Pike were exposed to COPCs through water only (despite being used to represent piscivorous predator), and White Sucker were exposed through water and sediments (as it is a bottom-feeder). Question/Recommendation: (i) Please justify the use of the IMPACT model data for Northern Pike tissue, given that it excludes any pathway related to piscivory. (ii) Please justify the use of the IMPACT model data for White Sucker tissue, given that is excludes any pathway related to the consumption of benthic invertebrates in addition to exposure to sediment. (iii) Note that studies on the toxicity of effluent to fish at the nearby Cameco Key Lake mine directly implicated dietary selenium.	
211.	ERFN (February 22, 2023)	Section 8.5.5 Mitigation Measures	Comment #ERFN-110: "Implement Project-specific monitoring programs…that include…and applying adaptive management, if necessary." Question/Recommendation: Please remove the "if necessary" qualifier; ERFN considers the monitoring mentioned in 8.5.5 and the application of adaptive management to be necessary for the successful mitigation of residual effects.	
212.	ERFN (February 22, 2023)	Section 8.5.6.2 Significance and Confidence in the Assessment	Comment #ERFN-112 "A high degree of confidence was assumed." Question/Recommendation: ERFN does not echo the high degree of confidence in this assessment, for multiple reasons including (but not limited to): apparent contradictions in the assessment methods and parameters, distinctly lacking baseline data, unsupported selection of modelling parameters, numerous assumptions without evidence for their validity, no references to contingency planning.	

213.	ERFN (February 22, 2023)	Section 8.5.8 Monitoring and Follow-Up	Comment #ERFN-113: Regulatory criteria for monitoring data comparison. Question/Recommendation: ERFN requests including comparisons to any applicable human health guidelines and/or screening criteria in all monitoring programs	
214.	ERFN (February 22, 2023)	Section 8.5.8 Monitoring and Follow-Up	Comment #ERFN-114: Monitoring locations. Question/Recommendation: ERFN requests the addition of a monitoring site for (at minimum) aquatic sediments, located within the Northern Pike spawning habitat north of the proposed discharge location	
215.	ERFN (February 22, 2023)	Section 8.5.8 Monitoring and Follow-Up	Comment #ERFN-115: "It is recognized that additional collection of pre-mining fish tissue concentrations in Whitefish Lake and a reference area is needed." ERFN acknowledges and appreciates this recognition, but notes that the majority of baseline data for aquatic biota and sediments is extremely lacking. This also appears to be the only recognition of insufficient baseline data throughout the entire EIS. Question/Recommendation: Please update the other EIS sections to reflect the data gaps in the baseline sections, and an outline of the plan to address these gaps.	
216.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Table 1-2	Comment #ERFN-116: High-level sample locations are provided, but an appropriate evaluation and characterization of baseline conditions require targeted sampling in specific areas. Question/Recommendation: Please update Table 1-2 to include sampling site coordinates (and replicate coordinates, if they are different), or, please provide a separate list of precise sample coordinates.	
217.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Figure 1-7	Comment #ERFN-117: Based on this figure, neither bathymetry nor habitat surveys were completed on South Whitefish Lake (LA-5). Bathymetry and fish habitat are crucial to evaluating potential project impacts in the receiving environment. Question/Recommendation: (i) If these surveys have been completed, please update Figure 1- 7 and provide the location of these data. (ii) If these surveys represent a data gap, ERFN recommends that Denison complete bathymetry and habitat surveys on South Whitefish Lake to sufficiently characterize the effluent discharge receiving environment.	

218.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Figure 1-8	Comment #ERFN-118: Although benthic invertebrate sampling was completed in South Whitefish Lake, based on this figure, the potential inputs from upstream have not been characterized. Question/Recommendation: ERFN recommends collecting benthic invertebrate samples at SA-6 to characterize the potential upstream inputs to the benthic invertebrate community of the receiving environment.	
219.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 2.0	Comment #ERFN-119: ERFN recognizes that Denison followed standardized or recommended field methodology during the collection of baseline information. Question/Recommendation: (i) What guidance did Denison follow to determine the frequency of baseline sampling? (ii) What guidance did Denison follow to determine the number of years that would provide sufficient characterization of the aquatic baseline? (iii) What guidance did Denison follow to determine the sampling locations and the number of samples?	
220.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 3.5.1	Comment #ERFN-120: The hydrological baseline data are now 8-10 years old. These data are too old to sufficiently characterize the current baseline conditions, especially given that development has occurred in the Project area within that time. Question/Recommendation: Denison should collect updated hydrological baseline data for South Whitefish Lake, including (but not limited to) water level, ice thickness, and bathymetry.	
221.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 3.5.1.3	Comment #ERFN-121: The South Whitefish Lake bathymetric baseline data collected by Golder in 2012 suggests that the average depth was 1.1 m. This appears to contradict the depth used in the mixing model (~3 m). Question/Recommendation: Please clarify the data and decisions that contributed to the depth parameter used for the mixing model.	
222.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 3.5.4	Comment #ERFN-122: Section suggests a collection of habitat data in South Whitefish Lake was completed in 2012 by Golder, and observations were made during the 2016 field program. Question/Recommendation: (i) Where are these data? Does Denison have a detailed characterization of the aquatic habitat in South Whitefish Lake available?	

			(ii) ERFN does not agree that high- level observations made during 2016 are sufficient to confirm that aquatic habitat has remained unchanged for the last 10 years.	
223.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 3.5.5	Comment #ERFN-123: As referenced in comment #ERFN-092, the baseline phytoplankton community for South Whitefish Lake is nearly 30% Cyanophyceae, the highest proportion of cyanobacteria in any Project waterbody except Russel Lake. This is likely to influence the risk of eutrophication in the receiving environment. Question/Recommendation: Please confirm whether the risk of eutrophication in South Whitefish Lake has been considered and justify its exclusion from the EIS.	
224.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 3.5.7	Comment #ERFN-124: Fish spawning habitat. Question/Recommendation: ERFN recognizes the inclusion of Indigenous Knowledge in confirming local fish spawning habitat.	
225.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Table 3-7C	Comment #ERFN-125: Caddisflies comprise <1% of the benthic invertebrate community in the receiving environment. Question/Recommendation: Please justify the specific selection of caddisflies for characterizing the baseline benthic invertebrate tissue chemistry.	
226.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Table 3-8	Comment #ERFN-126: No tissue chemistry guidelines are provided for benthic invertebrates. Question/Recommendation: ERFN recommends the inclusion of any available tissue chemistry guidelines for benthic invertebrates, including those from other Canadian jurisdictions, to provide sufficient context for evaluating the baseline data.	
227.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Table 3-10	Comment #ERFN-127: There appears to be a disagreement between the *n*'s provided in this table, and the description of fish tissue collection methods in the baseline and EIS. The methods section implies that 5 total samples were collected per waterbody, with some samples representing more than 1 fish. Question/Recommendation: Please clarify the fish tissue collection and analysis methods. Were all fish analyzed separately? Were tissues for each "sample" aggregated if multiple fish were required?	

228.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Table 3-10	Comment #ERFN-128: The table presents the average concentration of parameters, but no indication of variation/accuracy. Question/Recommendation: Please provide standard deviation and/or standard error for fish tissue chemistry average values.	
229.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Figures 3-10 and 3-11	Comment #ERFN-129: The inclusion of bathymetric and habitat survey data for North Whitefish Lake (LA-6) from 2018 highlights the lack of similar surveys on South Whitefish Lake (LA-5), which is the actual receiving environment. Question/Recommendation: (i) Please justify the lack of current bathymetric and habitat survey data for South Whitefish Lake. (ii) Denison should conduct multibeam sonar surveys on South Whitefish Lake, the receiving environment, to sufficiently characterize bathymetry and aquatic habitat.	
230.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 4.6.1	Comment #ERFN-130: Paragraph two notes that stage- discharge curves were updated in 2019 to account for greater discharge measured during manual surveys in 2019. Question/Recommendation: (i) Were stage-discharge curves adjusted for flows measured in recent years, other than 2019? Were manual measurements collected in any other recent years? (ii) If not, please justify the adjustment of stage-discharge curves based on a single year that had a higher- than-average discharge. How does Denison know that flows in 2019 were not abnormally high?	
231.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 4.6.1.2 and Table 4-1	Comment #ERFN-131: “In May-early June 2018, the flow at SA-6 was fluctuating around 0.7 m^3/s until end of May before decreasing.” This appears to imply that freshet flows in 2018 (assumedly high flows for that year) were near the minimum discharge measured from Sept 2016 to Aug 2019 (0.717 m^3/s). Question/Recommendation: (i) Were stage-discharge curves updated to reflect the flows in 2018? (ii) Please clarify the decisions and data used for updating stage-discharge curves.	
232.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 4.6.3	Comment #ERFN-132: “Mean channel wetted width, water depth and water velocity were 14 m, 0.7 m and 0.2 m/s, respectively.”	

			Question/Recommendation: How does a wide, slow, low-gradient inflow translate to the current velocities used for mixing modelling? Please refer to the earlier comment and justify the assumptions made for the mixing model.	
233.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 4.6.3	Comment #ERFN-133: "Snails (Gastropoda), mayfly nymphs (Hexagenia sp.) and dragonfly nymphs were observed." Field observations do not substitute for sample collection and taxonomy. Question/Recommendation: As noted in an comment #ERFN-118, ERFN recommends benthic invertebrate sampling at SA-6 to sufficiently characterize the benthic invertebrate community upstream of South Whitefish Lake.	
234.	ERFN (February 22, 2023)	Appendix 8-D Baseline Aquatic Environment Study Section 4.6.4	Comment #ERFN-134: Burbot were recovered at SA-6 but were considered not present in South Whitefish Lake. Question/Recommendation: Please justify the assertion that burbot are not present in South Whitefish Lake, despite recovering them shortly upstream at SA-6.	
235.	ERFN (February 22, 2023)	Appendix 10-A, Appendix A: Wheeler River Project IMPACT Model Figure 2-1	Comment #ERFN-135: This figure illustrates that absorption from surface water was only source of COPCs investigated for Northern Pike as part of the IMPACT model. Northern Pike was intended to represent piscivorous predators for the purpose of this modelling. Question/Recommendation: Please justify the results of the IMPACT model for Northern Pike despite not accounting for piscivory or any other feeding. Note that studies on the toxicity of effluent to fish at the nearby Cameco Key Lake mine directly implicated dietary selenium.	
236.	ERFN (February 22, 2023)	EIS Appendix 10-A, Appendix A: Wheeler River Project IMPACT Model Table 3-4	Comment #ERFN-136: The "Water Baseline" used for the IMPACT model integrates surface water quality from multiple regional waterbodies. This results in baseline chemistry that is lower (sometimes 10x lower) than the chemistry of South Whitefish Lake, the receiving environment. Question/Recommendation: Please revisit the IMPACT model using surface water quality data accurate to the South Whitefish Lake receiving environment.	

237.	ERFN (February 22, 2023)	Section 9.2.1, 9.3.1, and 9.4.1: Influence of IK, LK and Engagement on VC selection.	Comment #ERFN-137: Concerns raised by the ERFN during August 2022 engagement sessions (e.g., for subsistence/harvestable foods, important vegetation communities, and wildlife habitat) do not appear to have been considered during VC selection. Question/Recommendation: Update Section 9 to incorporate concerns raised in the August 2022 submission and demonstrate how these comments have been addressed or considered in the assessment as VCs, or KIs for existing VCs (i.e., wetlands, woodland caribou).	
238.	ERFN (February 22, 2023)	Section 9.2.1, 9.3.1, and 9.4.1: Influence of IK, LK and Engagement on MP considerations.	Comment #ERFN-138: Relevant criteria for VC selection according to the EIS includes: "'contributing roles to biodiversity, ecosystem function, and maintenance of wildlife habitat," and "contributions to environmental, socio-economic, and cultural values of Indigenous groups, the public and other Interested Parties" (EIS 9.2.1, 9.3.1, and 9.4.1), among others. Question/Recommendation: Overall changes in habitat for wildlife and plants of cultural importance within the Project area, LSA and RSA must be considered as a measurable parameter.	
239.	ERFN (February 22, 2023)	Section 9: Influence of IK, LK and Engagement on Mitigation and Monitoring considerations.	Comment #ERFN-139: Wetlands were recognized in the EIS as important for multiple reasons and designated a VC. However, the potential impacts and their mitigation and monitoring were not adequately characterized or discussed. Question/Recommendation: (i) Changes in aerial extent of wetlands as the single MP for this VC is insufficient to monitor all changes in these habitats – they are key lifecycle habitat (breeding/foraging/cover) areas for species of management concern as they relate to both the EIS and ERFN (e.g., small furbearers such as beaver, mink; large ungulates such as moose; game birds/species at risk; supports growth of subsistence foods such as cranberries). (ii) Drawdown effects on wetlands were not identified as a potential effect, even though water withdrawal requirements exist for majority of Project timeline, and Project design incorporates an inward hydraulic gradient. (iii) Overall changes in habitat for wildlife and plants of cultural importance within the Project area, LSA and RSA must be considered as a measurable parameter.	
240.	ERFN (February 22, 2023)	Section 9.1.4, (9.2.4, 9.3.4 and 9.4.4): Influence of IK, LK and Engagement on Mitigation and Monitoring considerations	Comment #ERFN-140: "Reclamation design planning is at a conceptual or pre-feasibility stage. Presently, most Project features are planned to be reclaimed by re- instating (to the extent practical) predominant topographical contours and drainage features, and preparing the site (e.g., via grading, and scarifying and/or other surface preparations) in a manner that promotes natural revegetation…. Certain Project features (e.g., the clean waste rock pile) may be integrated into the end-landscape… to create a safe, stable, and self- sustaining landscape." (pp. 9-28)	

			Concerns were raised in engagement sessions about documenting caribou calving locations and participating in mitigating possible effects (SVS, 2022). The loss of wetland areas may reduce the amount of habitat available for moose and caribou calving, as well as other stages of their respective life histories. This interaction will directly impact the availability of this important resource. Question/Recommendation: Section 9 and Table 3.5-1 should be updated to reflect recommendations for reclamation priorities identified in the ERA and ERA-annex, in addition to federal recovery strategies (i.e., Woodland caribou, wolverine) mitigations and management recommendations for species at risk, and species-specific IK and LK. Denison must consider all pathways of effects, including those which are indirect, such as the loss or conversion of lands used as habitat by species of cultural importance	
241.	ERFN (February 22, 2023)	Section 9.1.3.3: Influence of IK, LK and Engagement on VC selection.	Comment #ERFN-141: Permafrost was investigated but not adequately characterized to support conclusions made in the EIS. Potential presence is established, and engagement concerns were raised "specifically referencing cumulative effects through mention of climate change and the vulnerability of northern environments," "potential effect of exploration on various characteristics of the biophysical environment" (pp. 4-25); and "possible changes to permafrost on the Wheeler River" (pp. 4-33). Question/Recommendation: Sections 6 and 9 should be updated to include verification of the presence/absence/extent of permafrost within the Project Area or permafrost interactions with the Project within the CEA.	
242.	ERFN (February 22, 2023)	Section 9.1.4: Assessment of Project- related Effects.	Comment #ERFN-142: "Activities during Post- Decommissioning (comprising site inspections, monitoring and on-site engagement with interested parties) were deemed to have no interaction because they do not involve any land clearing, surface preparations or major earthworks" (EIS 9.1.4). Post-Decommissioning activities should incorporate changes issued by regulatory bodies, required mitigations or actions identified through the Denison Environmental Monitoring System/adaptive management process, and/or Indigenous/third party engagement recommendations. Question/Recommendation: Update Section 9 to include further detail regarding post-decommissioning activities resulting in earthworks for: changes issued by regulatory bodies, required mitigations or actions identified through the Denison Environmental Monitoring System/adaptive management process, and/or Indigenous/third party engagement recommendations.	

243.	ERFN (February 22, 2023)	Section 9.1.1.1 VC Selection (Terrain, Soil, and Organic Matter/Peat) and 9.2.3.2 Listed Plant Species VC	Comment #ERFN-143: Baseline studies for the Terrestrial Environment component of the EIS were conducted from 2017-2019 and were refined in 2019 with a focus on the Phoenix development only. Soil and terrain baseline data was presented at broad scale and coarse resolution (1:20,000) in the original investigations (Appendix 9-B), and baseline vegetation data categorized disturbed forest stands as novel regenerating forest types. This was defined and corrected further by the literature review and mapping contained in Appendix 9-C. Vegetation/wildlife habitat characterization were completed over two surveys in July-Aug 2017 (Appendix 9-B; with no sampling completed for waterbodies/disturbed non-vegetated lands), before the project footprint was altered – in consultation with the SK MOE, the EIS can carry forward with existing information with the condition that additional rare plant pre-disturbance surveys would accompany project approval. Question/Recommendation: ERFN appreciate the recognition of a data deficiency and concur that additional rare vascular plant surveys are required in ecosites not sampled previously to fully investigate the terrestrial environment component of the project and related effects. As baseline survey efforts focused on mid- and late-season rare vascular species, and further information on wetlands in the RSA is proposed to better characterize wildlife habitat and availability of subsistence harvestable food/medicinal plant resources, early-season surveys that also target wetland habitats are recommended.	
244.	ERFN (February 22, 2023)	Section 9.2.4.2.2 Change in the Concentrations of COPC in Vegetation	Comment #ERFN-144: Per the ERA, vegetation and soil collection and chemistry were completed at 10 permanent sample plots in August 2017 – terrestrial lichens, current year's growth of blueberry (leaf, stem, berries), and soil samples were collected. Radionuclide levels are relatively consistent (lichen, blueberry and soils); however, several metal/elemental parameters were elevated when compared to Rio Rinto's Roughrider Project. Question/Recommendation: The EIS identified Labrador tea and browse as also being estimated for metals/radionuclides COPCs in the ERA – this was not included in the ERA; however, red-backed voles were also tested during the small mammal baseline program (Appendix 9-B). Update section to reflect same.	
245.	ERFN (February 22, 2023)	Section 9.3.1.1 VC Selection (Ungulates, Furbearers, and Woodland Caribou)	Comment #ERFN-145: This VC list omits several species which have been identified by ERFN as commercially important for trapping purposes, including Lynx, Muskrat, Fisher, Fox, Otter, and Mink. As noted in the ERFN Traditional Knowledge Study, concern was raised about the impacts of the mine and associated infrastructure on the ability to trap and trapping success. Presence of lynx, fisher, fox, otter, muskrat, beaver and mink were identified in the baseline winter tracking studies (Appendix 9- B).	

			Question/Recommendation: Presence of all ERFN-identified traditionally important species were observed in the baseline winter tracking studies (Appendix 9- B). Overall changes in habitat for wildlife and plants of cultural importance within the Project area, LSA and RSA must be considered as a measurable parameter	
246.	ERFN (February 22, 2023)	Section 9.4.3 Existing Environment (Raptors, Migratory Breeding Birds, and Bird Species at Risk)	Comment #ERFN-146: Appendix 9-C identifies knowledge gaps for information to fully describe the wildlife assemblage in the RSA, including avian species of management concern. Species Detection Survey Protocols (SK MOE 2021) were not implemented for the baseline avian surveys. Recommendations for sensitive timing windows and setback distances from high disturbance activities should be considered for rusty blackbird, which may also use the RSA. The baseline survey did not account for early- season breeding species of management concern (i.e., owls, woodpeckers, game birds). Question/Recommendation: Additional surveys are recommended utilizing appropriate species detection survey protocols to account for VCs and additional species of management concern with the potential to occur in the project area.	
247.	ERFN (February 22, 2023)	Section 9 (General) VC Selection	Comment #ERFN-147: Some small mammals were shown to observe elevated levels of select COPCs during baseline studies (Appendix 9-B) but were not discussed in the EIS. Bats and Amphibians were also not considered in the EIS as VC or KIs, even though both bat species and one amphibian species are listed under SARA. Traditional species of cultural importance for gathering and subsistence were also not included. Question/Recommendation: Provide a rationale why these components were not considered.	
248.	ERFN (February 22, 2023)	Section 9 (General) VC Selection	Comment #ERFN-148: Several iterations in the EIS state baseline studies were not designed to establish relative abundance estimates for furbearer VCs, whereas certain baseline surveys (Appendix 9- B) were designed to provide quantitative data on the occurrence and relative abundance (i.e., semi- aquatic furbearer shoreline study, winter track count). Question/Recommendation: Provide rationale for not incorporating relative abundance.	
249.	ERFN (February 22, 2023)	Section 9.3.3 Existing Environment; EIS Section 9.3.5 Mitigation Measures	Comment #ERFN-149: Appendix 9-C identifies knowledge gaps for information to fully describe the wildlife assemblage in the RSA, including ungulates (woodland caribou and moose), but there is no recognition of the implications of these gaps or suggestions to address them.	

			Question/Recommendation: ERFN notes if recent aerial ungulate survey data are unavailable, the Proponent should consider management and development recommendations available for the region and management areas, in addition to the federal recovery strategy for caribou, as part of the EIS.	
250.	ERFN (February 22, 2023)	Section 9.3.5 Mitigation Measures	Comment #ERFN-150: The mitigations for linear disturbances identify ongoing research into the effectiveness of disrupting predator- prey dynamics along linear disturbances. Appendix 9-B includes recommendations for reclamation of linear disturbances around the Project Area. Question/Recommendation: ERFN acknowledges the efforts by Denison and the recommendations provided in Appendix 9- B for the reclamation of linear disturbances, and requests the Proponent to consider prioritizing progressive reclamation in these areas as a commitment within the EIS, in addition to utilizing ongoing research data to adjust and inform reclamation planning and implementation.	
251.	ERFN (February 22, 2023)	Section 9.1.5, 9.2.5, 9.3.5, 9.4.5 (General) Mitigation Measures	Comment #ERFN-151: Spill response plan. Question/Recommendation: It is recommended that monitoring during Project Activities occur to minimize discrete spills wherever possible, per the Spill Response Plan. Spill Response Plan should include reportable quantities, spills report line directly to proponent, and specific procedures for documenting and reporting spills to regulatory bodies.	
252.	ERFN (February 22, 2023)	Section 9.2.5.2.4 Invasive Plant Management	Comment #ERFN-152: Additional mitigation measures include use of herbicides or other bio- controls to address invasive species establishment. Denison does not provide evidence discussing the potential impacts to the Terrestrial Environment VCs from the use of herbicides or other bio-controls. Question/Recommendation: Denison must provide information on how impacts will be mitigated if herbicides or other bio-controls are used.	
253.	ERFN (February 22, 2023)	Section 9 (General) Wildlife mitigations	Comment #ERFN-153: Fencing for deterrence of entrapment in certain Project areas Question/Recommendation: Fencing should be buried deep enough to prevent potential interactions with burrowing animals, and high enough to prevent wildlife movement over the fence. Fencing should be monitored for entrapped wildlife at regular intervals identified within the EMS, and a plan should be in place for the non-lethal removal of trapped wildlife if required.	

254.	ERFN (February 22, 2023)	Section 10.1.1.2 Key Indicators and Measurable Parameters	Comment #ERFN-154: Public Health is Identified as a Key Indicator and is informed by Measurable Parameters which include: "Evaluation of risk of exposure to COPCs through use of hazard quotient, incremental lifetime cancer risk, or radiation dose," is a very narrow view of human health as it is affected by this project. This ignores a wide range of physical and psychological factors which may influence the health and wellbeing of ERFN citizens. Question/Recommendation: Denison should provide additional analysis of the Public Health Key Indicator which includes Measurable Parameters to qualitatively or quantitatively assess mental health, psycho-social factors and wellness as it may be influenced by this project.	
255.	ERFN (February 22, 2023)	Section 10.1.1.3 Spatial and Temporal Boundaries	Comment #ERFN-155: The spatial boundaries for the assessment of Human Health are not appropriate as it ignores the many persons who use the area surrounding the project but do not reside within the LSA or RSA catchment area. Most ERFN land users live further south in Patuanak/ Wapachewunak Reserve but use the area around the project to harvest and exercise rights, therefore must be considered within the geographic scope of the assessment Question/Recommendation: Denison reassesses the Public Health key indicator to include Patuanak/Wapachewunak Reserve, as the closest population centre.	
256.	ERFN (February 22, 2023)	Section 10.1.3.2 Traditional Foods Diet	Comment #ERFN-156: Denison note that Walleye and Lake Whitefish are the most commonly consumed fish within the study area to inform the HHRA. While these are important species, they may not be fully representative of the full risks posed by fish. For example, longer- living fish such as Lake Trout are consumed, and as top predators are at a greater risk for bioaccumulation Question/Recommendation: Denison should consider bioaccumulation risks associated with other country foods consumed. This includes considering and incorporating species which are both consumed in the greatest quantities, but also are representative of the greatest risk for use in the HHRA.	
257.	ERFN (February 22, 2023)	Section 10.1.4.1 Potential Interactions Between the Project and Valued Component/Key Indicators	Comment #ERFN-157: Table 10.1-3 Outlines a list of project phases/activities and an indication of whether they are likely to interact with Public Health. This table, however, fails to provide information about the effects of pathways or how the proposed activities may result in impacts on public health. Question/Recommendation: ERFN request Denison provide a breakdown of the effects pathways and predicted or plausible impacts for each of the project activities which may influence public health.	

258.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction, Operation, and Decommissioning	Comment #ERFN-158: As outlined in Appendix 6A, elevated levels of NO2 and Radon are expected to be observed outside of the area established as the LSA and in some cases the RSA to assess human health. Therefore, the assessment of potential project-related effects associated with air emissions during construction, operation, and decommissioning should be considered in complete. Question/Recommendation: Denison provides a revised assessment of Potential project-related effects as a result of air emissions during construction, operation, and decommissioning in areas beyond the geographical scope of elevated atmospheric emissions are predicted.	
259.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction, Operation, and Decommissioning	Comment #ERFN-159: Denison note that there are several instances in which exceedances of air quality criteria for NO2, PM10 and uranium are expected, they were not identified for further assessment in the human health risk assessment, "as these COPCs are unlikely to be associated with a human health or environmental risk." The adequate rationale is not provided to dismiss these potential contributors to human health risk, and air quality exceedance of any COPC, should be sufficient rationale within itself to carry forward any factor. Question/Recommendation: ERFN are confused as to why Denison has chosen to dismiss the consideration of COPCs which exceed air quality criteria from further human health risk assessment. By removing these potential risk sources, Denison appears to be picking and choosing which factors are important prior to carrying out any analysis. ERFN recommend that Denison amend the Human Health Risk Assessment and include No2, PM10 and uranium as possible human health risk factors until appropriate evidence can be presented to demonstrate that these will not present harm.	
260.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction, Operation, and Decommissioning	Comment #ERFN-160: Denison notes that "a pond may be constructed beside the clean waste rock pad to collect runoff if required. Any runoff from the clean waste rock pond will be directed to the process water pond". This statement contradicts itself, as in the first sentence, Denison indicates that they may establish a water collection pond to collect runoff from the clean waste rock pile, however, this is followed by stating that runoff will be directed to the process water pond. It is unclear the purpose of this additional pond that may be constructed. Question/Recommendation: Denison should provide additional information on the rationale for the construction of this additional pond and what role it will play in both mitigating risk to human health and providing overall contact water management.	

261.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction, Operation, and Decommissioning	Comment #ERFN-161: It is unclear under which circumstances effluent may be discharged to Whitefish Lake as Denison states they intend to process water by circulating it through the injection and recovery wells. Question/Recommendation: Please provide additional information regarding the source of water to be discharged to Whitefish Lake	
262.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction, Operation, and Decommissioning	Comment #ERFN-162: Denison appears to be confusing the application of multiple water quality applications. Specifically, they state: "The most restrictive federal or provincial guidelines for surface water quality, based on Canadian drinking water quality guidelines, are the CCME water quality guidelines for the protection of freshwater aquatic life, the federal environmental quality guidelines, and the Saskatchewan environmental quality guidelines." These are all separate water quality guidelines and apply to different aspects of water quality management. Question/Recommendation: Denison must be clear as to the guidelines which are being used at all times during the analysis to ensure that they are applied appropriately.	
263.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction, Operation, and Decommissioning	Comment #ERFN-163: Denison notes that effluent was assessed using a benchtop model simulation of the material processing and effluent treatment process. Using the derived effluent, a handful of constituents were assessed including cadmium, chromium, selenium, and lead. Other COPCs exist beyond these parameters and should be assessed appropriately. Question/Recommendation: Denison should perform additional broad-suite analysis of all parameters as set by CCME water quality guidelines for the protection of freshwater aquatic life and the Metal and Diamond Mining Effluent Regulations.	
264.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction, Operation, and Decommissioning	Comment #ERFN-164: Total dissolved solids (TDS) within itself is not known to be detrimental to the aquatic environment, however, can have adverse aesthetic impacts. That said, TDS is comprised of many other dissolved constituents, such as chloride, calcium, sodium, potassium, fluoride, and others, which may be harmful in elevated concentrations. Given TDS is expected to exceed the water quality guideline by more than 10-fold, it is necessary to identify the contributing factors before TDS can be ruled out as a potential risk. Question/Recommendation: Denison should provide an analysis of the constituents which contribute to high TDS and propose a method of reducing TDS to meet water quality guidelines.	
265.	ERFN (February 22, 2023)	Section 10.1.4.2.1 Air Emissions During Construction,	Comment #ERFN-165: Molybdenum is concerningly high. CCME note that the long-term concentration of molybdenum for the protection of aquatic life is 0.073 ug/L which is several	

		Operation, and Decommissioning; Table 10.1-4	orders of magnitude less than what was observed in effluent tests. Similarly, sulphate is also very high, which once released into the environment may influence pH and acidification of the downstream environment. Question/Recommendation: Denison must demonstrate how it plans to minimize the source effluent of molybdenum and sulphate associated with this project.	
266.	ERFN (February 22, 2023)	Section 10.1.6.1.1 Human Receptors Selection and Characterization; Table 10.1-6	Comment #ERFN-166: The human receptors outlined in Table 10.1-6 are not fully representative of land users and those who may be impacted. There is a need to consider other more vulnerable human receptor groups such as youth, Elders, and pregnant females who interact with the land and consume high levels of traditional foods similar to Fisher/Trapper. Similarly, other human health receptors should be considered for permanent residents. Question/Recommendation: Denison should reanalyze their human health risk assessment including the use of vulnerable personas such as youth, pregnant female, and Elder.	
267.	ERFN (February 22, 2023)	Section 10.1.6.1.3 Exposure Assessment and Pathway Modelling	Comment #ERFN-167: In assessing exposure pathways, it is noted that COPCs may travel through multiple ecological receptors before being consumed or otherwise taken up by humans. However, it is unclear whether Denison has considered the potential for bioaccumulation, additive, or synergistic effects when viewing the exposure pathway through a cumulative effects lens. Question/Recommendation: Denison should provide clarity into all assumptions which went into the pathway modelling including considerations for cumulative effects and bioaccumulation of COPCs en route to human end points.	
268.	ERFN (February 22, 2023)	Section 10.1.6.1.4 Human Health Risk Assessment Results; Table 10.1-8	Comment #ERFN-168: Denison does not provide a Hazard Quotient (HQ) for Aquatic Plants. However, aquatic plants may be directly consumed by ERFN land users. As a result, this represents a knowledge gap within the assessment. Question/Recommendation: Denison should assess the hazard quotients associated with aquatic plant consumption. If no information related to the TVR is available use available proxy (e.g., terrestrial plants) to estimate a conservative hazard quotient.	
269.	ERFN (February 22, 2023)	Section 10.1.6.1.4 Human Health Risk Assessment Results; Table 10.1-8	Comment #ERFN-169: Although in most cases project incremental HQ is not on its own a key driver in Project Total HQ exceeding individual or total benchmarks, the high baseline emphasizes the need to minimize additional inputs. ERFN does not accept arguments that	

			suggest that since the baseline is already elevated, any additional inputs are negligible. Rather, any additional inputs only worsen the risks which are already present. Question/Recommendation: For all COPCs where individual or total HQs are above benchmarks, Denison must proactively identify solutions for minimizing additional inputs.	
270.	ERFN (February 22, 2023)	Section 10.2.1.1 Valued Component Selection	Comment #ERFN-170: Denison notes that unwanted constituents, specifically iron and radium, will be removed from the recovered lixiviant material prior to uranium precipitation. This unwanted precipitate does however contain a valuable amount of uranium and therefore will be stored and shipped to be processed at an eligible licensed facility. It is unclear where this facility may be located, and furthermore, it is unclear whether the impacts of transportation of this material and the potential for accidents or malfunctions has been considered elsewhere in this EIS. Question/Recommendation: Denison must provide additional information about its plans to move waste products containing radium and uranium offsite for additional processing.	
271.	ERFN (February 22, 2023)	Section 10.2.4 Mitigation Measures	Comment #ERFN-171: Mitigation measures should ensure there are redundant protections in place to minimize risk to worker health. Specifically, in any instance where the use of powered air purifying respirator (PAPR) will be effective in reducing radiation exposure, it should be applied. This then can be made redundant through the use of personal protective equipment such as the use of N95 or a self-contained breathing system. Question/Recommendation: Denison should take an additive approach rather than an either/or approach to identifying and applying mitigations for limiting radiation exposure to workers.	
272.	ERFN (February 22, 2023)	Table 3.5-1: How Indigenous Knowledge was Incorporated into Existing Environment and Effects Assessment Sections	Comment #ERFN-172: Not all of the information in this table explains how the knowledge was incorporated or used to inform the effects assessment sections. Rather, in many instances, it states what the knowledge was instead of how it was used. Question/Recommendation: Provide a reference table identifying and acknowledging all of the information that was provided by ERFN and indicates how the information was incorporated and weighted into the assessment of the effects. If needed, ERFN can support by providing this information if the TK report is not clear enough.	
273.	ERFN (February 22, 2023)	Section 4.1.2 Denison's Indigenous Peoples Policy and	Comment #ERFN-173: The EIS states that "Denison is committed to operating the Project in a fully sustainable manner, considering not only the maintenance of high standards of safety and environmental compliance." (p.4-3). It is not clear what "fully sustainable" means	

		Investment and Sustainability Philosophy	or how the definition was informed. Question/Recommendation: Provide clear definition, with backed-up literature and evidence, as to what "fully sustainable" means. Further, clarify how ERFN values were included in the understanding of "fully sustainable." That is, has this definition been informed by Indigenous Knowledge and worldviews, and if so, then how have project planning and activities adjusted and if not, then provide an explanation as to why.	
274.	ERFN (February 22, 2023)	Land and Resource Use General comment	Comment #ERFN-174: Denison has separated out the quality of life, land and resource use, economics and other VCs as if they can be considered separately. Question/Recommendation: Provide an explanation as to how land and resource use was considered in quality of life effects assessment.	
275.	ERFN (February 22, 2023)	Land and Resource Use	Comment #ERFN-175: Repeatedly, Denison states that there is "limited amount of Indigenous uses in proximity to the Project" and it appears these conclusions have been made from Denison's interpretation of ERFN's TK report. It was made clear to Denison that there is extensive use in the area and that the report is limited in scope and is not statistically representative of ERFN rights holders. Further, Denison has failed to frame the EIS from a rights-based approach. The rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the Constitution Act, 1982 (Section 22(1)(c)) are collective rights, and assuming minimal impact based on the inaccurate understanding of a few land users does not adequately assess impacts to Indigenous Rights. Other instances of inaccurate wording of use include: • "Overall, given the limited use of the ILRU LSA, adverse effects that are low in magnitude, the limited geographic extents of effects, and the reversibility of effects, the conclusion relative to changes to ILRU is not significant." • "The absence of the Key Lake gate and the removal of the process of providing identification will provide recreational users and local Indigenous communities with greater access to the ILRU LSA**, which is not currently used intensively"** (p. 11-70 – emphasis added) • "Overall, given limited use of the ILRU LSA, adverse effects that are low in magnitude, the limited geographic extents of effects, and the reversibility of effects, the conclusion relative to changes to ILRU is **not significant**." (p. 11-74) • "Big game hunting is absent in the Project Area and is sparse and infrequent in the ILRU LSA. Indigenous harvests of terrestrial species are primarily conducted south of the Key Lake gate and/or closer to communities." (p.11-49)	

			Question/Recommendation: ERFN made it clear in their submissions that the information provided was not statistically representative and does not include the entire IK or land use of ERFN members. *ERFN's Traditional Knowledge Study & Health and Socio- Economic Study Report* states: "the results in this Study showcase the information shared by some of ERFN's land users, trappers and Elders and cannot be considered a complete representation of ERFN knowledge and use in the Study Area. Nevertheless, these results demonstrate that the Project is likely to have significant impacts on ERFN's Aboriginal and Treaty Rights and Interests without appropriate and effective measures including mitigation, accommodation, monitoring/follow- up, environmental management and protection planning, along with an ongoing role in environmental oversight. ERFN continues to assert that it is only through a collaborative and co-production approach to the EA that these measures will be appropriately designed and implemented." There remains a disconnect between Denison's conclusions of impacts and the results that were provided in ERFN's Traditional Knowledge Study & Health and Socio- Economic Study Report. Denison must ensure that it considers the collectively held rights of ERFN protected by section 35 of the Constitution Act and Treaty 10. Individual ERFN land users have important interests to be considered, and in some instances, they exercise rights held by the collective. However, such users do not represent the constitutional interests of the collective; the elected Chief and Council bear that critical and all-encompassing responsibility Denison must recognize that inherent Aboriginal rights or Treaty Rights must not be infringed upon, and where impacts cannot be avoided, accommodation measures must be complete. (i) Provide reasoning as to why these statements were made and evidence that Denison understands the impact that these statements have. That is, they belittle the information provided and misrepresent potential impacts on the collective rights of ERFN. (ii) Provide adequate funding for ERFN to undertake a comprehensive Rights Impact Assessment that is led independently by ERFN (iii) It is expected that Denison will remove all of these inaccurate statements, and all other similar statements in the EIS, and re-evaluate impacts based on an understanding of collective rights and recognition of the cumulative impacts of past activities	
276.	ERFN (February 22, 2023)	Section 11.1.7 Cumulative Effects	Comment #ERFN-176: The EIS states, "existing projects were not considered as part of the CEA because they were captured and assessed within baseline conditions" (p. 11-69). However, Denison has not shown how CE from past projects was acknowledged within the baseline of ILRU. Rather, in many instances, as noted above, Denison has misinterpreted	

			ERFN's *Traditional Knowledge Study & Health and Socio- Economic Study Report*. There is limited recognition of the discussion on impacts from past projects and how this has altered current baseline conditions, including the likelihood that current baseline conditions have moved beyond ERFN's acceptable threshold of impact. Question/Recommendation: Until Section 11.1.7, and Section 11 in general, adequately considers cumulative effects of past projects and impacts to ERFN's harvesting activities, and ability to access ancestral lands as they were prior to contact from a rights-impacts lens, Section 11.1.7 is considered inadequate and incomplete.	
277.	ERFN (February 22, 2023)	Section 11.1.5 Mitigation Measures	Comment #ERFN-177: Denison has stated that there will be no further mitigation or monitoring for Resource Availability, Availability of Lands/Waters, and in general ILRU monitoring. This is unsatisfactory as ERFN is in disagreement that impacts to ILRU will not be significant. Question/Recommendation: Prior to approval, Denison needs to work with ERFN to develop a program that monitors changes to ERFN's relationship and use of the area. This needs to be led by ERFN and occur with frequency across all phases of the project. It will provide relevant and useful information to Denison and ERFN to monitor potential changes and impacts from the project and any additional monitoring activities that may need to occur.	
278.	ERFN (February 22, 2023)	Section 11.1.4.5.1 Aesthetic Experience	Comment #ERFN-178: Denison states that "to control road dust during summer (May to October), water and/or chemical dust suppressant will be applied to all site roads (Section 6.1.5 in Section 6)." p. 11-56. There is no description of chemical dust suppressant and Section 6.1.5 only indicates that water will be used twice daily as a dust suppressant. Question/Recommendation: (i) Confirm how dust will be managed – is it water or chemical dust suppressant? (ii) If the latter, provide information on the product that will be used and all impacts to plants and wildlife.	
279.	ERFN (February 22, 2023)	Section 11.1.4.3 Resource Availability for Subsistence Harvesting	Comment #ERFN-179: With respect to furbearer habitat, Denison states "effects are predicted to be long-term but reversible because the alteration of available furbearer habitat is expected to be reversed as sensory disturbances diminish with the end of Project Operation activities and subsequent Decommissioning of Project components." p. 11-50. While there is recognition that this impact may be reversible to furbearing animals, it is not clear how this is a reversable to the used of the area by ERFN. This long-term impact will	

			last for at least a generation. It is clear from past projects, settlements, and colonial activities that a lot of knowledge can be lost within a generation when you remove the access and ability for knowledge transfer. Question/Recommendation: Provide an explanation as to how predictions across all of section 11.1.4 considered potential for contribution to the degradation of cultural practices and knowledge transfer. Provide analysis on the potential impacts of project activities on knowledge transfer and land use for ERFN citizens who have rights across their entire ancestral territory. This needs to be done with the assumption that removal of an area for land use will result in an impact to ERFN's collectively held section 35 rights.	
280.	ERFN (February 22, 2023)	Section 11.1.3.2.1 English River First Nation/Patunuak	Comment #ERFN-180: There is concern as to how well Denison reviewed the reports from ERFN. For example, in Section 11.1.3.2.1 English River First Nation/Patunuak on p. 11-30 Denison states "no access routes or culture/historical trails were identified as intersecting with the Project site (ERFN and SVS 2022b)." ERFN dispute this statement and urge Denison to re- review ERFN's report and remind Denison of the information provided in this report: "Participants spoke of using the Fox Lake Road, which runs through the Wheeler River Project site, as an access route for harvesting activities throughout an area stretching from the Key Lake mine to McArthur River mine … One participant expressed concerns that this route (1018-14) may be blocked by Project activity. Another participant stressed how this entire area (1004-18) is used by ERFN people as a contemporary gathering place." Question/Recommendation: Denison will need to do a more carefully review of ERFN's reports and include all information provided in the EIS. That is, all information summarized will need to be confirmed for accuracy and gaps in the information summarized will need to be filled.	
281.	ERFN (February 22, 2023)	Section 11.1.3 Existing Environment	Comment #ERFN-181: This section does not adequately discuss or highlight the history and experience of ERFN. Additional valuable information that frames the existing environment and impacts to land use was provided in ERFN's Traditional Knowledge Study & Health and Socio-Economic Study Report. Question/Recommendation: Provide ERFN with the capacity and opportunity to edit and add to this section so that the EIS is framed with additional and relevant information.	

282.	ERFN (February 22, 2023)	Section 16.6.3 Heritage Resources	Comment #ERFN-182: Heritage Resource Management Plan. Question/Recommendation: In Section 16.6.3 Denison states that a “Heritage Resources Management Plan (HRMP) has been developed by Denison and outlines the steps that will be taken should anymore archaeological sites be identified Even though they say that these steps include "discussions with local indigenous leadership." this is not evident. Prior to this document being approved, ERFN requests the opportunity to complete a third-party review and provide feedback to Denison.	
283.	ERFN (February 22, 2023)	Section 16.6.3	Comment #ERFN-183: Cultural Heritage Monitors. Question/Recommendation: Prior to the approval of the project, Denison must commit to hiring ERFN Cultural Heritage Monitors who will be present during any construction and/or land disturbance work. This area is still considered to have high potential for archeological sites even if Denison was not able to locate many sites during their assessments.	
284.	ERFN (February 22, 2023)	Section 12.1.2.1, 12.2.2.1, 12.3.2.1 Influence of Indigenous Knowledge, Local Knowledge and Engagement on the Assessment, English River First Nation	Comment #ERFN-184: EIS Section 12.1.2.1, 12.2.2.1, and 12.3.2.1 sets out a list of the submissions and reports provided by ERFN that included Traditional Knowledge and perspectives that have informed Section 12.1, 12.2 and 12.3 of the assessment respectively. ERFN notes that these lists do not include ERFN’s submission of comments to Denison on a draft of the EIS provided to ERFN before its submission to CNSC, despite this submission including important information regarding our Traditional Knowledge and perspectives that was meant to inform changes to these sections of the Draft EIS. ERFN notes that as a result, numerous comments on this section of the EIS below are a restatement of concerns raised in our August 2022 submission that remain unaddressed. ERFN also notes that the contents of ERFN’s August 2022 submission are also not reflected in Table 4.3-2 which is meant to outline Key Issues and Concerns raised English River First Nation in previous engagements and submissions and demonstrate how these comments have been addressed or considered in the Draft EIS. Question/Recommendation: Section 12 must be updated to incorporate the concerns raised in the August 2022 submission and restated in the comments below. In addition, Table 4.3-2 should be updated to reflect the Key Issues and Concerns raised in ERFN’s August 2022 submission and demonstrate how these comments have been addressed or considered in Section 12 of the EIS.	
285.	ERFN (February 22, 2023)	Section 12.1.1.2 Key Indicators and Measurable Parameters	Comment #ERFN-185: Section 12.1.1.2 states that a Key Indicator (KI) "is an important aspect of a VC that may be affected by the Project and its activities" and that a measurable	

			parameter "is the metric associated with the KI that can be used to characterize changes to attributes of the environment that may change as a result of the Project and/or other human developments and natural factors" (p. 12-7). For the valued component of Cultural Expression and this section of the assessment, Table 12.1-1 sets out Denison's selection of KIs to include: 1. Knowledge Transfer 2. Traditional diet While ERFN is supportive of Cultural Expression being included as an important facet of Quality of Life and identified as a key value component included in the scope of the effects assessment, the KIs and measurable parameters selected by Denison in Section 12.1.1.2 are insufficient and do not reflect a holistic consideration of Cultural Expression, even by Denison's own definition set out in Section 12.1. ERFN notes that concerns have been raised in previous engagement with ERFN and in our August 2022 submission of comments on the Draft EIS regarding the limited scope of these KIs and that additional KIs and measurable parameters must be included to reflect a more holistic understanding of Cultural Expression informed by Indigenous perspectives. Because the selection of these KIs and measurable parameters is a foundational step in the assessment that informs the scope and approach to the subsequent characterization of existing conditions, assessment of project-related effects, identification of mitigation measures and assessment of residual effects and cumulative effects, the insufficient scope of KIs and measurable parameters selected by Denison therefore results in a fundamental deficiency of Section 12.1 of the assessment of the effects. Section 12.1 should be revised to include an analysis of additional KIs and measurable parameters of Cultural Expression more closely related to values identified for protection by ERFN citizens. These may include: • Ability to practice traditional activities • Cultural Identity • Connection to ERFN Traditional Territory • Ability to speak ERFN dialects of Dene and Cree • Intergenerational knowledge transfer • Collecting, processing, using, and sharing traditional medicines • Spiritual and cultural vitality	
286.	ERFN (February 22, 2023)	Section 12.1.4.1 Potential Project – Valued Component and Key Indicator Interactions	Comment #ERFN-186: Table 12.1-2 outlines potential interactions between project phases and activities, and KIs for Cultural Expression. ERFN notes that Employment and Expenditures are not identified to have potential interactions. ERFN disagrees with this assessment as employment may alter the ability for ERFN citizens to engage in traditional activities and intergenerational knowledge transfer, as citizens will	

			be unable to engage in on-the-land activities and cultural knowledge sharing during rotational work periods. Question/Recommendation: Denison should revise Table 12.1-2 to recognize potential interactions between employment and KIs for Cultural Expression	
287.	ERFN (February 22, 2023)	Section 12.1.6 Residual Effects Evaluation	Comment #ERFN-187: Section 12.1.6 of the EIS defines a significant adverse residual effect on Cultural Expression as "an effect that is highly different from baseline conditions and trends and cannot be managed or mitigated through adjustments to existing programs, policies, or other mitigation." The EIS goes on to state that "because residual adverse effects on Cultural Expression are not expected to result in this level of change, effects are expected to be not significant for the Project." ERFN does not agree with this assessment of the potential residual effects of the Project, which is fundamentally deficient based on the limited scope of KIs and measurable parameters that were selected for analysis. ERFN also does not agree that the mitigation measures presented in Section 12.1.5 are sufficient to address effects of the Project on Cultural Expression that will be highly different from baseline conditions. Question/Recommendation: Until Section 12.1 is revised to include a more holistic consideration of KIs and measurable parameters for Cultural Expression that ERFN has set out above, Denison's assessment of the nature of potential Residual Effects should be considered incomplete and deficient. In addition, until ERFN confirms CNSC that Denison and ERFN have reached mutually agreed-upon terms of mitigation and accommodation that address the effects of the Project on Cultural Expression, this EIS should not be considered complete or approved by CNSC. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
288.	ERFN (February 22, 2023)	Section 12.2.1.2 Key Indicators and Measurable Parameters	Comment #ERFN-188: Section 12.2.1.2 states that a Key Indicator (KI) "is an important aspect of a VC that may be affected by the Project and It's activities" and that a measurable parameter "Is the metric associated with the KI that can be used to characterize changes to attributes of the environment that may change as a result of the Project and/or other human developments and natural factors" (p. 12-44). For the valued component of Community Well-Being and this section of the assessment, Table 12.2- 1 sets out Denison's selection of KIs to include: 1. Population and Demographics (from in/out migration as people seek employment opportunities),	

			2. Income of local workers (from participation in employment and/or contracting activities), and 3. Community cohesion (from changes in income and participation in a commuter rotation system). While ERFN is supportive of Community Well-Being being identified as a key value component and included in the scope of the effects assessment, the KIs and measurable parameters selected by Denison are insufficient and do not reflect a holistic consideration of well- being informed by Indigenous determinants of well-being, despite Denison's acknowledgment that communities in the LSA are predominantly (95.2%) Aboriginal (Section 12.2.3.1, p. 12-56). ERFN notes that concerns have been raised in previous engagement with ERFN and in our August 2022 submission of comments on the Draft EIS regarding the limited scope of these KIs and that additional KIs and measurable parameters must be included to reflect a more holistic understanding of Community Well-Being informed by Indigenous perspectives. Because the selection of these KIs and measurable parameters is a foundational step in the assessment that informs the scope and approach to the subsequent characterization of existing conditions, assessment of project related effects, identification of mitigation measures and assessment of residual effects and cumulative effects, the insufficient scope of KIs and measurable parameters selected by Denison therefore results in a fundamental deficiency of Section 12.1 of the assessment of the effects. Question/Recommendation: ERFN has shared with Denison (ERFN and SVS 2022a), that the four components of ERFN health and well-being, often referred to as the "the medicine wheel," is the core guiding principle to overall ERFN health and well-being, and include: • Physical health • Mental health • Spiritual health • Emotional health The KIs selected by Denison and subsequent steps of the assessment of the effects must be amended to include more holistic Kis and parameters relevant to these ERFN determinants of Community Well-Being, in collaboration with ERFN and based on the results of studies and submissions provided by ERFN to date. Potential Kis/parameters could include, but are not limited to: • Food security • Access to traditional foods • Psychosocial Impacts • Spiritual and cultural vitality o Ability to practice traditional activities	

			○ Cultural Identity ○ Connection to ERFN Traditional Territory ○ Ability to speak ERFN dialects of Dene and Cree ○ Intergenerational knowledge transfer ○ Collecting, processing, using, and sharing traditional medicines	
289.	ERFN (February 22, 2023)	Section 12.2.4.1 Potential Interactions Between the Project and Valued Components/Key Indicators	Comment #ERFN-189: In Section 12.2.4.1, Denison sets out the assessment of potential interactions between the Project and VC/KIs, based on "IK, LK, discussions with Indigenous groups, government agencies, and the public, KPIs for the Project, the professional judgment of members of the Project team, and consideration of existing conditions in the study areas for the VCs and KIs" (Page 12-73). ERFN notes the only project activities Denison has determined will interact with the VC/KIs considered in this section of the assessment are employment and expenditures, and Denison states that no other construction activities, operation activities, or decommissioning activities are anticipated to have any interactions with Community Well-Being. ERFN does not agree with this assessment of the Project's potential interactions with Community Well- Being, and it is ERFN's position that numerous other Project activities will have potential adverse effects on ERFN's Community Well-Being. Question/Recommendation: This assessment should be considered incomplete and fundamentally deficient. The assessment must be redone with a more holistic consideration of KIs and pathways to effects developed in collaboration with ERFN and based on the results of studies completed by ERFN to date.	
290.	ERFN (February 22, 2023)	Section 12.2.4.2 Potential Project Related Effects	Comment #ERFN-190: While Section 12.2.4.2.1 does consider the effects of population changes related to the Project on demand for housing and general concerns with the in- and- out migration of LSA residents, it doesn't address the full range of potential impacts associated with a transient workforce. Question/Recommendation: Section 12.2.4.2 must include an assessment of all potential effects of a transient workforce and changes to population dynamics, including those disproportionately experienced by women and other segments of the population. This should incorporate findings of research like the 2017 study completed by Lake Babine Nation and Nak'azdli Whut'en (Indigenous Communities and Industrial Camps), and/or related research in the context of the LSA.	
291.	ERFN (February 22, 2023)	EIS Section 12.2.4.2 Potential Project Related Effects	Comment #ERFN-191: While Section 12.2.4.2.2 does include consideration of the effects of increased income on existing issues for LSA residents including substance abuse and domestic violence, corresponding mitigation measures in Section 12.2.5 are limited to training and programming on the Project site, which is not sufficient to address these potential impacts and should not be considered sufficient to prevent residual effects.	

			Question/Recommendation: Section 12.2.5 must also include Denison's commitments to support the establishment and improvement of social services and wellness programs located in, led and implemented by each of the Indigenous communities in the LSA through the provision of funding and other resources.	
292.	ERFN (February 22, 2023)	EIS Section 12.2.4.2 Potential Project-Related Effects	Comment #ERFN-192: Despite acknowledging in its characterization of the existing environment for income of local workers in Section 12.2.3.2 that "the traditional economy in the LSA provides important non-cash income to citizens and contributes to the overall sense of well-being for communities" (p. 12-64), and that "Wheeler River is a culturally and economically important area for ERFN and a place where fishing, hunting, and trapping occur throughout the year" (p. 12-65), the assessment of potential project related effects for this KI in Section 12.2.4.2 only considers effects on personal income for residents of the LSA through employment on the Project. Question/Recommendation: The assessment of effects for income and financial well-being must be expanded to include participation in the traditional and subsistence economy, the Project's potential effects on ERFN's fishing, hunting and trapping and the relationship between participation in the traditional economy and the overall sense of well-being for communities, which Denison acknowledges in Section 13.3.2.3.	
293.	ERFN (February 22, 2023)	EIS Section 12.2.4.2 Potential Project-Related Effects	Comment #ERFN-193: Despite acknowledging in its characterization of the existing environment for community cohesion in Section 12.2.3.3 that ERFN's practice of traditional activities such as hunting, fishing, trapping and gathering is a crucial component of community cohesion and well-being (p. 12-70), Denison's assessment of effects for this KI in Section 14.2.4.2.3 only considers time spent by LSA residents employed by the Project away from their communities and families during work rotation. While employment and participation in the Project by ERFN citizens is optional, the Project has broader direct impacts on the Ancestral Territory, effecting all ERFN citizens. Therefore, regardless of whether employment interferes with aspects of Community Well-Being, the existence of the Project will change the manner in which all ERFN citizens interact with Nuhtsiye-kwi Benéne, and in turn ERFN's overall community cohesion, Community Well-Being and Quality of Life. Question/Recommendation: The assessment of effects for community cohesion must be expanded to include all the Project's potential effects on ERFN's practice of traditional activities, including fishing, hunting and trapping.	

294.	ERFN (February 22, 2023)	Section 12.2.6 Residual Effects Evaluation	Comment #ERFN-194: Section 12.1.6 of the EIS defines a significant adverse residual effect on Cultural Expression as "an effect that is highly different from baseline conditions and trends and cannot be managed or mitigated through adjustments to existing programs, policies, or other mitigation." The EIS goes on to state that "because residual adverse effects on Cultural Expression are not expected to result in this level of change, effects are expected to be not significant for the Project." ERFN does not agree with this assessment of the potential residual effects of the Project, which is fundamentally deficient based on the limited scope of KIs and measurable parameters that were selected for analysis. ERFN also does not agree that the mitigation measures presented in Section 12.2.5 are sufficient to address effects of the Project on Cultural Expression that will be highly different from baseline conditions. Question/Recommendation: Until Section 12.2 is revised to include a more holistic consideration of KIs and measurable parameters for Community Well-Being that ERFN has set out above, Denison's assessment of the nature of potential Residual Effects should be considered incomplete and deficient. In addition, until ERFN provides confirmation to CNSC that Denison and ERFN have reached mutually agreed upon terms of mitigation and accommodation that address the effects of the Project on Community Well-Being, this EIS should not be considered complete or approved by CNSC. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
295.	ERFN (February 22, 2023)	Section 12.3.3.1 Methods and Limitations	Comment #ERFN-195: Traffic volume data for Highways 914 and 165 are based on short term traffic counts conducted over a 48- hour counting period, however, continuous traffic monitoring data and subsequent average daily traffic volume reports are not produced for these highways. This traffic data is infrequently updated and only provides a snapshot of actual traffic conditions which may not be representative of actual conditions. The impacts of the Project to ERFN's rights and interests related to increased traffic and access to the Project area is a crucial concern, and an accurate baseline of traffic data is vital to the integrity of the subsequent assessment of potential effects, development of mitigation measures, residual effects evaluation and characterization of cumulative effects. Question/Recommendation: Denison should establish long-term traffic monitoring stations along Highway 914 and 165 to provide a more accurate description of existing traffic conditions along these key access routes for the Project.	
296.	ERFN (February 22, 2023)	Section 12.3.6.1 Residual Effects Characterization	Comment #ERFN-196: Denison states a significant effect on the Infrastructure and Services VC (including the measurable parameters of traffic and community infrastructure and services, and emergency services) would result if projected demands are above the current	

			capacity, are routinely above the current levels for an extended period of time, are unlikely to return to existing conditions, and cannot be mitigated through adjustments to programs, policies, plans, or through other mitigations. Local and regional emergency services are limited and could be easily overwhelmed by even moderate scale emergencies. Question/Recommendation: Denison must demonstrate plans to be largely self-reliant on internal emergency response measures, and able to sustain emergency management until transportation is available to or from the Project area either by air or ground.	
297.	ERFN (February 22, 2023)	Section 12.3.4.2.1 Potential Effect 1 – Change in Traffic	Comment #ERFN-197: While Section 12.3.4.2.1 describes Denison's assessment of changes to traffic volume during Project construction, operation and decommissioning, this section of the EIS does not go on to describe how the effects of increased traffic may interact with traditional land use and Quality of Life, which is the overall valued component considered in Section 12 of the EIS. Question/Recommendation: Section 12.3.4.2.1 should be modified to include an analysis of how the Project's change to traffic conditions and road use will result in effects to traditional land use and Quality of Life, and include mitigation measures to address these potential effects.	
298.	ERFN (February 22, 2023)	Section 13.1 Scope of the Assessment	Comment #ERFN-198: The guiding questions are narrowly focused and could be expanded to understand impacts from a GBA+ perspective. The questions do not ask how the Project will help to retain economic benefits for LSA communities. Question/Recommendation: The assessment could be enhanced by reviewing the findings from a GBA+ perspective. The assessment should make clear recommendations to help LSA maximize potential economic effects.	
299.	ERFN (February 22, 2023)	Section 13.1 Scope of the Assessment	Comment #ERFN-199: "Characterize existing conditions"; This could be enhanced by forecasting the baseline conditions without the project to match the temporal boundaries of the project, as well as characterizing existing conditions. Forecasting key indicators and measurable parameters without the project based on trends and existing conditions could enhance the assessment.	
300.	ERFN (February 22, 2023)	Section 13.1.2 Key Indicators and Measurable Parameters	Comment #ERFN-200: Based on the Terms of Reference, the Traditional Economy could be a separate VC. However, the Draft EIS considers Traditional Economy as a KI. Question/Recommendation:	

			Given the importance of the Traditional Economy to ERFN, selecting it as a separate VC with a set of Key Indicators could enhance the assessment and monitoring of the potential Project's effects.	
301.	ERFN (February 22, 2023)	Section 13.1.2 Key Indicators and Measurable Parameters	Comment #ERFN-201: Typo, the Economy VC is comprised of five, not four KIs. Question/Recommendation: Please fix typo.	
302.	ERFN (February 22, 2023)	Section 13.1.2 Key Indicators and Measurable Parameters	Comment #ERFN-202: Direct/Indirect/Induced for employment and income – Direct employment/income could be outside of the LSA or RSA. Question/Recommendation: Acknowledge that Direct employment in this assessment is limited to the direct employment by Denison and contractors in the Study areas.	
303.	ERFN (February 22, 2023)	Section 13.1.2 Key Indicators and Measurable Parameters	Comment #ERFN-203: Indirect/Induced for employment; the suggested measure for indirect and induced employment is aggregated employment and unemployment rates; Input-output modelling could be used to estimate indirect and induced employment. Question/Recommendation: Enhance measurement of indirect and induced employment through input-output modelling. This would help understand the other enabled employment impacts of the project.	
304.	ERFN (February 22, 2023)	Table 13.1-1: Key Indicators and Measurable Parameters for Economy	Comment #ERFN-204: Measurable parameters employment and training; employment is limited to direct project-related employment opportunities. There are 2 issues: 1. It is implied that many of these opportunities will be captured by fly- in/fly-out workers that won't impact the LSA. 2. There's no estimating of the quantity of indirect and induced employment. Indirect and induced employment can often represent the same number of jobs provincially as direct employment. The question for all these jobs is how many of them will be captured in the LSA and RSA. Recommendations: 1. Estimate indirect and induced employment impacts using input- output modelling. 2. Estimate the number of direct and indirect jobs that will be captured in the LSA and RSA vs. out of the study area. Induced jobs in the study areas could be proportional to the percentage of total direct and indirect jobs captured in the study areas. Regardless of the methodology Denison uses, an estimate of the economic impact on local employment in the LSA and RSA would add to the assessment.	

305.	ERFN (February 22, 2023)	Table 13.1-1: Key Indicators and Measurable Parameters for Economy	Comment #ERFN-205: Measurable parameters – Income; Wages and salaries paid by Denison are only part of the income impact in the study areas. Not all the income will be captured in the study areas, and some income will be generated through indirect and induced activities. Question/Recommendation: Income impacts in the community should be based on the same employment capture assumptions that are used for capturing employment.	
306.	ERFN (February 22, 2023)	Table 13.1-1: Key Indicators and Measurable Parameters for Economy	Comment #ERFN-206: Measurable parameters – Income; Income disparity is not included in the measurable parameters; Projects that can create relatively high-paying jobs for some of the residents in a community can create income disparity. This can result in increases in household costs for all residents. The impact of the project on income disparity could be important. Question/Recommendation: Consider adding income disparity as a measurable parameter of the Income key indicator.	
307.	ERFN (February 22, 2023)	Table 13.1-1: Key Indicators and Measurable Parameters for Economy	Comment #ERFN-207: Business opportunities does not look at the impact of the project on the labour supply for existing businesses. Relatively high-paying jobs associated with the project could result in existing businesses not being able to hire and retain the employees necessary to operate their businesses. Question/Recommendation: The assessment could be enhanced by including impact on labour for existing businesses as a measurable parameter for the Business Opportunities Key Indicator.	
308.	ERFN (February 22, 2023)	Table 13.1-1: Key Indicators and Measurable Parameters for Economy	Comment #ERFN-208: Measurable parameters: Doesn't specify that measurable parameters will be looked at in a disaggregated fashion. Question/Recommendation: The assessment could be enhanced by collecting disaggregated data on these measurable parameters when it was available. Project impacts of the key indicators are likely not homogeneous across all demographic factors.	
309.	ERFN (February 22, 2023)	Section 13.1.3.2 Temporal Boundaries	Comment #ERFN-209: The existing environment focuses on the past three census periods (2006, 2011, 2016). The assessment would benefit from reviewing and incorporating data from the latest census. Question/Recommendation: Incorporate demographic and economic data from the 2021 Census.	

310.	ERFN (February 22, 2023)	Section 13.1.3.2 Temporal Boundaries	Comment #ERFN-210: The temporal boundaries seem appropriate, but the existing conditions without the project do not forecast what the measurable indicators will be without the project. Question/Recommendation: Forecast baseline measurable indicators without the project for the temporal boundaries presented in the assessment.	
311.	ERFN (February 22, 2023)	Section 13.2 Existing Environment	Comment #ERFN-211: Most of the data presented in 13.2.1.4/13.2.1.5/13.2.1.6 only shows percentages of participation. The associated nominal values are unclear. Question/Recommendation: Because the nominal values are important for understanding the scale of impact of the project, add nominal values throughout the sections. This is important because the entire LSA has only 875 people in their labour force. How is that spread across the different communities? Small changes in these variables could be material to the different communities.	
312.	ERFN (February 22, 2023)	Section 13.2.1 Key Indicator: Employment and Training	Comment #ERFN-212: The Draft EIS stated, “due to the small populations of La Plonge and Patuanak, data from Statistics Canada have been suppressed to protect confidentiality. Accordingly, data for the LSA are not fully representative, but the effect on reported statistics is believed to be minimal at the LSA level, given the low population of those two localities” (p. 13-18). Question/Recommendation: The random rounding for small populations makes the census data unreliable as an absolute indicator. Denison has done a good job using qualitative interview data to add to the baseline understanding of unemployment. Given the challenges in the census at capturing unemployment for these small populations, specific details for measuring unemployment as part of the monitoring plan would be valuable.	
313.	ERFN (February 22, 2023)	Section 13.2.1 Key Indicator: Employment and Training (all indicators)	Comment #ERFN-213: The data are not presented from a GBA+ perspective, limiting the assessment’s estimate of the Project adverse or disproportionate impacts separated based on gender, sexual orientation, race, or other factors which have historically been used to disadvantage populations interacting with mining projects. Question/Recommendation: Complete the assessment using a GBA+ framework. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	

314.	ERFN (February 22, 2023)	Section 13.2.1.5 Employment by Sector	Comment #ERFN-214: The employment by industry sector shows that the LSA has a higher concentration of employment in mining than the RSA and the province as a whole. This suggests that not all the jobs associated with the project will go to a fly-in/fly-out work force. Employment in the LSA could be impacted by the project: Many workers are already in the mining industry. Question/Recommendation: Do not rule out effects due to the fly-in/fly-out nature of the project (municipal revenue, indirect and induced employment, and income).	
315.	ERFN (February 22, 2023)	Section 13.2.2.1 Total Personal Income	Comment #ERFN-216: Personal Income data is presented for the LSA for Indigenous and non- Indigenous individuals, but the make- up of the population (Indigenous vs non-Indigenous) was not presented. Question/Recommendation: Include nominal values to show the size of the Indigenous and non-Indigenous populations in the LSA.	
316.	ERFN (February 22, 2023)	Section 13.2.3 Key Indicator: Traditional Economy	Comment #ERFN-218: Some baseline data is missing from this section. Traditional economy baseline data is presented in the project's effects section for the first time. Specifically, the commercial harvester who had traplines near the project site was not identified in this section, nor was the typical locations of non-commercial harvesting identified. These are referenced in the effects section. It would be helpful if they were previously introduced. Question/Recommendation: Add the baseline elements of the Traditional Economy referenced in the effects section to the baseline section.	
317.	ERFN (February 22, 2023)	Section 13.2.3 Key Indicator: Traditional Economy	Comment #ERFN-219: Kineepik Métis Local and Pinehouse Lake member concerns and thoughts about the impact of the project should likely be in the effects section, not the baseline. Question/Recommendation: Move information related to the effects of the project to the project effects section.	
318.	ERFN (February 22, 2023)	Section 13.2.4 Key Indicator: Business Opportunities	Comment #ERFN-220: There is no discussion on challenges local businesses have in finding labour to operate their businesses. Question/Recommendation: Adding the challenges of local businesses to finding labour would enhance this section.	

319.	ERFN (February 22, 2023)	Table 13.3-1: Potential Project Interactions for Economy	Comment #ERFN-221: The Traditional Economy may have interactions with other phases/activities of the Project, and the interactions are not limited to only employment and expenditures. Project activities and the presence of the Project may interact with current and future Traditional users. Question/Recommendation: Work with traditional users and Knowledge Holders to review the approach of outcomes of the assessment to the Traditional Economy.	
320.	ERFN (February 22, 2023)	Section 13.3.2 Potential Project-related Effects	Comment #ERFN-222: The assessment does not quantify anticipated effects for LSA communities and relies on a qualitative and subjective assessment. Question/Recommendation: Review existing baseline data and run scenarios (best, likely, worst case) to estimate potential capture with the LSA for economic benefits. Denison should conduct an analysis to estimate KI changes in LSA and RSA.	
321.	ERFN (February 22, 2023)	Section 13.3.2.1 Potential Effect 1 – Employment and Training (p.13-61)	Comment #ERFN-223: The Draft EIS states, "training programming will be determined in consultation with COI and are anticipated to involve existing training facilities and programs (Process Operation Technical [SIIT] Meadow Lake, Chemical Technology [Saskatchewan Polytechnic]) as well as specific ISR training, where required. Denison will initially prioritize Indigenous and non-Indigenous communities in the LSA in terms of employment and training opportunities" (p. 13-61). However, Denison has not made firm commitments as of now. Question/Recommendation: (i) Clarify how Denison plans to prioritize Indigenous and non-Indigenous local communities in terms of employment and training. (ii) Establishing a local recruitment and training centre within a nearby community would enhance the positive impacts of the Project on Employment and Training.	
322.	ERFN (February 22, 2023)	Section 13.3.2.1 Potential Effect 1 – Employment and Training	Comment #ERFN-224: Presentation of historic baseline participation and employment rates in the effects section. The effects of the project on these measurable indicators are missing. Question/Recommendation: Remove the presentation of baseline data of these indicators. Add the estimated effects of the project on these indicators.	
323.	ERFN (February 22, 2023)	Section 13.3.2.1 Potential Effect 1 – Employment and Training	Comment #ERFN-225: The draft EIS states, "training opportunities are anticipated to be delivered by institutions in northern Saskatchewan or Saskatchewan more broadly and will be determined in consultation with LSA communities" (p. 13-64)	

			Question/Recommendation: Supporting local hiring practices through the establishment of a local recruitment and training centre within a nearby community for ensuring Indigenous and non-Indigenous members have a pathway to having higher quality positions than general labour or junior positions. This would enhance the positive Project impact on Employment and Training.	
324.	ERFN (February 22, 2023)	Section 13.3.2.3 Potential Effect 3- Traditional Economy	Comment #ERFN-226: The potential effects on the Traditional Economy are likely underestimated. The erosion of traditional economic practices resulting from the cumulative effects of resource projects is a concern voiced by ERFN. Question/Recommendation: Work with traditional users and Knowledge Holders to develop a robust compensation plan, considering future users.	
325.	ERFN (February 22, 2023)	Section 13.3.2.4 Potential Effect 4 – Business Opportunities	Comment #ERFN-228: The impact of the project on business to hire and retain labour to support existing business operations has not been addressed. Question/Recommendation: Forecast the impact of the project on existing businesses access to labour to support existing operations.	
326.	ERFN (February 22, 2023)	Section 13.3.2.4 Potential Effect 4 – Business Opportunities	Comment #ERFN-229: The Draft EIS states, “Denison has established an internal procurement approach that requires the procurement of all goods and services for the Project to first consider businesses based within the LSA communities prior to looking elsewhere in northern Saskatchewan, southern Saskatchewan, and/or outside of Saskatchewan throughout all phases of the Project” (p. 13-68). There were limited specifics associated with this commitment. Question/Recommendation: Clarify how Denison plans to develop procurement strategies that favour local works and businesses. Engage Indigenous and non-Indigenous businesses in the development of these procurement strategies	
327.	ERFN (February 22, 2023)	Section 13.4 Mitigation and Enhancement Measures	Comment #ERFN-230: Mitigation measures are vague and require more clarity. How Indigenous and local hiring will be prioritized and maximized, the likelihood and type of local procurement and training opportunities should be clearly outlined. Question/Recommendation: Develop a robust and clear set of actions to maximize potential benefits to LSA.	

328.	ERFN (February 22, 2023)	Section 13.4 Mitigation and Enhancement Measures	Comment #ERFN-231: The workforce transition plan will be a key mitigation measure to protect the LSA communities against any boom- bust effects of the Project. More clarity on this plan, including financial commitments to ensure the long-term economic benefits for the LSA, are needed. This plan should also address transition planning for any local businesses working with the Project. Question/Recommendation: Provide details with financial commitments in the workforce transition plan. This should be developed prior to Project approvals and should be revisited on an ongoing basis.	
329.	ERFN (February 22, 2023)	Section 13.5.1 Residual Effects Characterization	Comment #ERFN-232: The residual impacts on employment are said to be positive and low to moderate, without quantifying the impact. At points in the analysis, it is said that there will be little impact on employment and residency due to the fly-in/fly-out nature of the project. Then in this section it is said that the impact on employment could have a moderate effect on the economy. This could cascade to a moderate impact on income disparity, business access to labour, and municipal government cost driven by community growth. Question/Recommendation: Quantify the impacts on employment. Cascade the impacts on employment to impacts on income, business opportunity and government finance.	
330.	ERFN (February 22, 2023)	Section 13.5.1.2 Income	Comment #ERFN-233: The residual impact on Income is seen as positive and moderate. This analysis does not consider the impact on income inequality and how that could impact the LSA and RSA. This might change to direction of the impact. Question/Recommendation: Include income disparity as a measurable impact in the analysis and determine if it changes the direction of the impact of the project on Income.	
331.	ERFN (February 22, 2023)	Section 13.5.1.3 Traditional Economy	Comment #ERFN-234: The residual impact of the project on the traditional economy is seen as having a magnitude of negligible to low. The characterization of the ability of the workforce to participate in the traditional economy as being minimal or low does not seem to be supported by the evidence presented. Evidence presented indicated that some workers at other similar facilities felt that their ability to participate in the traditional economy had been negatively impacted (13-67). Question/Recommendation Provide additional evidence to support the magnitude of the impact as being negligible to low or adjust the magnitude of the impact.	

			The magnitude of the negative impact could potentially be reduced if Denison proposed additional time off be granted to workers to participate in traditional seasonal harvesting activities.	
332.	ERFN (February 22, 2023)	Section 13.5.1.3 Traditional Economy	Comment #ERFN-235: The residual impact of the project on the traditional economy is seen as having a reversibility as fully reversible. The assessment doesn't address the contribution of participating in the traditional economy's impact on social customs and relationships. This effect was identified in the baseline (p. 13-51), but not assessed in section 13.3.2.3. If there is a more than low impact on the traditional economy, this could have a lasting impact on social customs and relationships. This might make return to the traditional economy not as fully reversible as the analysis proposes. Question/Recommendation: Provide additional evidence as to how impacts to the traditional economy won't impact the social customs and relationships, or how if it does these will be able to be reversed after decommissioning.	
333.	ERFN (February 22, 2023)	Section 13.5.1.4 Business Opportunities	Comment #ERFN-236 and ERFN-237: The residual impact of the project on business opportunities has a direction of positive. The assessment does not include the impact of the project of existing businesses' access to labour to support ongoing business operations. If the project negatively impacts existing businesses' access to labour the direction of the impact on business opportunity could change. Question/Recommendation: Assess the impact of the project on existing businesses access to labour. Re-assess the direction of the residual impact if necessary.	
334.	ERFN (February 22, 2023)	Section 13.5.2. Summary of Project- related Residual Adverse Effects on Economy	Comment #ERFN-238: The effects of the Traditional Economy are likely underestimated. The effects from a GBA+ perspective are unknown. The potential boom- bust effects of the Project are not considered. Question/Recommendation: Assess the impact of the project on GBA+.Re-assess the direction of the residual impact if necessary. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
335.	ERFN (February 22, 2023)	Section 13.5.2 Summary of Project- related Residual Adverse Effects on Economy	Comment #ERFN-239: The residual adverse effects and economy summary may need to be updated if some of the additional analysis is done. Question/Recommendation:	

			Re-assess the residual adverse effects on the economy after updating the residual effects on the other key indicators. Revise as necessary the Economy Summary.	
336.	ERFN (February 22, 2023)	Section 13.7 Monitoring and Follow-up	Comment #ERFN-240: There is very little information on how the economic environment will be monitored. Question/Recommendation: Develop a clear monitoring and follow-up plan with ERFN, addressing each of the Key Indicators and outlining the measurements and reporting that will be undertaken.	
337.	ERFN (February 22, 2023)	Section 14.2 Scope, Scale, and Objectives of the Assessment	Comment #ERFN-241: Denison notes that the overall objective of Section 14 Accidents and Malfunctions is to "evaluate the potential effects to human health or the biophysical environment resulting from radiological and conventional accidents and malfunctions in consideration of proposed environmental protection measures" however, continue to state that "some hazards related to work safety were identified; however, worker safety (i.e., risks and consequences) is beyond the scope of this assessment." The lack of full consideration of worker safety with respect to radiological hazards suggests that Denison have failed to identify and consider the full range of accidents, as many of the greatest risks with this project are directly related to worker health and safety, and expand well beyond the health of any one individual (e.g., impacts to worker health and safety may have direct impacts on aquatic or terrestrial conditions, as well as socio-economic perceptions of the mine). Question/Recommendation: Denison must include assessment and consideration of all worker safety risks and consequences associated with accidents and malfunctions for this section to be considered complete. Without this section reviewers are unable assess the broader impacts of the projects and the overall risks to both the environment and society in which this project is set. This request is in alignment with REGDOC-2.9.1 Section A.3.4 which notes that "[t]he applicant should provide an assessment of potential health and environmental effects resulting from postulated radiological and conventional malfunctions or accidents." Our interpretation of this wording is that it applies to both environmental and human health which includes both public and worker health.	
338.	ERFN (February 22, 2023)	Section 14.4 Influence of Indigenous Knowledge, Local Knowledge, and Engagement on the Assessment	Comment #ERFN-242: Examples of Influence of Indigenous Knowledge, Local Knowledge, and Engagement on the Assessment outlined in section 14.4 only demonstrate that concerns were raised during engagement activities, however, Denison fails to demonstrate how it included specific Traditional Knowledge both in the assessment of Accidents and Malfunctions, as well as how Traditional Knowledge would be used in monitoring and or response in the event of an accident or malfunction. As a result, ERFN assert that Denison has done a poor job of meaningfully considering the input from ERFN and others.	

			Question/Recommendation: Denison must demonstrate how Traditional Knowledge, not only community concerns, was considered in the assessment of accidents and malfunction including risks, monitoring, and proposed interventions and mitigations.	
339.	ERFN (February 22, 2023)	Section 14.4 Influence of Indigenous Knowledge, Local Knowledge, and Engagement on the Assessment; Table 14.4-1	Comment #ERFN-243: Table 14.4-1 outlines a summary of engagement records related to accidents and malfunctions; however, Denison does not provide sufficient information regarding the concern which was raised and context in which it was raised. Specifically, in many cases, Denison only present a handful of words as the "comment" and then speaks to assessment consideration, but reviewers are unable to identify the concern which is being raised in most cases. As a result, Denison is able to present a solution for assessment consideration to a concern which is not identified. Question/Recommendation: Denison must provide complete engagement records outlining full comments/concerns with the context in which they were presented in order to demonstrate that these concerns were indeed appropriately considered in relation to the assessment of accidents and malfunctions.	
340.	ERFN (February 22, 2023)	Section 14.4 Influence of Indigenous Knowledge, Local Knowledge, and Engagement on the Assessment; Table 14.4-1	Comment #ERFN-244: Table 14.4-1 outlines many of the concerns raised through engagement with ERFN and others, however, Denison only point to these concerns being addressed and considered in the Emergency Response Plan and other documents which have not yet been drafted. ERFN find it inappropriate for Denison to continue to defer meaningful discussions about potential impacts and ability to respond beyond the EIS stage. It is necessary to fully understand Denison's mitigation and response for all foreseeable events at this stage in order to evaluate possible residual effects of this project. Question/Recommendation: Denison must provide a draft version of the Emergency Response Plan which outlines all foreseeable effects pathways associated with accident or malfunction, monitoring options to ensure accidents or malfunctions are appropriately detected, and possible consequences and interventions as a result of an accident or malfunction.	
341.	ERFN (February 22, 2023)	Section 14.5.1 Overview	Comment #ERFN-245: Denison has identified several risk scenarios as part of the accidents and malfunctions analysis; however, it has not conducted an effects pathway assessment with ERFN directly, allowing Denison and ERFN citizens to communicate concerns associated with the project and potential accidents and malfunctions. As a result, ERFN see that Denison's accidents and malfunctions assessment to be narrow in scope and only speak to western science perspectives. Question/Recommendation:	

			Denison should provide appropriate capacity and support to enable ERFN to engage Denison in establishing an effects pathway assessment to ensure that monitoring, mitigation, and intervention associated with all potential environmental impacts appropriately consider ERFN TK and input, based on how the land is used and the societal impacts of this project.	
342.	ERFN (February 22, 2023)	Section 14.5.2 Process Hazards Analysis	Comment #ERFN-246: Denison note that while there are standards and regulatory documents which govern the assessment of risk and probability for an accident or malfunction associated with a reactor facility, similar REGDOCs do not exist for a mining environment. ERFN agree that REGDOCS focusing on risk and probability assessment for a reactor facility is not overly appropriate to a uranium mine facility. However, there remain additional hazards which do not occur at non-nuclear facilities (e.g., non-uranium metal mines), that should be considered. Question/Recommendation: Denison should demonstrate how it utilized lessons learned from other uranium mines in the regional context (e.g., McClean Lake, Cigar Lake, and McArthur River), as well as other ISR facilities in the United States and elsewhere to ground the Hazards Analysis.	
343.	ERFN (February 22, 2023)	Section 14.5.2 Process Hazards Analysis; Figure 14.5-2	Comment #ERFN-247: Denison outlines in Figure 14.5-2 a matrix considering likelihood and consequence severity of an accident or malfunction. This approach is used widely in environmental assessment, however, the definitions used to delineate consequence are not appropriately framed through the lens of ERFN land users who live near the facility and use the lands resources which would be affected to exercise rights and traditional practices. As a result, ERFN find the term consequence severity to be superficial. Question/Recommendation: Denison must consider, in its hazard analysis risk matrix, not only the potential impacts to human and environmental health, but also consider by extension the impacts to society, land use, traditional and non-traditional economic factors, and importantly, perceptions in the event of an accident or malfunction. For example, while an accident or malfunction may only have a narrow physical footprint in which the environment is impacted, this incident, especially if associated with a radiological event, could have a much larger perceived area of impact. As a result, the consequence severity may be much greater when viewed through the perspective of ERFN land users rather than what is measurable through western scientific methods.	
344.	ERFN (February 22, 2023)	Section 14.5.4 General Design and Mitigation Considerations	Comment #ERFN-248: Section 14.5.4 outlines general design and mitigation considerations for the project. In the preface for this subsection, Denison outline intentions and commitments to "setting high standards for various aspects of its operations, which will serve to mitigate potential Project-related effects." However, only provide a generic overview of measures and features which they are considering.	

			They do not present options and analysis for the consideration of these measures and therefore ERFN are unable to conduct any sort of meaningful assessment of whether they will be effective. Question/Recommendation: Denison must do more to appropriately identify, assess, and proactively propose meaningful options for mitigations to be considered. Specifically, ERFN expects that Denison outline specific hazards, and discussion on measures which will proactively prevent impact and alternative measures to serve as contingency.	
345.	ERFN (February 22, 2023)	Section 14.5.4 General Design and Mitigation Considerations	Comment #ERFN-249: Denison note that "the processing plant will be designed with expert consideration of potential environmental and health and safety effects to mitigate interactions to the extent possible." While ERFN do not suspect that this wording implies that other aspects of the project will not be designed with expert consideration of potential environmental and health and safety effects in mind, this statement perfectly exemplifies the frustration ERFN faces in meaningfully evaluating the potential mitigation measures, which are absent. Question/Recommendation: ERFN requests that Denison provide detailed design and activity options based on each identified risk such that the effectiveness and appropriateness of each measure can be adequately assessed.	
346.	ERFN (February 22, 2023)	Section 14.5.6 Definition of Bounding Scenarios	Comment #ERFN-250: Denison notes that "the processing plant will be designed with expert consideration of potential environmental and health and safety effects to mitigate interactions to the extent possible." While ERFN do not suspect that this wording implies that other aspects of the project will not be designed with expert consideration of potential environmental and health and safety effects in mind, this statement perfectly exemplifies the frustration ERFN faces in meaningfully evaluating the potential mitigation measures, which are absent. Question/Recommendation: ERFN request that Denison provide detailed design and activity options based on each identified risk such that the effectiveness and appropriateness of each measure can be adequately assessed.	
347.	ERFN (February 22, 2023)	Section 14.5.6 Definition of Bounding Scenarios; Table 14.5-2	Comment #ERFN-251: Loss of freeze capacity is identified as High Risk. Based on the risk matrix outlined in Figure 14.5-2 the overall risk is based on both likelihood and consequence severity. It is however unclear the circumstance which led the loss of the freeze capacity to be evaluated as high risk (similarly, failure of the freeze wall is identified as moderate risk, however, again the factors which led to this initial risk characterization are not discussed). ERFN agrees that the consequence severity for loss of	

			freeze capacity and failure of freeze wall to be amongst the greatest for this project, however, what is unclear is whether Denison is suggesting the likelihood is also elevated. Question/Recommendation: ERFN requests that Denison provides an overview of factors which led them to the characterization of risk as presented, including both likelihood, consequence severity, and rational for why those risks were determined to fall within each respective likelihood and consequence severity levels.	
348.	ERFN (February 22, 2023)	Section 14.6.1.1.1 Release Characterization	Comment #ERFN-252: ERFN questions the approach used to assess the dissolution rate of uranium on a number of factors. a) Denison uses concentrate samples from the McClean Lake operation as a proxy for yellow cake produced at the Wheeler River project, without providing discussion as to whether these are truly interchangeable for the purposes of assessing solubility. Given the significant differences in processing, it is unclear whether McClean Lake samples are an appropriate proxy. b) The information provided outlining the rate at which uranium will come out solution is not clear. Specifically, ERFN raise concerns that solubility (4,800 ug/L) is used directly to measure the rate of dissolution. Solubility and dissolution rate should have an inversely proportionate relationship. c) Denison make an assumption that only dissolved (soluble) uranium will be mobilized by water. This is not accurate as flowing water can mobilized material which is not dissolved either as bed load or as suspended load, which may travel significantly downstream. d) Denison indicates that "that most (98% of the mass) of the uranium concentrate is expected to settle within a short distance of the release (i.e., within approximately 20 m of the release point), even under high flow conditions in the Wheeler River due to a relatively slow water velocity (<0.8 m/s)." This is a very narrow range of expected impacts; however, insufficient information has been made available to understand the spatial modelling that has been conducted to support this assertion Question/Recommendation: Denison must provide additional information regarding the methods used to model possible uranium flow, including providing a particle dispersion map of the downstream environment to illustrate expected movement and areas which could be effected in the event of an accident and spill.	
349.	ERFN (February 22, 2023)	Section 14.6.1.3 Evaluation of Probability	Comment #ERFN-253: Generalized national or provincial transportation accident statistics is not an appropriate proxy given the unique conditions which face transportation of material from the Wheeler River site. Specifically, generalize statistics do not consider the increased risks of driving on a remote roadway, that is poorly lit and has frequent encounters with wildlife.	

			Question/Recommendation: Denison must consider the additive or interactive effects of the road conditions unique to the Wheeler River project, which may increase accident rates beyond that of conventional roadway accident statistics.	
350.	ERFN (February 22, 2023)	Section 14.6.1.4.2 Exposure Assessment	Comment #ERFN-254: The assessment of risk associated with a vehicular accident in which uranium is spilled into Wheeler River does not consider either the psychological/ perceived impacts of the spill, in which ERFN citizens may be less likely to want to interact with the river following an accident regardless of whether the spill was appropriately cleaned up, or the impacts to fish and aquatic habitat as a result of cleanup efforts. Given the need to clean the physical substrate significant amounts of fish habitat would be destroyed in order to effectively remediate a spill site. Question/Recommendation: Denison must consider the secondary implications of mitigation measures and interventions in the event there is an accident resulting in a spill.	
351.	ERFN (February 22, 2023)	Section 14.6.3.1 Scenario Description	Comment #ERFN-255: Denison note that the freeze wall will require a minimum of 12 months to thaw in the event of freezing system failure. It is unclear where this value originated from and the factors which contribute to such a slow thawing cycle. Question/Recommendation: ERFN requests that Denison provide modelling data for the thawing rates of freeze wall based on the geological properties to be encountered by the freeze wall.	
352.	ERFN (February 22, 2023)	Section 14.6.3.3 Evaluation of Probability	Comment #ERFN-256: Denison notes that a probability value of 1 x10-7 was established for the likelihood of loss of freeze capacity based on professional judgement. ERFN contests this value as entirely speculative and offered without substance. There are a wide range of factors that may contribute to short and long-term reductions or losses in freeze capacity (e.g., power failure, equipment failure, maintenance), which are not discussed. Question/Recommendation: Denison must provide a more meaningful assessment of specific factors which could lead to the loss or reduction of freeze capacity, demonstrating how they may contribute to an overall likelihood of loss of freeze capacity.	
353.	ERFN (February 22, 2023)	Section 14.6.3.4 Evaluation of Consequences	Comment #ERFN-257: Denison argues in sections 14.6.3.1, 14.6.3.3 and14.6.3.4 without substance that the risk of groundwater contamination due to the loss of freeze capacity is very unlikely. The lack of evidence presented to substantial these claims is alarming to ERFN. ERFN agree that under normal circumstances the likelihood of the freeze wall failing allowing for groundwater contamination is on the lower end of the likelihood spectrum,	

			however, ERFN are not currently assessing effectiveness under normal circumstances, but rather as a result of accident or malfunction. Based on the discussion provided in section 14.6.3.4, there is great concern to ERFN that Denison would be a) able to detect the failure of a freeze wall and b) identify the exposure pathway to enable Denison to take appropriate action before catastrophic environmental impacts are observed. Question/Recommendation: ERFN is gravely concerned about the information put forward by Denison in section 14.6.3 regarding the risk assessment associated with likelihood and consequences of failure by the freeze wall. Denison has not presented a viable method to monitor the effectiveness of the freeze wall. Additionally, Denison indicates that there are no viable methods of detecting impacts or intervening until they are observed, indicating failure of the freeze wall. Finally, when speaking to the likelihood of an accident or malfunction, Denison only offer a best guess. ERFN requests that CSNC and Denison take seriously the possible threat to the environment and by extension ERFN Rights and interests associated with the failure of the freeze wall. ERFN cannot overstate the need to provide additional analysis of contingency measures to avoid containment in the event the freeze wall fails to contain mining fluids and other sources of groundwater contamination associated with Wheeler River activities. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
354.	ERFN (February 22, 2023)	Section 14.6.4.1 Scenario Description	Comment #ERFN-258: Denison suggests that the "low temperature of the formation in and around the compromised section of the freeze wall would most likely cause the fluids to freeze and seal or partially seal the opening, further reducing the rate of contamination." It is unclear how mining fluids may influence the freezing point of groundwater, and therefore allow mining fluids to either thaw the freeze wall or be immune to subsequent freezing by surrounding materials. Question/Recommendation: ERFN request Denison provide a breakdown of expected freezing points for mining fluids or other liquids within the mining theatre which may interact with the freeze wall.	
355.	ERFN (February 22, 2023)	Section 14.6.4.1 Scenario Description	Comment #ERFN-259: Denison speculates that migration of fluids from the mining theatre beyond a compromised freeze wall section would be slow due to low temperatures. a) This assertion is not supported by ground water modelling or other evidence accounting for groundwater flow, especially as liquids are being injected and extracted via ISR mine operations. b) If migration is indeed slow, it would imply that the detection of impacts would also be slow. This may mean that impacts from a compromised freeze wall may not be observed until after the mine has completed its production life. ERFN is therefore concerned that the inability to detect impacts may result in a legacy of contamination	

			which may not be the responsibility of Denison if they are not detected until after the mine has completed closure and reclamation activities. Question/Recommendation: (i) Denison should provide detailed scenario based modelling to demonstrate expected flow rather beyond a compromised freeze wall. (ii) Denison should include an appropriate groundwater monitoring program surrounding the project to run throughout the entire lifecycle of the mine to best capture potential contamination and migration of mining fluids.	
356.	ERFN (February 22, 2023)	Section 14.6.5.2 Design and Mitigation Considerations	Comment #ERFN-260: Radon is an odorless, colourless gas. While a burst pipe of vessel under pressure may result in obvious signs of a leak, leaky valves and or fittings may allow for radon to escape undetected. Question/Recommendation: Denison should identify measures to ensure that valves and fittings are inspected and maintained in routine intervals. Also, ERFN recommend that radon detectors be installed and monitored near all enclosed infrastructure where radon gas may escape.	
357.	ERFN (February 22, 2023)	Section 14.6.6.1.1 Release Characterization	Comment #ERFN-261: Denison assumes that in the event of an explosion 90% of the uranium would be trapped within the damaged dryer unit, however, fail to substantiate this assumption. Question/Recommendation: Denison should base assumptions on maximum risk scenarios rather than minimum or probable risk scenarios. As a result, ERFN request that the LPF be equated to 1 rather than 0.1.	
358.	ERFN (February 22, 2023)	Section 14.6.6.2 Design and Mitigation Considerations	Comment #ERFN-262: In speaking to design and mitigation considerations Denison only make hypothetical or aspirational commitments (e.g. "Denison would make sure that the design of the plant includes control measures to reduce exposure levels to workers and members of the public to levels that are as low as achievable."). These are not specific design considerations or hard commitments. Question/Recommendation: Denison should commit to best practices, including the implementation of specific measures rather than simply stating plans to commit the implementation of design and mitigation considerations.	
359.	ERFN (February 22, 2023)	Section 14.8 Key Findings and Conclusions	Comment #ERFN-263: Denison has presented an accidents and malfunctions assessment that speaks only to a handful of concerns, while presenting in many cases minimal evidence	

			to substantiate its assertions and assumptions. ERFN is very concerned by the lack of consideration for contingency planning associated with the identified risks. Question/Recommendation: ERFN does not consider section 14 sufficiently comprehensive or meaningful for the purposes of assessing risks.	
360.	ERFN (February 22, 2023)	Section 15.2.1. Existing Environmental Conditions	Comment #ERFN-264: ERFN agree that the probability of a significant seismic event effecting the project site is low, however, it is not zero. Further, given the inherent design of the project, which relies on the establishment of multiple closely spaced deep wells to be drilled for injection and extraction, well design must be such that it can withstand significant sheer forces associated with horizontal movement. Denison presents an inconclusive outline of design considerations to be incorporated to minimize risks to well structures, and the freeze wall as a result of a significant seismic event. Question/Recommendation: ERFN request Denison provide an analysis looking at other similar projects to identify specific design considerations to mitigate risks to below-ground infrastructure as a result of seismic activity.	
361.	ERFN (February 22, 2023)	Section 15.2.1. Existing Environmental Conditions	Comment #ERFN-265: Human induced seismic activity has been observed in association with the use of injection wells. This have been most notably observed in association with hydraulic fracturing in the extraction of shale gas, where high- pressure fluid liquid is forced into geological formations with the intention of fracturing the rock to release trapped gasses. However, similar human induced seismic activity has been observed in other instances where injection wells are used, resulting in large changes of water or gas form underground reservoirs, creation of voids space, changes in pore-pressure, all have been associated with increases in seismic activity (Ellsworth, 2013). ERFN is concerned that similar human induced seismic activity may increase as a result of the extraction process being proposed by Denison. Question/Recommendation: ERFN request that Denison provide evidence using examples of other in situ recovery uranium mines around the world to discuss the potential risks of increased seismic activity as a result of the proposed activity.	
362.	ERFN (February 22, 2023)	Section 15.2.2. Effects on the Project	Comment #ERFN-266: Although seismic activity is unlikely, it is still possible. Given the inherent hazards associated with this project there is a need to ensure that project infrastructure can withstand all likely seismic events. Question/Recommendation:	

			ERFN request that Denison provide information on the magnitude and duration of a seismic event for which infrastructure will be designed to withstand. Included should be an analysis of the likelihood of such and event to occur at the project site.	
363.	ERFN (February 22, 2023)	Section 15.3.2 Effects on the Project	Comment #ERFN-267: Denison notes that although potential exists for forest fires to occur during the life of the Project, fire is not expected to have a detrimental effect on the Project given the design features and mitigation measures that Denison with have in place with the Fire Protection Program, which will be developed specifically for the Project and based on proven programs at existing northern sites. Denison does not provide additional information on what mitigations will be included in the Fire Protection Program, nor does it provide information on which existing programs they will be based on. Forest fires present perhaps one of the greatest environmental threats to the safe operation of this project, as fires are frequent in the region, inherently difficult to control, and likely to increase as a result of climate change. Question/Recommendation: (i) ERFN request that Denison provide additional information on fire mitigation and suppression measures that are to be established and maintained to minimize the risk of fire to the project. Specifically, more information is needed to describe how infrastructure used in the extraction, handling, processing, and storage of uranium ore and products will be safeguarded against fire (such as the use of fire proof building materials). (ii) Additional information is requested on the existing northern sites used to inform the development of the Fire Protection Program. (iii) Denison does not contemplate risks or consequences of an uncontrolled fire affecting the project site. ERFN request that additional information be provided modelling atmospheric dispersal potential of radioactive material from stockpiles and facilities in the event fire were to impact the project footprint.	
364.	ERFN (February 22, 2023)	Section 15.3.2 Effects on the Project	Comment #ERFN-268: Denison notes that the potential for increased forest fire frequency and severity due to climate change in the coming decade, referencing Section 15.3.2. However, no additional information about the potential interplay between forest fires and climate change is discussed in this section beyond this sentence. Question/Recommendation: ERFN requests that Denison revise this section to either accurately cite the appropriate section reference or provide additional discussion on the potential impacts of increase forest fire frequency and severity on the project as a result of climate change.	
365.	ERFN (February 22, 2023)	Section 15.4.2 Effects on the Project Table 15.4- 1	Comment #ERFN-269: Denison notes that in response to major precipitation events, suitable equipment and design systems will be selected for the project to operate under	

			heavy precipitation conditions, however, do not specific what design standard will be selected. Question/Recommendation: Given that climate change has the potential to increase the frequency and severity of heavy precipitation events, ERFN request that Denison specify a design standard which outlines the return period for an event (e.g., 1 in 100, 1 in 500 event).	
366.	ERFN (February 22, 2023)	Section 15.4.2 Effects on the Project Table 15.4- 1	Comment #ERFN-270: Non-contact surface runoff may include water which contains elevated amounts of suspended solids or other water quality constituents which are greater than allowable for discharge to the environment as a result of contact with roadway surfaces, or modified landcover. The likelihood of poor water quality is greater in surface runoff during extreme and prolonged precipitation or melt events. Question/Recommendation: Please provide an outline of how Denison plans to monitor and appropriately intervene in instances where non-contact surface water runoff does not meet appropriate water quality standards as a result of an extreme or prolonged precipitation or melt event.	
367.	ERFN (February 22, 2023)	Section 15.4.2 Effects on the Project Table 15.4- 1	Comment #ERFN-271: While it is logical for the water management infrastructure to be designed to allow for water to be transferred from pond to pond as required, during a significant or prolonged precipitation or melt event, water storage ponds are likely to all rise proportionately, making this mitigation potentially fruitless. Question/Recommendation: Please identify design considerations including maximum storage capacity, operational freeboard, spillway location and design, and excess treatment capacity which may allow for additional treated effluent discharge to environment in the event total pond capacity is exceeded.	
368.	ERFN (February 22, 2023)	Section 15.4.2 Effects on the Project Table 15.4- 1	Comment #ERFN-272: Denison notes that the system as proposed is designed to recycle a significant amount of the process water encountered, minimizing the amount of water that is needed to be withdrawn from Whitefish Lake. However, it is unclear from the description provided whether or not operational plan to be developed include considerations for minimum or maximum water levels within the storage ponds. Question/Recommendation: Please outline whether water storage ponds require a minimum amount of water to maintain operations of mine processes and function of the ponds themselves.	

369.	ERFN (February 22, 2023)	Section 15.4.2 Effects on the Project Table 15.4- 1	Comment #ERFN-273: Water takings and recycle may be effected during periods of extended drought. Increased water taking from Whitefish Lake may impact the water level in the lake, fish habitat, and use. Question/Recommendation: Please outline total water balance including maximum expected water takings from Whitefish Lake.	
370.	ERFN (February 22, 2023)	Section 15.4.2 Effects on the Project Table 15.4- 1	Comment #ERFN-274: The use of additional energy generation on site as a result of air conditioning will increase the carbon footprint of the project. Question/Recommendation: (i) Please provide analysis of how increased air temperatures will alter the overall carbon emissions to be produced by this project. (ii) In the event that diesel generators are required as a result of a power outage, please provide a synopsis of how operations may be impacted, including a reduction in operations to minimize carbon emissions associated with running generators. (iii) It is recommended that during summer months, alternative energy options are utilized rather than diesel generators to provide backup power. This will minimize the carbon and nitrogen dioxide footprint. Please provide information on how the use of emergency diesel backup generators has been included into the predicted nitrogen dioxide and carbon emissions/air quality assessment.	
371.	ERFN (February 22, 2023)	Section 15.4.2 Effects on the Project Table 15.4- 1	Comment #ERFN-275: Denison do not provide a discussion on the potential impacts of wind erosion on stockpiles or other dry- stacked materials during an extremely high wind event. Question/Recommendation: (i) ERFN recommend that PM15, metals, and radioactive material be modelled under extreme wind conditions, demonstrating potential dispersal, and associated implications. (ii) ERFN request that Denison develop appropriate mitigation plans for minimizing dust from roadways, stockpiles, and dry-stacked materials as a result of extremely high winds - including those associated with tornadic events.	
372.	ERFN (February 22, 2023)	Section 15.5 Climate Change	Comment #ERFN-276: Denison notes that concerns related to climate change were raised during engagement and consultation activities, however, these concerns pertain to climate change rather than GHG emissions specifically. While this may be technically accurate, climate change and the release of GHG emissions should be considered as synonymous as the cause-and-effect relationship is well established. Denison will be	

			responsible for the emission of significant amounts of GHG, which although are difficult to quantify in their impact on the local and regional environment, contribute to climate change which is experienced at local, regional, and global levels. Question/Recommendation: Denison must recognize the inherent connectedness between its operation and climate change. Further, it is necessary that Denison implement meaningful and realistic approaches to minimizing its GHG emissions and contributions to climate change.	
373.	ERFN (February 22, 2023)	EIS Section 15.5.3 Effects on the Project	Comment #ERFN-277: Throughout much of the assessment on the effects of the environment on the project, Denison downplays the potential uncertainty due to natural events. This includes providing minimal discussion on the potential for flooding, excess snowfall, and tornadic events, as well as insufficient discussion on planned mitigation options for addressing effects of the environment identified. Question/Recommendation: (i) Denison should provide analysis of potential effects of the environment on the project as a result of surface water flooding, excess snowfall events, and tornados on the project. (ii) Denison should provide additional information linking mitigation measures to possible effects of the environment, including specific design standards to demonstrate the project will be designed to minimize risks.	
374.	ERFN (February 22, 2023)	Section 15 General	Comment #ERFN-278: The Wheeler River project is located in an area of discontinuous permafrost. This aspect is not identified or examined with respect to the potential impacts of the environment on this project. (i) ERFN see this as a potential significant oversight as works conducted and infrastructure constructed on discontinuous permafrost may be impacted by permafrost melt. As frost heave and slumping may adversely impact the project site. (ii) Permafrost has an ability to trap methane and other GHGs from escaping into the environment. Permafrost which is melted or disturbed may release those gases. If permafrost will be disrupted by project activities, Denison must consider GHGs to be released as part of its impacts on the environment Question/Recommendation: (i) Denison must provide discussion on the presence or absence of discontinuous permafrost in RSA, and whether that permafrost will be impacted by project activities. (ii) Where permafrost may be impacted, Denison must quantify the amount of GHG that will be released from melting or disturbed permafrost areas.	

375.	Ya'thi Nene Land and Resource Office (YNLRO) (March 4, 2023)	EIS Executive Summary, p. 2	Comments #1, 2 and 3, Appendix A: YNLR sees a potential benefit of the in-situ approach as it is designed to reduce the surface disturbance of the Project, and the potential leakage of contaminants from excavated rock and tailings. However: • YNLR is concerned that the extraction of source water for the Project may have a negative effect on stream flows both below- and aboveground. • YNLR is concerned with the potential effects of contaminants released during and after the Project.	
376.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 2	Comment #4, Appendix A: based on the information from p. 2 of the Project Overview: YNLR assumes no permanent work camp will be constructedYNLR expects that a sizeable proportion of the Project workers will be hired from the local and regional area.	
377.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 2	Comment #5, Appendix A: YNLR is concerned with the potential increase in road and off-road traffic affecting wildlife and fisheries sustainability	
378.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 2	Comment #6, Appendix A: YNLR supports this built-in precautionary approach to the Project's risk assessment. However, given the lengthy timeline of the Project, YNLR would like to see that lost (i.e., unmitigated) wildlife and fisheries habitat be offset in some manner. A response to this should be approached through an anticipated impact benefit agreement.	
379.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 2	The EIS Executive Summary outlines mitigation measures, monitoring requirements, and commitments needed for Denison to have confidence that Project is operating as planned and that the actual effects resulting from Project Construction, Operation, and Decommissioning are at or below predicted effects. Comment #7, Appendix A: Despite these reassuring statements, YNLR is aware that predictions may fall short, hence the need for close collaboration with Indigenous Peoples, communities, and organizations, including their input into the design and implementation of transparent and statistically-robust project monitoring programs.	
380.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 2, 12, 44, 45 and 47	Comments #8, 10, 21 and 22, Appendix A: YNLR remains concerned about the nature and disposition of project contaminants during and after the mining process. • YNLR supports the Project outcome of lower aboveground disturbance, it retains concerns about the management inputs and outputs of the ISR method, particularly project water sources, quantity, and release along with its associated contaminants. • The release of contaminants before and after the Project's completion worries YNLR, which sets a high priority on clean and abundant groundwater and surface water. The Indigenous People, communities, and organizations YNLR represents will be here long after mine decommissioning, so minimizing this risk with statements regarding the length of time it takes is not helpful.	

			• As with groundwater, YNLR places a high value on the quantity and quality of surface waters. Monitoring of water will be critical, and YNLR expects to be consulted and heavily involved with respect to this activity.	
381.	YNLRO (March 4, 2023)	EIS Executive Summary Freeze Wall, p. 12 and 13	Comments #11, 12 and 13, Appendix A: Containment of the mining solution and uranium bearing solution within the mining area will be achieved through a defence-in-depth approach with three levels of containment. • YNLR assumes that information and data exist with respect to the environmental safety of freeze wall technology in uranium mining operations within Saskatchewan. Has Denison reviewed these data and are they considered/presented as part of this EIS? If not, why not? • What happens to the freeze wall and its retained contaminants at the end of the Project's life? – despite safeguards and remediation, it has potential to release contaminants after mining is completed. • Monitoring and adaptive management are important components of sustainable uranium mining. YNLR expects to be consulted/included in the design and implementation of the Project's environmental monitoring programs.	
382.	YNLRO (March 4, 2023)	EIS Executive Summary, p.16	Comment #14, Appendix A: Will the released radon gas be of any concern to natural resources, such as fish and wildlife?	
383.	YNLRO (March 4, 2023)	EIS Executive Summary, p.18 Land and Resource Use, p. 11-50 to 11-52	Comment #15, Appendix A: While Project water reuse is laudable, its overall conservation and management are significant concerns for YNLR, particularly the quantities removed from the ecosystem and the fate of contaminated water released back into the ecosystem from the Project that end up in Wollaston Lake. YNLR expects to be consulted/included in the design and implementation of the Project's environmental monitoring programs. Comment #85, Appendix A: YNLR remains concerned with the potential effects of Project contamination on culturally important natural resources. These concerns stem from the nature of the materials being mined, and the novel method (ISR) by which they are being extracted. Northern residents and Indigenous Peoples will be living here long after the mine is exhausted, thus effective monitoring is critical, as is the inclusion of impacted Aboriginal and Treaty rights holders in the design and implementation of arm's length, transparent, and statistically-robust monitoring programs.	
384.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 26	Comments #16 and 17, Appendix A: YNLR supports Denison's corporate Indigenous Peoples Policy (IPP) and looks forward to collaborating with Denison to ensure that the Project's socioeconomic benefits reach local Indigenous People. YNLR acknowledges that Denison incorporated the YNLR report into the EIS and looks forward to further working with the company collaboratively regarding the rights of Indigenous People.	

			YNLR is interested in an impact benefit agreement with Denison ensuring mutual benefits from the Project and co-management of environmental monitoring and mitigation.	
385.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 26, 28 and 59 Land and Resource Use, p. 11-52 and 11-53	Comments #18, 19 and 29, Appendix A: • Indigenous People, communities, and organizations YNLR represents are rights holders, and are not to be arbitrarily grouped and treated as non-rights holders. This is an important distinction, as the rights they hold are constitutionally protected. This must be respected and recognized in the ongoing dialogue between the company and Indigenous Peoples through their chosen representatives, like YNLR. • The Athabasca Denesųłiné people are rights holders and not stakeholders with respect to the Project. These rights include full access and use of the natural resources of the area. Any proposed infringement on these rights by the Project will need to be discussed well ahead of the Project's start date. Comment #86, Appendix A: The EIS minimizes effects of Lands and Waters availability and access on northern residents and Indigenous Peoples. Any impairment to the ability of Indigenous Peoples to utilize their Aboriginal and Treaty rights to the use of natural resources for their traditional activities constitutes an infringement of those constitutionally protected rights and must be justified. Rigorous examination of these impacts and negotiated compensation for these impacts should therefore be seriously considered.	
386.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 52	Comments #24 and 25, Appendix A: Fish, fish habitat, and fish health are all extremely important to northern people of Saskatchewan, and especially Indigenous People. Wild fish are a culturally important source of protein and provide economic opportunities in the form of commercial fishing and recreational angling. • YNLR will be eager to and expects to be involved in collaborating with Denison in the future monitoring of these vital natural resources. • Based on existing federal fishers legal and policy requirements, YNLR expects that all fish habitat destroyed or altered by the Project will be more than offset.	
387.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 54 and 55	Comment #26, Appendix A: YNLR places a high priority on wildlife and wildlife habitat, from both ecological and sociocultural perspectives. Given the long time frame of the Project, YNLR are concerned about the lack of significance associated with the residual and cumulative effects assessments of all ecological VCs. YNLR believes that the addition of this mine with its associated disturbances will have a cumulative effect on wildlife, especially for woodland caribou, as the area is already crisscrossed with many kilometres of seismic cut lines through the LSA, RSA and beyond (Figure 9.2-6, page 9-83, EIS and Appendix 9B).	

			YNLR maintains that in order for the Project to meaningfully attempt to mitigate this concern, the company must work with Indigenous partners to create an effective habitat offset plan for this species. This should form part of any project approval. Such a plan should, for instance, include steps to restore the considerable caribou habitat degraded by past mineral exploration activities.	
388.	YNLRO (March 4, 2023)	EIS Executive Summary	Comment #27, Appendix A: Indigenous People have brought forward concerns with the extensive network of seismic cut lines at several places in the EIS.	
389.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 59	Comment #28, Appendix A: While the overall direct footprint of the Project is relatively small, YNLR maintains that any wildlife habitat destroyed or altered by the Project should be more than offset or compensated for in some fashion. One example would be the additional disturbance created by the proposed Highway 914 extension. This needs to be accounted for by Denison.	
390.	YNLRO (March 4, 2023)	EIS Executive Summary Monitoring Programs, p. 74	Comment #30, Appendix A: YNLR expects to be included as part of the design and implementation of all monitoring programs. All such programs should be transparent, arm's length, include significant involvement and participation of Indigenous People, communities, and organizations and be statistically robust.	
391.	YNLRO (March 4, 2023)	EIS Executive Summary, p. 76	Comment #31, Appendix A: The EIS states: "On the basis of the Project information and related evaluation and assessment of effects, Denison believes that the Project can be constructed, operated, and decommissioned in a manner that is not likely to cause significant adverse effects to the biophysical or human environments." This is perhaps an overly optimistic conclusion. However, YNLR is willing to discuss how the company moves forward and is interested in creating more formal processes to achieve this, such as the signing of an impact benefit agreement.	
392.	YNLRO (March 4, 2023)	Project Introduction and Overview, p. 1-1, 1-5 and 1-18	Comments #32 and 33, Appendix A: The Project is located within Nuhenéné and of principal concern to YNLR is that the Project be fully sustainable with respect to cultural rights and traditions, socioeconomic equity, and environmental protection. To achieve this end, YNLR expects Denison to work collaboratively with the people of Nuhenéné through the YNLR office. YNLR supports the sustainable mining of uranium within Nuhenéné.	
393.	YNLRO (March 4, 2023)	Aquatic Environment, p. 8.-38	Comment #34, Appendix A: The EIS recognized that the utilization of water will result in an adverse impact on the drainage but dismissed the issue given that a reduction in the stream flow rate is expected to be less than 3%. It would therefore be prudent to closely monitor the flow regime to identify possible adverse effects throughout the life of the Project.	

394.	YNLRO (March 4, 2023)	Aquatic Environment, p. 8-40, 8-42, 8-98 and 8-99	Comment #35, Appendix A: Utilizing the extent of the LSA and the fact that it does not overlap with projects located within the same drainage system seems to be quite arbitrary and convenient. By this criterion, each mine does not trigger a cumulative effect according to the EIS, although they are all additive to the water flow regime. This methodology then arbitrarily and conveniently determines that "mitigation measures" for each of the mines is not warranted since there was a determination of no cumulative effects in sections 8.1.7.1, 8.1.7.2, 8.1.7.3 and 8.1.7.4. Comment #36, Appendix A: The determination of Cumulative Effects Characterization and the resultant Determination of Significance is highly subjective, therefore a much more extensive monitoring program is required. Such a program should start prior to the construction phase and carry on at least several years into the operation portion of the Project to at least demonstrate local and cumulative effects of mining projects within the watershed. Comment #37, Appendix A: YNLR agrees that the hydrological monitoring program remain throughout the life of the Project but as per the above, the study should have a much broader mandate in order to measure local and regional effects on VCs. Comment #41, Appendix A: YNLR is concerned that the conclusion that the residual effects from Project operations will not have an adverse effect on surface water is highly speculative. Again, this indicates the need for a comprehensive monitoring program to validate the speculation on water quality with rigorous statistical evidence. Comment #42, Appendix A: YNLR questions the logic track that states, "additional mitigation measures not warranted" because of the determination of no cumulative effects, then "a determination of significance is not warranted" as no cumulative effects were identified for water quality because surface water impacts are expected to remain localized…for all the mining operations in the region. Impacts on water quality and mitigation measures "not warranted" should be demonstrated through field studies and research rather than relying on a theoretical modelling approach.	
395.	YNLRO (March 4, 2023)	Aquatic Environment, p. 8-92, 8-93 and 8-96	Comment #40, Appendix A: There are several comments in the EIS that recognize the potential for a negative effect on water quality from the site water management system into Whitefish Lake. Statements taken from residents have identified concerns about the release of elements such as "mercury" because of the mining activity. While the report recognized that detectable concentrations of mercury will not be produced, the local comment should be considered as a proxy for a variety of contaminants such as selenium, arsenic, cobalt, zinc, etc., as well as the concern expressed by residents, rather than being taken literally as mercury as the only contaminant of concern.	

			YNLR reiterates that concerns about water quality are warranted given that the EIS indicates that there will be a continuous (year-round) average discharge of water from the mine site of more than 36,000 litres/hour for the entire life of the Project. This discharge will be especially evident during low flow periods.	
396.	YNLRO (March 4, 2023)	Aquatic Environment, p. 8-102	Comment #43, Appendix A: While appreciating current water quality standards, YNLR suggests that monitoring programs be designed to more than meet regulatory requirements of the license conditions. The EIS recognizes that the Project area lies primarily within an undisturbed area of the boreal forest (aside from the extent of seismic activity carried out within this area). YNLR would like to be involved in specific follow-up and monitoring plans as identified in the EIS.	
397.	YNLRO (March 4, 2023)	Aquatic Environment Fish and Fish habitat, p. 8-117, 8-140, 8-141, 8-153, 8-252 and 11-50	Comment #44, 45, 46, 49, 52 and 84, Appendix A: It is noted that the aquatic survey and fish sampling were carried out in 2016, which is now somewhat dated. It is also noted that work that would affect fish and fish habitat could/should only be carried out between July 16 and September 30th, as both spring and fall spawning species were collected in the fish sample. YNLR acknowledges that the amount of fish habitat directly affected by the Project is small. However, a much bigger concern is the indirect effects of increased human activity in the area over several decades and beyond, particularly with respect to the consequent increase in fish harvest. This will directly affect the ability of Indigenous Peoples to exercise their Aboriginal and Treaty rights. Related comments: • YNLR would be eager to see how “a fish salvage plan to relocate fish prior to in-water works” might be carried out? Such an approach may not be practicable or effective. • While the sentiment of the above fish management strategy is laudable, it is not practical in terms of preserving fish numbers given the increased human access to the lakes that the mining activity will create. • The EIS does recognize the value of sucker species to residents, which is a positive step, as these fish species are netted for a variety of purposes. Increased local traffic will also undoubtedly provide more access for both subsistence and recreational fishing. As part of the mitigation measures YNLR proposes working with authorities to regulate recreational fishing prior to the onset of the construction phase of the Project and revisiting these regulations at intervals throughout the mine’s operation and decommissioning. • YNLR disagrees with the assumptions used (Section 8.3.7.2 to 8.3.7.5), which “assume” specific monitoring and follow-up for Fish and Fish Habitat related to cumulative effects is not warranted.	

			• YNLR would like to be involved in designing and carrying out of a monitoring program, which would test the "no cumulative effect" assumption. • YNLR would like to be involved in a monitoring program for fish health. Further, this monitoring program should continue for the life of the Project or until it is demonstrated that the current filtering programs are effective.	
398.	YNLRO (March 4, 2023)	Aquatic Environment, p. 8-151	Comment #47, Appendix A: The statement on page 8-151 recognizes that the discharge of treated effluent during the Operation and Decommissioning phase may interact with Cameco's current releases contributing to cumulative effects. It is recommended that a study be undertaken to assess the basin effect of water discharges.	
399.	YNLRO (March 4, 2023)	Aquatic Environment, p. 8-152	Comment #48, Appendix A: Sediment quality of Whitefish Lake and downstream is not "anticipated" to overlap with the Key Lake Operation. It would be prudent to test this hypothesis to ensure that water quality in the flowage is maintained given the high value placed on these waters by residents.	
400.	YNLRO (March 4, 2023)	Aquatic Environment, p. 8-232	Comment #51, Appendix A: Water management during construction indicates that there is to be no planned discharge to Whitefish Lake. If a release of water from the mine site becomes necessary, in addition to monitoring suspended solid levels, there should be a communication plan to inform area residents of the pending release and its duration.	
401.	YNLRO (March 4, 2023)	Terrestrial Environment Fig 9. 2-6, p. 9-83	Comment #53, Appendix A: YNLR is concerned about the potential residual and cumulative effects of the extensive seismic network on the soils of the RSA and LSA. Were these and other potential network effects considered in the analyses?	
402.	YNLRO (March 4, 2023)	Terrestrial Environment Appendix 9B, p. 60 Also, p. 9-68, Fig 9. 2-9, 9-133, 9-139 and 9-149	Comment #54 and 55, Appendix A: Appendix 9B of the EIS states that 100% of the LSA and 82% of the RSA are already disturbed by buffered anthropogenic disturbances in the form of exploration lines, exploration trails, and seasonal roads. During the consultation process, residents raised the issue of the high degree of human disturbance and highlighted concerns about the broad network of linear disruptions in numerous places across the EIS. As with the Project soils, YNLR is concerned about the potential residual and cumulative effects of the extensive seismic network on the vegetation and wetlands of the RSA and LSA, particularly from edge effects. Were these and other possible effects of the network considered? If so, how were they included?	

403.	YNLRO (March 4, 2023)	Terrestrial Environment, p. 9-168	Comment #56, Appendix A: Wilson et al. (2018) recently summarized the home ranges of 25 woodland caribou populations in Canada. The average home range varied 28-fold, from 312 to 8,838 sq. km. The RSA delineated for assessing cumulative effects on caribou (40,174 ha ~ 402 sq.km.) is thus inadequate for this purpose, and the conclusions of project residual and cumulative effects non-significance are highly suspect. The same could be said for other wide-ranging species such as wolverine.	
404.	YNLRO (March 4, 2023)	Terrestrial Environment Fig 9. 2-9	Comment #57, Appendix A: Was the current RSA anthropogenic disturbance estimate (599 ha) inclusive of the many kilometres of existing seismic cut lines? Did the estimate include consideration of the compounding 'edge effects' from these linear disturbances? If not, why not? See previous comments on the very high level of existing human disturbance in the LSA and RSA highlighted in Appendix 9B.	
405.	YNLRO (March 4, 2023)	Terrestrial Environment, p. 9-239	Comment #58, Appendix A: Again, the direct and indirect effects of the existing seismic disturbance seem not to have been considered in this assessment, particularly because wolverines 'avoid linear infrastructure.' In fact, one can also see that woodland caribou avoid areas of historic seismic disturbance by directly comparing the figures on page 9-139, EIS (vegetation) and 9-202, EIS (caribou sightings). Appendix 9B gives a summary of the impacts of linear disturbances on boreal forest wildlife.	
406.	YNLRO (March 4, 2023)	Terrestrial Environment, 9. P-239	Comment #59, Appendix A: Buffered disturbance is included in Appendix 9B but appears to have been ignored in the effects assessment. Was the 500m buffering of anthropogenic disturbances also applied to the network of seismic cut lines to account for edge effects? If not, why not?	
407.	YNLRO (March 4, 2023)	Terrestrial Environment Table 9.3-23 and p. 9-270	Comment #60, Appendix A: Is the amount of initial 'available woodland caribou habitat' inclusive of the direct and indirect seismic cutline network effects? If not, why not? Irrespective of this, it appears that the LSA is being written off for woodland caribou for decades to come. See above comments with respect to Appendix 9B.	
408.	YNLRO (March 4, 2023)	Terrestrial Environment, p. 9-275, 9-280, 9-300, Land and Resource Use, p. 11-46 and 11-	Comment #61, 62, 82, 83, Appendix A: The EIS correctly highlights the cultural importance of moose and woodland caribou to Indigenous People, which underscores YNLR's concerns regarding the conclusions of the residual and cumulative effects assessments of these species, particularly for caribou. YNLR questions the optimistic conclusions drawn by Denison regarding the ongoing availability of woodland caribou for traditional use.	

			• The buffered direct habitat loss alone eliminates the LSA and RSA for caribou habitation for decades to come (Appendix 9B), so how can it 'sustain the regional woodland caribou population' in any way? • The reference to 'proven' mitigation measures is rather vague and requires further explanation. • YNLR is unaware of these proven mitigation measures, other than isolation from human disturbance. YNLR disagrees with this overall residual effects conclusion for these wildlife VCs, especially in regard to woodland caribou (Appendix 9B), for the following reasons: (i) Comment #64, Appendix A: In addition, the reason why SK1 holds one of the very few sustainable caribou populations despite a high level of forest fire, is because of currently very low levels of human intrusion, which suggests that the provincial and federal approval processes, BMPs, and mitigation measures have not been sufficient in the rest of the species' range throughout the entirety of Canada. (ii) Comment #83, Appendix A: Woodland caribou populations have strongly declined across Canada despite all types of project mitigation, so YNLR doubts that similar mitigation efforts will be effective here. A woodland caribou 'management' plan is not sufficient. YNLR believes that, at a minimum, Denison should commit to an aggressive caribou habitat offset plan before work on the Project begins. In addition, it is unclear what constitutes this proposed mitigation. A caribou management plan is proposed (Section 9), however nothing short of a full caribou habitat offset plan will suffice to sustain the region's population. Offset activities should include the ongoing restoration of the existing seismic lines, among other things. This work is best accomplished in consultation and collaboration with Indigenous People, their communities, and organizations.	
409.	YNLRO (March 4, 2023)	Terrestrial Environment, p. 9-280, 9-287 and 9-302	Comment #62, 63, 64, 66, 67 and 68, Appendix A: Past and future direct and indirect effects of seismic line clearing appear to have been ignored in this assessment (Appendix 9B). The fact that most caribou sightings occurred away from seismically disturbed areas independent of habitat type supports this observation. YNLR disagrees with this overall residual effects conclusion for these wildlife VCs, especially in regard to woodland caribou (Appendix 9B), for the following reasons: • Comment # 63 and 64, Appendix A: The extent of past seismic line cutting is very high for both the LSA and RSA. However, direct and indirect (edge) effects on wildlife, especially woodland caribou, seem to have been overlooked or minimized. Future exploration disturbance should have been estimated and included based on the rate of historic disturbance if nothing else. • Comment #67, Appendix A: Most of these mitigation measures (listed on p. 9-308) are quite superficial and would contribute little to the long-term conservation of wildlife in	

			the RSA and LSA. The proposed caribou management plan needs to be a fully developed Caribou Habitat Offset Plan given the extent of already altered habitat by seismic activities. Also note that this has a high potential for a direct impact on Aboriginal and Treaty rights. More, some Indigenous People will likely take offence at the idea of the company 'facilitating access' to their inherent Treaty Rights. Significant consultation and collaboration with Indigenous People is required. Comment #69, Appendix A: Concern about the extensive network of seismic cut lines were also raised by Indigenous People at several places in the EIS.	
410.	YNLRO (March 4, 2023)	Terrestrial Environment	Comment #65, Appendix A: Is it not possible to conduct modern mineral exploration without cutting miles and miles of seismic lines across the boreal forest?	
411.	YNLRO (March 4, 2023)	Terrestrial Environment	Comment #68, Appendix A: Section 9.3.9 of the draft EIS indicates that with the implementation of the above (and additional) mitigation measures, the residual effects on the Ungulates, Furbearer, and Woodland Caribou VCs were assessed as follows: • Moose. Not significant: the residual effects of alteration and/or loss of available habitat and of change in mortality are not expected to result in a change that will alter habitat integrity to the point where it would not be able to sustain the regional ungulate populations or the integrity of the regional moose population to the point where it could not be sustained. • Furbearers. Not significant: the residual effects of alteration and/or loss of available habitat and of change in mortality are not expected to result in a change that will alter habitat integrity to the point where it would not be able to sustain the regional furbearer populations or the integrity of the regional furbearer populations to the point where they could not be sustained. • Woodland caribou. Not significant: the residual effects of alteration and/or loss of available habitat and of change in mortality are not expected to result in a change that will alter habitat integrity to the point where it would not be able to sustain the regional woodland caribou population or the integrity of the regional woodland caribou population to the point where they could not be sustained. YNLR believes this summary to be overly optimistic and somewhat inaccurate for the following reasons: • The RSA and LSA are too small relative to the home range of woodland caribou to serve as a basis for assessing residual and cumulative effects on the species. • Large portions of the RSA and LSA have been badly degraded by mineral exploration activities (particularly by line-cutting for seismic surveys; Appendix 9B), yet their direct and indirect (edge) impacts seem not to have been considered in the effects assessments. This is puzzling given the known impact that these features have on wildlife, especially caribou, wolverine, other predators, and many avian species. The	

			EIS maps themselves clearly show an avoidance of these seismically-disturbed areas by woodland caribou. YNLR strongly believes that, at a minimum, an aggressive Caribou Habitat Offset Plan should be co-developed before Project work begins, and regular monitoring of the caribou population be conducted throughout the life of the Project.	
412.	YNLRO (March 4, 2023)	Terrestrial Environment, p. 9-320, 9-384, 9-389, 9-408, 9-413, 9-414, 9-454, 9-457, 9-460, 9-465, 9-469 Land and Resource Use	Comment #69, Appendix A: in Section 9.4 of the EIS lists Raptors, Migratory Breeding Birds and Bird Species at Risk together (p. 9-320). YNLR questions how and why these three avian VCs were selected and grouped. The three VCs include dozens of breeding bird species with hugely varying habitat requirements, so it is difficult to see how it is possible to accurately predict Project effects for many of these species, especially when so many are lumped together in only one Migratory Breeding Birds VC. In addition, the scarcity of raptors and avian species at risk makes them poor candidates for effects assessments because of low sample sizes. Comment #72 and 73, Appendix A: With only two water-based species selected to represent all forest raptors in the Project area, the results and conclusions of this assessment are extremely limited. For the forest birds in particular, this is compounded by the non-inclusion of the historic network of seismic cut lines across the landscape (Appendix 9B), and the resulting underestimation of direct and edge effects. Comment #74, Appendix A: Species at risk generally make very poor indicators of ecological integrity/biodiversity because of their relative scarcity. In fact, three of the VC bird species at risk selected were not even detected during the Project surveys. This very low quantity and data quality greatly weakens any conclusions regarding the Project residual effects. Comment # 75, Appendix A: YNLR cannot find any mention of the extensive seismic line network impacts (Appendix 9B) included in the effects assessment for birds. This was also the case for the caribou and wildlife assessments. Comment #76 and 77: Appendix A: The selection of weak indicators and the ad hoc grouping of dissimilar species make these predictions quite unreliable. This potential error is likely compounded by the apparent exclusion of the direct and indirect effects of the existing seismic cutline network (Appendix 9B). Concern about these extensive network of seismic cut lines were also raised by Indigenous People at several places in the EIS.	
413.	YNLRO (March 4, 2023)	Terrestrial Environment, p. 9-356 and 9-357	Comment #71, Appendix A: The EIS states: *"In this assessment, alteration of habitat is defined as indirect habitat alteration where suitable habitat for the Raptors, Migratory Breeding Birds, and Bird Species at Risk VCs and their associated KIs remains physically*	

			intact but is rendered less suitable or unsuitable for their use. Sources of habitat alteration include Project-related habitat fragmentation (i.e., the breaking apart of continuous habitat into smaller, spatially distinct patches), edge effects (i.e., the influence of recently cleared areas on adjacent habitats), and sensory disturbance." (Page 9-356, EIS) *"A minimum patch size is often required to fulfill all required life requisites (Robbins et al. 1989, Askins 1994, Vance et al. 2003, Butcher et al. 2010). When available suitable habitat is below a minimum patch size threshold, individual birds may get displaced despite the continued presence of suitable habitat. As a result, patch size at the individual and population level may have a species-specific effect on habitat use and could affect reproductive success, health, and survival (Askins 1994, Villard et al. 1999, Vance et al. 2003, Suorsa et al. 2004, Butcher et al. 2010)."* (Page 9-357, EIS) *"Edge effects include the influence of recently cleared areas on adjacent intact habitats. Gradients of light intensity, temperature, wind, relative humidity, as well as snow accumulation and melt may occur along the border between cleared areas and intact habitats (Bannerman 1998, Kremsater and Bunnell 1999), which could alter habitat suitability for avian use. Bannerman (1998) suggested that the richness and density of generalist bird species may increase along forest edges based on the variety of vegetation and abundance of food (e.g., American Crow and Blue Jay. However, numbers of habitat specialist species (e.g., Red-breasted Nuthatch and Pileated Woodpecker may decrease near edges because they use edge habitats less frequently or avoid them (George and Dobkin 2002). The potential influx of individuals into edge habitats, or the potential displacement of individuals into other areas, may increase crowding and subsequent inter-and intra-specific competition for breeding habitat, food, and other resources (Hagan et al. 1996, Schmiegelow et al. 1997, Bannerman 1998, George and Dobkin 2002, Calizza et al. 2017)."* (Page 9-357, EIS) The above descriptions summarize the potential effects of the Project on breeding bird habitats. When wooded landscapes are subjected to widespread seismic activity, the same effects occur: continuous parcels of forest are divided by miles of cut lines, resulting in smaller habitat patches and greater habitat edge. As a result, bird species that prefer contiguous habitats are declining, while birds that prefer habitat edges are increasing. How will the EIS address already existing direct and indirect impacts of these historic seismic linear disturbances across the LSA and RSA (Appendix 9B) that were ignored.	
414.	YNLRO (March 4, 2023)	Terrestrial Environment	Comment #78, Appendix A: Why were amphibians excluded as a VC/KI? Bats? Both were surveyed (Appendix 9B).	
415.	YNLRO (March 4, 2023)	Terrestrial Environment, p. 9-474	Comment #79, Appendix A: Project monitoring programs specific to Raptors, Migratory Breeding Bird, and Bird Species at Risk VCs are critical, particularly the ongoing repeated	

			surveys throughout the life of the Project, especially given the weak predictive basis for the effects assessments of the Project on breeding bird species.	
416.	YNLRO (March 4, 2023)	Land and Resource Use	Comment #80, Appendix A: YNLR would like to emphasize that natural resource use by Indigenous Peoples of northern Saskatchewan is of incalculable value, and the Project must not infringe upon the ability of Indigenous Peoples to exercise those constitutionally protected rights.	
417.	YNLRO (March 4, 2023)	Land and Resource Use, p. 11-50, 11-57, 11-58, 11-79, 11-138 and 11-139	Comment #84, 87, 88 and 89, Appendix A: The EIS notes that *"The presence of the Project workforce will increase the numbers of people in the ILRU LSA by an estimated 300 during Construction and 180 during Operation and Decommissioning."* (p. 11-57) YNRL notes that: • This is a significant increase in the number and persistence of humans in the area, and despite these vague reassurances, YNLR believes that this increase will affect the ability of Indigenous Peoples to exercise their Aboriginal and Treaty rights and increase the pressures on the natural resources of the area. • YNLR believes that Denison provides an overly optimistic conclusion regarding the impacts of the Project on traditional resource use by Indigenous peoples. • One indicator of increased human activity is truck traffic. However, these numbers do not include non-truck traffic. How will Denison address this? As with the impacts on the traditional use of land and natural resources by Aboriginal and Treaty rights holders, the human presence in the region is going to increase, which in turn will put additional pressures on fish and wildlife resources.	
418.	YNLRO (March 4, 2023)	Appendix 16-A Summary of Residual Effects, p. 1	Comment #90, Appendix A: There are about three dozen Valued Component/Key Indicators that are assessed for the significance of residual effects (effects that remain after mitigation) from the Project. They include sediment quality, benthic invertebrates, fish and fish habitat, fish health, terrain, soil, organic matter, vegetation abundance, listed plant species, wetlands, ungulates (moose), furbearers (wolverine, pine marten, mink, muskrat), woodland caribou, raptors (bald eagle, osprey), migratory breeding birds (water birds and waterfowl, upland game birds, migratory songbirds), avian species at risk (5), human health and safety, Indigenous land and resource use, other land and resource use, heritage resources, traditional diet, community well-being (income and cohesion), traffic, infrastructure & services, and economics. The residual effects of the Project on all of these VCs/Kis are concluded to be non-significant in the EIS.	

			YNLR questions this overly optimistic and statistically unlikely prediction. For example, the sheer number of fish and wildlife species that the few selected VC/Kis represent would suggest that some will be adversely affected, even if by chance alone. The assessment effectively states that the Project is advantageous and/or neutral to all biophysical and human values, which YNLR rejects. If the Project proceeds, YNLR will want to be closely associated with all project monitoring programs.	
419.	YNLRO (March 4, 2023)	Appendix 16-A Summary of Cumulative Effects	Comment #91, Appendix A: There are about three dozen Valued Component/Key Indicators that are assessed for the significance of cumulative effects (effects that remain after mitigation) from the Project. These include air quality, noise, terrain morphology and stability, groundwater quantity and quality, surface water quality and quantity, soil quantity and quality, organic matter, sediment quality, benthic invertebrates, fish and fish habitat, fish health, vegetation abundance, listed plant species, wetlands, moose, furbearers, woodland caribou, raptors, migratory breeding birds, avian species at risk, human health, Indigenous land and resource use, other land and resource use, heritage resources, traditional diet, income of workers, community cohesion, traffic, community infrastructure and services, and economics. As with the summary of the residual effects, the cumulative effects of the Project on all of these VCs/Kis are concluded to be non-significant in the EIS. Again, YNLR believes this to be an overly optimistic and statistically unlikely prediction for the same reasons as given above, for example, inadequate spatial boundaries, poorly chosen and grouped VCs and Kis, the apparent omission of the existing linear disturbance network in the effects assessments, and the largely qualitative nature of the assessments and their resultant 'significance.'	
420.	YNLRO (March 4, 2023)	Executive Summary Monitoring and Follow-Up Programs	Comment #92, Appendix A: YNLR believes there is a lot of uncertainty remaining from this EIS. This stems from several items, including the relatively novel nature of the ISR methodology with its potential effects on water quality and fish health, to the questionable conclusion that the mine will be neutral with respect to the persistence of woodland caribou in the region. If the mine is to be approved, YNLR wants a transparent, independent, statistically robust monitoring program implemented for the life of the Project and beyond. YNLR expects northern Indigenous Peoples to be involved in the design and implementation of such a program.	
421.	YNLRO (March 4, 2023)	General	Comment #1, Appendix B: There is inconsistent use of YNLRO and YNLR throughout several sections of the EIS. Specifically, YNLRO in section 3, YNLR in sections 4 and 11. As they are used to represent the same thing, only one format should be used.	

422.	YNLRO (March 4, 2023)	Section 1 Project Introduction and Overview, p. 1-5 Section 3 Value of IK in EA Practice, p. 3-1 and 3-2	Comment # 2 and 6, Appendix B: EIS Page 1-1, second paragraph, first sentence states: *"The Project falls within the boundaries of Treaty 10, the Nuhtsiye-kwi Benéne (Ancestral Lands) of English River First Nation, the traditional territory of the Kineepik Métis Local #9, the homeland of the Métis, and the Nuhenéné."* YNLR notes that this is a misuse of Nuhenéné as the name of the people. This should be "Nuhenéné, the traditional territory of the Athabasca Denesųłiné". In reference to section 3.1 of the EIS (p. 3-1 to 3-2), YNLR also notes that the Wheeler River Project falls within Nuhenéné and Athabasca Denesųłiné perspectives and knowledge should have been sought throughout all stages of the Environmental Assessment (EA). Early inclusion in this project would have been beneficial to both the Athabasca Denesųłine communities and to Denison through increased sharing of knowledge.	
423.	YNLRO (March 4, 2023)	Section 1 Project Introduction and Overview, p. 1-5 and 4-12	Comment #3, Appendix B: There YNLR notes that the Hatchet Lake Denesųłiné First Nation, an Athabasca Denesųłiné community, is the closest to the Project. The Wheeler River EIS seems to rely on road distance rather than physical proximity. Road distance should not be utilized to determine community importance or impacts since not all travel methods require continuous roads. Travel to this part of our traditional territory is typically achieved cross country rather than by road. Comment #13, Appendix B: YNLR notes that Hatchet Lake First Nation is located 150 km…Black Lake First Nation is located 180 km…and Fond du Lac First Nation is located 230 km away from the Project as recognised on page 4-47 of the draft EIS. Our community members generally access the Project area via overland routes rather than the established Provincial Road network.	
424.	YNLRO (March 4, 2023)	Section 1 Project Introduction and Overview, p. 1-4 and 1-7	Comment #4 and 5, Appendix B: Athabasca Denesųłiné land uses include, but are not limited to, large and small game harvesting, gathering activities, and fishing, all of which are of key cultural importance. It is important to note that the Hatchet Lake Denesųłiné First Nation and the community of Wollaston Post are situated at Wollaston Lake and given their downstream location there is potential for negative impacts.	
425.	YNLRO (March 4, 2023)	Section 3 Value of IK in EA Practice, p. 3-5	Comment #7, Appendix B: YNLR notes that while the wording for EIS Page 3-5, first paragraph, is an improvement from the May 2021 draft, it does not make clear that no Wheeler River site specific Athabasca Denesųłiné knowledge or land use studies were undertaken and that the information presented is from a variety of other projects with differing objectives and study areas.	

			The issue is better captured/described in the EIS on page 11-39.	
426.	YNLRO (March 4, 2023)	Section 3 Value of IK in EA Practice, p. 3-10	Comment #8, Appendix B: YNLR notes that there appears to be grammatical errors for page 3-10, last paragraph of the EIS. YNLR requests edits to: "Ya'thi Néné Lands and Resources, the point of contact for and representative of the Athabasca Denesųłiné communities of Black Lake, Fond du Lac, and Hatchet Lake Denesųłiné First Nations, as well as the northern hamlets/settlements of Stony Rapids, Wollaston Lake, Uranium City, and Camsell Portage, provided their report; An Exploration of Recorded Athabasca Denesųłiné Traditional Knowledge, Land Use and Occupancy Information in the Vicinity of Denison Mines Wheeler River Project, that summarized traditional knowledge and land use and occupancy information collected for various other projects and initiatives and partially documented Athabasca Denesųłiné use in the Project area, although it is not considered as a site-specific study."	

427.	YNLRO
	(March 4, 2023)
		Section 3 Value of IK in EA Practice, various pages	Comment #9, 10, 12, 15, 16, 17, 19 and 35, Appendix B: YNLR notes that as the Athabasca Denesųłiné were not considered to be an Indigenous COI, the opportunities to contribute to our knowledge to this discussion were diminished or lost.
			
			Comment #19, Appendix B: The mis-categorization as the Athabasca Denesųłine am Indigenous Community rather than as an Indigenous COI is a step backwards rather than forwards with regards to reconciliation. A letter to Denison dated July 29, 2022, YNLR critiqued the designations of COI and IC as being artificial and marginalizing. Denison responded October 28, 2022, after the submission of Wheeler River EIS with an alternative view.
			
			Other related comments include:
			• Comment #9, Appendix B: Only 4 of 31 aspects influenced (from EIS Table 3.5-1) for Indigenous knowledge and 3 of 37 aspects influenced (from EIS Table 3.5-2) for local knowledge were taken from Athabasca Denesųłine knowledge sources. How will Denison address this?
			• Comment #10, Appendix B: YNLR notes that the Athabasca Denesųłiné communities should be considered an Indigenous COI per Denison's definition (EIS page 4-vii) as they are/have:
			  ○ signatories of Treaty 10 and Athabasca Denesųłine traditional territory is within the Project area (Hatchet Lake First Nation is a signatory to Treaty 10 as recognised on page 4-47 of the draft EIS)
			  ○ established Treaty rights in proximity to the Project
			  ○ more likely to experience impacts, for example, water drainage as indicated on page 1-7 of the EIS ultimately flows into Wollaston Lake where the Athabasca Denesųłine community of Hatchet Lake is located	

			• Comment #12 and 16, Appendix B: YNLR notes that the Project is located within Nuhenéné (the Athabasca Denesųłiné traditional territory) as recognised on page 4-61 of the draft EIS. Further, Hatchet Lake First Nation is a signatory to Treaty 10, while Black Lake First Nation and Fond du Lac First Nation are signatories to Treaty 8, and as such all have Treaty Rights within the Project area and that ; that our communities are in proximity to the Project and have demonstrated traditional activity • Comment #15, Appendix B: YNLR notes that the Athabasca Denesųłine has relationships with other projects such as McArthur River and Key Lake as indicated in ROC-78, page 504, Combined Appendices for the Wheeler River Project Draft EIS. • Comment #17, Appendix B: Given these EIS defined criteria, YNLR has difficulty understanding why the Athabasca Denesųłiné have been excluded from Indigenous COI status for this project. Exclusion of COI status means loss of opportunity for the communities to be part of greater engagement throughout all stages of the Project. Lost opportunities are considerable and include loss of participation at all phases of the Project and include influence regarding the boundaries of the study areas, possibilities for increased discussions regarding environmental and health concerns, mitigation procedures, and planned remediation, potential to participate in monitoring and research projects and future opportunities such as employment. • Comment # 35, Appendix B: YNLR notes that the engagement database demonstrates that their opportunities to contribute were limited. For example, of the approximately 101 pages of Engagement Database tables that are dispersed through several sections of the appendices for the EIS (2022), there are 6 entries credited to the Athabasca Denesųłiné. Given an average of 3 to 5 entries per page in the tables, this means that only 1-2% of the contributions were made by the Athabasca Denesųłiné. These limited opportunities may well be the result of the exclusion of Athabasca Denesųłine from the COI category. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
428.	YNLRO (March 4, 2023)	Section 4 Engagement, p. 4-14, 4-61	Comment #20 and 22, Appendix B: YNLR note that project is within Nuhenéné. There is no need to state the southern edge. It could be argued that the Project is on the northern edge of other Indigenous groups areas. Such descriptions have been applied inconsistently to the groups. Territories should be described in an unbiased manner.	
429.	YNLRO (March 4, 2023)	Section 4 Engagement, p. 4-61	Comment #23, Appendix B: YNLR notes that the EIS text on page 4-61 should recognise that this report was a compilation of existing YNLR data from a variety of projects with differing objectives and study areas, and that no research was commissioned.	
430.	YNLRO (March 4, 2023)	Section 4 Engagement, p. 4-65	Comment #24, Appendix B: YNLR believes that the EIS section on page 4-65 referring to the letter sent by Denison dated October 28, 2022 rather than in early October as stated in the draft EIS. Given the draft EIS was submitted to the CNSC on October 24, 2022, four days	

			before Denison responded to YNLR concerns, further opportunity to provide clarifications or specific details for inclusion in the EIS were lost. YNLR does not agree that all our concerns have been addressed in the EIS.	
431.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use, p. 11-8	Comment #26, Appendix B: YNLR notes that the Athabasca Denesųłiné had limited opportunity to contribute to VCs. One community virtual meeting was presented to the Athabasca Denesųłine, while there appears to have been approximately 12 events for other First Nation communities (combined) including workshops, school presentations, meetings (in person and virtual) and open houses (draft EIS pp 4-16 to 4-86). While YNLR appreciate the opportunity to participate and recognize the impacts of Covid-19, the difference between Athabasca Denesųłine participation and other groups is stark.	
432.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use, p. 11-14	Comment #27, Appendix B: YNLR notes that the Athabasca Denesųłiné have demonstrated land use in both the local and regional land use as per our report (YNLR 2022). YNLR has reported 371 Athabasca Denesųłine Traditional Land Use and Occupancy data entries within the Denison regional study area. These include 18 points for harvesting of big game, such as barrenground caribou, moose, and woodland caribou, 29 overnight sites, 21 points where birds or eggs such as duck and spruce grouse were harvested. Other activities include furbearer harvesting, fishing, including commercial and tourism related activities such as guiding. A map of these activities is reiterated here.	
433.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use, p. 11-18, 11-40, 11-41, 11-94 and 11-95	Comment #28, 31 and 32, and 34 Appendix B: YNLR notes that Denison's understanding of the nature of the 2022 YNLR Report is incomplete. As YNLR noted many times, this report is an amalgamation of known information contained within YNLR's database. It comes from a variety of projects each with differing objectives and geographic scope. It is not a Wheeler River-specific Athabasca Denesųłiné Knowledge, Land Use, and Occupancy (ADKLUO) Study. This, in our opinion, leads to misunderstandings and misrepresentations within the draft EIS. Additional clarifications are that our report is not a Wheeler River-specific TLU study, nor were any such specific works undertaken or commissioned. This is important because it sets the tone for comparisons with other Indigenous groups who have met with Denison far more frequently and conducted far more intensive and focused works. Additionally, the limited engagement with did not allow for a shared Athabasca Denesųłine – Denison in-depth exploration of Athabasca Denesųłiné experiences. Using the YNLR Report requires an understanding that the amalgamated information comes from a variety of projects and was collected for a variety of purposes. For example, the report mentions woodland caribou values, tracks, and sightings within the EIS study area. This information comes from various caribou studies and our database records project information. This information clearly demonstrates that Athabasca Denesųłine members	

			were in the EIS area, that harvesting or other values were not recorded is a function of the purpose of the woodland caribou study rather than an indication that Athabasca Denesųłine do not utilize the area for other traditional purposes. Other such interpretations or misrepresentations exist within the report. Additional engagement with the Athabasca Denesųłiné communities and YNLR could have ensured further clarification. Information from the 2022 YNLR Report Section 3.3 appears to have been disregarded in the draft EIS. This information includes references to activities mentioned during duty-to-consult works for other projects with the LSA. This includes hunting, fishing (including commercial) and the gathering of berries and medicines. The responses also indicate that the land is used for therapeutic purposes, youth gatherings, fish camps and general camping. Further the responses note that areas were utilized year-round for hunting, trapping, and fishing, with activities such as berry picking occurring in summer. Impact concerns raised by the interviewees in included damage to the lands and water, how wildlife will be affected, disruption to traditional activities and accessibility to the areas while projects are ongoing. Surely, this information is relevant to the Wheeler River project and should be included with the EIS? YNLR also indicated to Denison in July 2022 that some of the publicly available information is the draft EIS was misleading and of limited relevance to this project.	
434.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use, p. 11-37	Comment #29, Appendix B: YNLR notes that the Map of BQ Caribou Range in draft EIS Section 11.1.3.3.26 is misdated, it should be BQCMB 2012. The original source map is dated 2000, but includes telemetry data from 2012 so is more appropriately dated as 2012.	
435.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use, p. 11-40	Comment #30, Appendix B: YNLR notes, as they did previously, that they are unclear what the relevance of including these sources is, since neither the CBEMP nor the Tazi Twé project investigated land use in the Wheeler River area. The March 2022 YNLR compilation report provides clear indications that the Athabasca Denesųłine communities 150tilize the areas in the vicinity of the Project.	
436.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use, p. 11-40	Comment #31, Appendix B: YNLR notes that the citations on the EIS page 11-40 are listed as YNLR 2020 and should likely be 2022.	
437.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use	Comment # 33, Appendix B: Pages 11-94 and 11-95 of the EIS uses the term *historic*. YNLR notes that the use of the term historic is prejudicial and incorrect. YNLR were assured by Denison that they had removed the term historic during earlier discussions.	
438.	YNLRO (March 4, 2023)	Section 11 Land and Resource Use	Comment #36, Appendix B, EIS Page 11-100 third- and fourth-lines states “The YNLR described trapping activity by one of its Athabasca Denesųłiné member at Keefe Lake to the east of the RSA but did nor report any trapping in N-14 (YNLR 2022).”	

			YNLR notes that the reference to trapping in N-14 is perplexing as the Saskatchewan Trappers Association map shows that N-14 is south of the Project area. Further there is a typo: “not” instead of “nor”	
439.	Métis Nation of Saskatchewan (MN-S) (March 4, 2023)	Executive Summary, Section 2 Project Overview EIS, Section 4.3.4.1 Engagement with Indigenous Organizations	Issue #ES-001: To date, Denison’s engagement approach has not been collaborative. Denison has not engaged all potentially impacted Métis communities. Denison has focused engagement efforts on Métis communities in NR3. Recommendations: • Denison needs to engage all potentially impacted Métis communities. Specifically, to see Denison equally engage NR1 Locals and NR3 Locals in addition to Kineepik Metis Local #9 throughout the life of the Project. Denison needs to include MN-S, NR1 Locals, and NR3 Locals under Indigenous Communities of Interest • Denison needs to engage MN-S, NR1 Locals, and NR3 Locals on Project information, Project-related employment, procurement, and cultural opportunities, engagement expectations (e.g., involvement of youth and Elders), and approach for gathering and incorporating Métis Knowledge into Project reports, plans, and processes.	
440.	MN-S (March 4, 2023)	Executive Summary, Section 3 Project Setting Executive Summary, Section 3.4.3 Proposed Schedule and Activities Executive Summary, Section 4 General EIS, Glossary	Issue #ES-002: Denison does not acknowledge that the Project falls within the MN-S Homeland. Issue #ES-013: MN-S is listed under Indigenous Organizations instead of Indigenous Communities of Interest. Issue #ES-012, ES-005 and 4-001: Per Denison’s definition, MN-S, NR1 Locals, and NR3 Locals should be considered an Indigenous Community of Interest. Denison notes site visits as the only engagement-associated activities in each Project Phase. Additional involvement opportunities should be provided to MN-S throughout the life of the Project Further, MNS refers to CNSC correspondence (Appendix A) indicating that consultation and engagement was expected to be with NR1 Locals, NR2 Locals, NR3 Locals, and MN-S. Given NR2’s involvement in NexGen and Fission, MN-S limited its engagement and consultation expectations to NR1 Locals, NR3 Locals, and itself. Recommendations: • Denison needs to engage all potentially impacted Métis, including: MN-S, NR1 Locals, and NR3 Locals, in addition to Kineepik Metis Local #9, as an Indigenous Community of Interest throughout the life of the Project. • Denison needs to revise their Indigenous Community of Interest definition in the Final EIS to reflect the uniqueness of Métis governance structures. Specifically, a definition	

			that recognizes Métis Locals proximate to the Project, MN-S, and MN-S regional leadership. • Denison needs to engage MN-S, NR1 Locals, and NR3 Locals, to understand their preferred level of involvement throughout the life of the Project. • Denison needs to acknowledge MN-S, NR1 Locals, and NR3 Locals as an Indigenous Community of Interest in the Final EIS. • Denison needs to revise the Final EIS Executive Summary to note that the Project falls within the Homeland of MN-S, NR1 Locals, and NR3 Locals. Denison needs to apply this change throughout the EIS, where applicable. • Denison to acknowledge that lease review data is not an appropriate way to determine Métis traditional resource use in and around the Project in the Final EIS. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
441.	MN-S (March 4, 2023)	Executive Summary, Section 3.4.2.4 Waste Management	Issue #ES-004: Denison's EIS does not outline where hazardous waste will be taken for proper recycling or disposal. Recommendations: • Denison needs to share where hazardous waste will be taken for proper recycling and disposal with MN-S, NR1 Locals, and NR3 Locals	
442.	MN-S (March 4, 2023)	Executive Summary, Section 3.4.8 Indigenous Knowledge	Issue #ES-003 and ES-007: Denison did not engage MN-S on potential Project-related effects to Métis traditional use activities (such as but not limited to: hunting, trapping, and fishing) and therefore may not be aware of potential traditional use activities conducted by Métis peoples in and around the Project. Denison's reliance on reviewing traditional resource user leases is not an appropriate way to determine Métis traditional resource use in and around the Project. Recommendations: • Denison needs to incorporate Métis Knowledge from the Métis Knowledge Study (MKS) into their discipline-specific effects assessment, the Final EIS, and all monitoring plans for the Project, where applicable. • Denison needs to engage MN-S, NR1 Locals, and NR3 Locals to determine the appropriate funding, process, and timeline to conduct the MKS.	
443.	MN-S (March 4, 2023)	Executive Summary, Section 4.1 Introduction	Issue #ES-009: MN-S has not had an opportunity to review Denison's engagement plan. Recommendations: • Denison needs to share all engagement plans and reports of interest to MN-S, NR1 Locals, and NR3 Locals for review and comment.	

444.	MN-S (March 4, 2023)	Executive Summary, Section 4.1 Introduction Executive Summary, Section 4.2 Engagement Approach EIS, Section 2.2.1 Mining EIS, Section 4.3.1 Engagement with Identified Indigenous Communities and Organizations, and Supporting Criteria EIS, Section 4.3.2.1.3 Key Engagement Activities EIS, Section 4.3.4 Engagement with Indigenous Organizations	Issue #ES-008 and ES-010: Denison has not engaged all potentially impacted Métis communities. Issue #4-006: Métis communities in NR1 and NR3 meet multiple evaluation criteria identified by Denison. Denison's engagement to date has not included Métis communities in NR1. Denison's explanation related to the selection of Indigenous groups to be engaged on the Project is unsatisfactory. Issue #4-007: The Project is located within Métis NR1 in Saskatchewan. However, several key Métis communities with whom Denison is engaging are located in Métis NR3. Denison's explanation related to the selection of Indigenous groups to be engaged on the Project is unsatisfactory. The MN-S website states that "consultations must be with the Métis government structures that are elected and supported by the Métis people." (MN-S n.d.c.)". Denison has not engaged with Métis communities outside of NR3. Issue #ES-011: Denison's engagement to date has largely been with Métis communities in NR3. Particularly, the Kineepik Metis Local #9 community. There are only two entries related to engagement with Métis communities (with exclusion to Kineepik Metis Local #9) in Appendix 2A: Section 2 – Engagement Database Summary Table – Project Description. Kineepik Metis Local #9. This record demonstrates little engagement was conducted with Métis communities in NR1 and NR3. Issue #2-001 and 4-008: Denison has not had meetings to introduce the Project, share information on Project alternatives and options, VCs, the ISR ming method and proposed freezing method, or any other topics of interest to the MN-S and Métis communities in NR1. These communities also did not receive a VC survey to identify VCs of importance to Citizens and/or other interests and concerns related to the Project. Recommendations: • Denison needs to engage all potentially impacted Métis communities. Specifically, to equally engage all NR1 and NR3 communities, in addition to Kineepik Metis Local #9 throughout the life of the Project. Denison needs to include MN-S, NR1 Locals, and NR3 Locals under Indigenous Communities of Interest. • To facilitate a collaborative approach to engagement, Denison needs to engage MN-S, NR1 Locals, and NR3 Locals on Project information, Project-related employment/procurement/cultural opportunities, engagement expectations (e.g., involvement of youth and Elders), and approach for gathering and incorporating Métis Knowledge into Project reports, plans, and processes.	
445.	MN-S (March 4, 2023)	Executive Summary, Section 5 General	Issue #ES-014: Denison did not engage MN-S on potential Project-related effects to Métis traditional use activities such as (but not limited to): hunting, trapping, and fishing. No Métis Knowledge was used to inform the Project's spatial boundaries.	

			Issues #ES-015 to ES-24: Denison has not engaged MN-S to understand Métis knowledge to inform the development of the Project's environmental monitoring and management plans (e.g., Caribou Management Plan). This applies to monitoring air emissions, noise monitoring, geology, groundwater quantity and quality, surface water quality, sediment quality, fish and fish habitat and human health. Information to be gathered during the Métis Knowledge Study will contribute to the development of these plans. Recommendations: • Denison needs to incorporate Métis Knowledge from the MKS into their discipline-specific effects assessment, the Final EIS, and all monitoring and management plans for the Project, where applicable. • Denison needs to engage MN-S to determine the appropriate funding, process, and timeline to conduct the MKS. • MN-S would like the opportunity to review applicable Project management documents that provide information that is relative to the potential impacts of the Project on traditional land use activities, these include, but are not limited to the following: Preliminary Decommissioning Plan, Status of the Environment reports, Environmental Effects Monitoring reports, annual reports, updated environmental risk assessments and the Final Decommissioning. • Denison needs to provide plain language summaries, posters/handouts, and presentations on monitoring and effects management plans and programs to MN-S, NR1 Locals, and NR3 Locals. Denison needs to share all engagement plans and reports of interest to MN-S, NR1 Locals, and NR3 Locals for review and comment. • Denison needs to engage MN-S, NR1 Locals, and NR3 Locals to better understand how they would like to be informed of monitoring results (e.g., 1-page plain language summaries, annual monitoring report, community meetings etc.).	
446.	MN-S (March 4, 2023)	Executive Summary, Section 5.4.2 Surface Water Quality	Issue #ES-20: The draft EIS does not clarify the influence of groundwater temperature on Whitefish Lake. Recommendations: • Denison needs to confirm the influence of groundwater temperature on Whitefish Lake in the Final EIS.	
447.	MN-S (March 4, 2023)	Section 2.2.1.3.2 Freeze Wall Timeline	Issue #2-002: The removal of the freeze wall may cause increased migration of constituents that could cause environmental release to the receiving environment unintentionally. Recommendations: Denison needs to clarify the following with MN-S, NR1 Locals, and NR3 Locals: a) the freezing effects on the Upper and Lower barrier zones post mining, and	

			b) if the freeze thaw process could cause increased fracturing potential within these zones.	
448.	MN-S (March 4, 2023)	Section 2.3.4 Post-decommissioning	Issue #2-002: Denison does not acknowledge MN-S, NR1, or NR3 involvement in the design and implementation of the post-decommissioning monitoring program. Recommendations: Denison needs to engage MN-S, NR1 Locals, and NR3 Locals in the design and implementation of decommissioning planning and all subsequent monitoring programs for the Project. This will allow Métis to share their interests in the long-term state of the land and incorporate Métis knowledge. It will also create opportunities for Métis youth and Elders to participate in monitoring programs.	
449.	MN-S (March 4, 2023)	Section 2.3.5 Ancillary Projects	Issue #2-004: Denison's EIS suggests SaskPower's work related to the extension of an existing 138 kV line will be independent from work led by Denison. Recommendations: • Denison needs to clarify whether the additional 138 kV line was factored into the cumulative effects evaluation. • Denison needs to clarify whether the proposed Project can proceed without the 138 kV line construction. • Denison needs to clarify the timing of the construction of the line and Wheeler River Project construction. • Denison needs to confirm that SaskPower will engage with MN-S, NR1 Locals, and NR3 Locals on line routing and design. • Denison needs to confirm if/when the 138 kV line will be decommissioned.	
450.	MN-S (March 4, 2023)	Section 2.7 Project Benefits	Issue #2-005: Denison notes some jobs will require a Grade 12 education in addition to in-house training programs, but does not offer to support Métis peoples obtain Grade 12 education to access available positions. Recommendations: • MN-S would like confirmation on what kind of education and training support Denison will make available to maximize employment from Communities of Interest. • Denison needs to support Métis training opportunities through Northlands College. • MN-S would like additional details on which roles will need Grade 12, and how many roles are available for people without Grade 12.	
451.	MN-S (March 4, 2023)	Section 2.7 Project Benefits	Issue #2-006 and 2-007: Denison does not specify the goods and services during Construction, Operation, and Decommissioning. MN-S is interested in sharing potential goods and services opportunities for Métis peoples (e.g., chefs and artisans). Denison has	

			not specified how it is transmitting knowledge nor provided an explanation of the procurement approach. Recommendations: • Denison needs to provide specific information on the goods and services opportunity available to Métis as per labour force and business analysis. • Denison needs to clarify how it has made MN-S, NR1, and NR3 Locals aware of the procurement approach and opportunities, and how it will keep them informed through the life of the Project.	
452.	MN-S (March 4, 2023)	Section 2.9.1.3.1 Environmental Protection Program	Issue #2-008 and 2-009: The Draft EIS does not include a draft Environmental Protection Plan (EPP) or a summary of how the EPP will be developed. The Métis Knowledge Study is yet to be completed and these plans should not be completed without considering the Métis Knowledge Study. Draft monitoring plans were not available for review to confirm how Denison plans to inform plans with existing local and traditional knowledge. Recommendations: • Denison needs to provide an Environmental Protection Plan with the Final EIS. • Denison needs to involve MN-S, NR1 Locals, and NR3 Locals in the development and implementation of the Environmental Protection Program so that Métis can ensure their interests and Métis Knowledge are included. Additionally involvement in the development of monitoring plans and review of MN-S knowledge usage and how it informed the plan should also be undertaken. • Denison needs to share all engagement plans and reports of interest to MN-S, NR1 Locals, and NR3 Locals for input, review and comment. • Denison needs to include an implementation and reporting plan with the monitoring plans.	
453.	MN-S (March 4, 2023)	Section 2.9.1.3.5 Emergency Preparedness and Response Program	Issue #2-010: No Emergency Preparedness and Response Program was available for review. Recommendations: • Denison needs to include an Emergency Preparedness and Response Program in the Final EIS for review. • Denison to include information on transportation accidents within the Emergency Preparedness and Response Program.	
454.	MN-S (March 4, 2023)	Section 3.4.2.3 Métis Nation – Saskatchewan Section 3.4.8 Lands Taken Up from an Indigenous Perspective	Issue #3-001 and 3-002: The Draft EIS does not yet include Métis Knowledge from NR1 and NR 3 other than Kineepik. The Draft EIS does not include information on how Denison intends to include the outcome of the Métis Knowledge Study.	

			Perspectives on cumulative impacts have only been considered for English River First Nation and Kineepik Metis. This has resulted in an absence of MN-S perspective regarding cumulative impacts within the Project and surrounding areas. Recommendations: • Denison needs to provide a clear indication of how the MKS findings were included in the Final EIS (e.g., effects analysis, cumulative effects analysis, mitigation measures, etc.) including confirming use with MN-S. • The Assessment should not be considered complete until the Métis Knowledge Study is finished and factored in.	
455.	MN-S (March 4, 2023)	Section 3.4.6 Addressing Divergence Between Indigenous Knowledge and Western Scientific Knowledge Systems	Issue #3-003: Details are not provided regarding how these programs and plans will be developed and implemented, or how they will integrate the needs of all the Indigenous and Métis communities. Recommendations: • Denison needs to clarify whether discrepancies will only be addressed by follow-up and monitoring. • Denison needs to involve MN-S, NR1 and NR3 in determining other means for examining divergences and informing follow-up and monitoring (e.g., collaborative field studies).	
456.	MN-S (March 4, 2023)	Section 4.1.2 Denison's Indigenous Peoples Policy and Investment and Sustainability Philosophy	Issue #4-002: The EIS notes that "In 2021, Denison announced the adoption of an Indigenous Peoples Policy (IPP). The IPP reflects Denison's recognition of the important role of Canadian business in the process of reconciliation with Indigenous peoples in Canada and outlines Denison's commitment to take action towards advancing reconciliation. The IPP was developed based on Denison's experiences with, as well as feedback and guidance received from, Indigenous communities with whom Denison is actively engaged. This approach was designed to make sure the IPP appropriately captures a mutual vision for reconciliation. The IPP identifies five key areas of action that will support the ongoing development of a continuously evolving Reconciliation Action Plan (RAP): Engagement; Empowerment; Environment; Employment; and Education. Through the RAP, Denison is striving to interweave the principles of reconciliation throughout all areas of the company's operations (Denison 2021a)." Denison does not explain how it will accomplish free, prior, and informed consent (FPIC) as per the IPP and RAP [2]. Recommendations: • Denison needs to clarify how it intends to consider free, prior, and informed consent (FPIC).	

			[2] Engagement – We are committed to building long-term and mutually respectful relationships through proactive engagement and consultation with Indigenous people. Our aim is to work to achieve the free, prior, and informed consent, where the potential for impacts to rights may occur, before proceeding with economic development projects and during ongoing activities and operations	
457.	MN-S (March 4, 2023)	Section 4.2 Engagement Approach Section 4.3.1 Engagement with Identified Indigenous Communities and Organizations, and Supporting Criteria	Issue #4-003 and 4-005: MN-S is listed under Indigenous Organizations instead of Indigenous Communities of Interest. Not all potentially impacted Métis communities are listed in this figure. Métis communities listed under Indigenous Communities of Interest include Kineepik Metis Local #9, Sipishik Metis Local #37, Patuanak Metis Local #82. Métis communities listed under Other Indigenous Communities include Dore/Sled Lake Métis Local #67 and A La Baie Métis Local #21. These Métis communities are all within NR3. Only NR3 communities are listed in Figure 4.3-2: Unidentified Indigenous Communities and Organizations in Relation to the Project. Recommendations: • Denison needs to revise its understanding of Métis, Métis governance and the differences between MN-S and Métis Locals. • Denison needs to include MN-S, NR1 Locals, and NR3 Locals as Communities of Interest, or explain why they limited their selection of Métis communities in their listing.	
458.	MN-S (March 4, 2023)	Section 4.2 Engagement Approach	Issue #4-003: MN-S appreciates Denison's willingness to evolve engagement activities in response to feedback from MN-S over time. Recommendations: • Denison to continue engaging and involving MN-S, NR1 Locals, and NR3 Locals during the revisions of the Draft EIS and completion of outstanding plans.	
459.	MN-S (March 4, 2023)	Section 4.3.2.3 Engagement with Sipishik Métis Local #37	Issue #4-009: Denison is taking engagement direction from MN-S to not lump public engagement efforts with Métis engagement is appreciated. Recommendations: • Denison needs to engage Beauval/Sipishik Métis Local #37 throughout the life of the Project.	
460.	MN-S (March 4, 2023)	Section 4.3.2.3.4 Key Issues and Concerns	Issue #4-010: The safety of all Métis peoples that will be engaged or employed by the Project is of utmost importance. Racism towards Métis peoples will not be tolerated. Denison's policies need to support a safe work culture for all. Recommendations:	

			• Denison needs to share all policies related to creating a safe workplace with MN-S, NR1 Locals, and NR3 Locals for review and comment (e.g., health and safety policies and the Workplace Violence & Harassment Policy). • Denison needs to create a culturally safe workplace for Métis peoples. • Denison needs to clarify its policies to prevent incidents of workplace violence and harassment and identify clear actions to address potential incidents of workplace violence and harassment. • Denison needs to mandate cultural awareness training for all employees to help with one the Project's established principles: "approaching sustainability and engagement activities with the utmost respect for Indigenous communities, Indigenous Rights, and Indigenous Knowledge".	
461.	MN-S (March 4, 2023)	Section 4.3.2.4.3 Key Issues and Concerns	Issue #4-011: Denison created "Key Issues and Concerns" tables in their EIS to document responses to issues and concerns identified by Indigenous Groups. Denison marked issues and concerns that they believe have been addressed as "Complete" in "Key Issues and Concerns" tables throughout the Draft EIS. Directing MN-S and Métis Locals to chapters within the EIS is not a sufficient response to an issue or concern identified by MN-S and Métis peoples. One- way information sharing is not an effective means for addressing or mitigating issues and concerns identified by MN-S and Métis people. Responses to issues regarding effects should discuss the presence or absence of effects, rather than responding that effects were studied. Recommendations: • Denison needs to respond to issues and concerns identified through engagement during meetings with and communications to MN-S, MN-S, NR1 Locals, and NR3 Locals. • Denison needs to implement a collaborative engagement approach that allows MN-S, NR1 Locals, and NR3 Locals to provide feedback and inform Project decision-making, plans, and outcomes versus one-way information sharing engagement approach.	
462.	MN-S (March 4, 2023)	Section 4.3.4.1.2 Agreements Relative to the Environmental Assessment Process	Issue #4-014: Denison's Draft EIS notes that Denison and MN-S were in the process of developing a capacity funding agreement. Since the Draft EIS was published, Denison and MN-S reached an agreement. Recommendations: • Denison needs to revise the Final EIS to note that a capacity funding agreement was reached with MN-S.	
463.	MN-S (March 4, 2023)	Section 5.3.1 Valued Components Selection	Issue #5-001: Métis input to VC selection was limited to NR3 communities. Recommendations:	

			• Denison needs to confirm the selected valued components with Métis Locals in NR1 and NR3 and revise the Final EIS as required to reflect their input.	
464.	MN-S (March 4, 2023)	Section 5.4 Influence of Indigenous Knowledge, Local Knowledge, and Engagement	Issue #5-002: The use of "complimentary and influential" does not reflect current best practices that acknowledge Indigenous Knowledge as an equal but different way of knowing (than western science). This terminology implies that Indigenous Knowledge can be absorbed into a scientific approach. Recommendations: • Denison needs to confirm use of the wording "complimentary and influential" and how the use of Indigenous Knowledge is treated as equal to western science in the Final EIS. • Denison needs to confirm if it intends the use of "complimentary" or "complementary". Best practices will differ depending on intention.	
465.	MN-S (March 4, 2023)	Section 5.6.1 Potential Interactions Between the Project and Valued Components/Key Indicators	Issue #5-003: Interactions with the Human Environment Valued Components should be consistent with interaction table in related technical VC assessment sections. Comments have been made for revision to some of the interaction table in related VCs. Recommendations: • Denison needs to update Table 5.6-2 be to be consistent with revised interaction tables for related VCs.	
466.	MN-S (March 4, 2023)	Section 5.3 Scope of the Assessment	Issue #5-004: It's best practice in environmental assessments to acknowledge limitations on data and analysis used for the assessment. This identifies constraints imposed on the assessment due to limitations in data or analysis that can influence or limit the ability to predict potential effects of the Project. This may be provided as a "technical boundary" or in some other transparent way as a part of the assessment reporting. Recommendations: • Denison needs to provide details in the Final EIS on data and analysis limitations.	
467.	MN-S (March 4, 2023)	Section 5.8 Residual Effects Evaluation	Issue #5-005: Details should be provided on what level of residual effects are carried forward for residual effects evaluation. This would help provide a consistent method for bringing measurable effects for a full residual effect assessment. This ensures that measurable (even minor) are not overlooked in residual effects characterization and consideration of significance. From review of the Draft EIS, there are instances where effects that remain after the implementation of all mitigation measures and management plans are characterized as minor and not carried forward for evaluation. Recommendations:	

			• Denison needs to provide details on the development and choice of thresholds used to describe residual effects including how LK and IK were considered in threshold development. • Denison needs to provide further explanation as to why minor effects will have no or negligible effects and should not be considered further.	
468.	MN-S (March 4, 2023)	Section 5.9.1 Cumulative Effects Assessment Process Section 12.1.7 Cumulative Effects	Issue #5-006 and 12-005: Denison acknowledges that cumulative effects are important to Indigenous communities in section 5.9.3 (p. 5-42). For many Indigenous communities and governments, cumulative effects analysis requires an assessment this includes pre-development conditions to understand the impacts of past and existing activities that continue to affect the context for environmental and social systems. Considering the fuller context of historic change during an EA is an evolving best practice and is recognized through numerous Canadian cumulative effects assessment initiatives and management frameworks (e.g., Indigenous Centre for Cumulative Effects) and recent Indigenous led environmental assessment (e.g., Squamish Nation Assessment Process). Recommendations: • Denison needs to provide further detail on what projects and activities were considered in the cumulative effects i.e., table listing projects. • Denison needs to provide further detail on how it considers cumulative effects important to Indigenous communities and whether it includes an evaluation of changes to pre- development conditions as is being done as practice in other environmental assessments. This would allow Indigenous communities to better understand the ongoing impacts of past and existing activities that continue to affect Indigenous cultural use of lands and resources.	
469.	MN-S (March 4, 2023)	Section 5.9.2 Identification of Present or Reasonably Foreseeable Projects and Activities	Issue #5-007: Clarity is required that this includes existing ongoing activities that may not be certain but are highly likely to occur such as forestry and mine exploration activity. Denison did not include the new powerline that SaskPower is building in Table 5.9-1: Projects and Activities for Consideration in the Cumulative Effects Assessment for the Valued Components. See Section 2.3.1.9 for more details on the powerline to be constructed by SaskPower. Recommendations: • Denison needs to provide further detail on the projects and activities that were considered for cumulative effects and why certain projects and activities were not included. For example, Denison needs to explain how reasonably foreseeable projects and activities that may not be certain but are highly likely in the RSA, such as mining exploration or infrastructure use and maintenance, are not included in Table 5.9-1.	

470.	MN-S (March 4, 2023)	Section 7.4.1 Potential Project-Valued Components Interactions	Issue #7-001: There is lack of geotechnical information in the Draft EIS that would expand explanation of Project interactions with geology and groundwater. Recommendations: • The Final EIS needs to demonstrate Denison's commitment to developing appropriate mitigations to avoid or limit identified adverse effects resulting from the Project, whether direct or indirect.	
471.	MN-S (March 4, 2023)	Section 7.5 Mitigation Measures	Issue #7-002: There is lack of information, details and modelling related to potential subsidence. Recommendations: • Denison needs to provide additional detail in the Final EIS about mitigation measures related to operations affecting subsidence at ground surface including managing for different subsidence areas, different subsidence sizes, and whether subsidence will propagate further ground surface disturbances that will require further and continuous action. • Denison needs to prepare a management and monitoring plan for subsidence.	
472.	MN-S (March 4, 2023)	Section 8.0 Aquatic Environment	Issue #8-001: Key waterbodies are inconsistently named on the maps/figures throughout section Section 8.0 Aquatic Environment. Key waterbodies include those considered as reference or exposure waterbodies, and any others of importance to NR2 and NR3 Locals. Recommendations: • Denison needs to revise maps/figures to include labels for key waterbodies referenced in the EIS, particularly for figures included in section 8. • Denison needs to ensure waterbodies are named consistently throughout section 8.0 Aquatic Environment.	
473.	MN-S (March 4, 2023)	Section 8.3.6.1 Residual Effects Characterization	Issue #8-002: Not all fishing and hunting activities are documented. Currently, the MKS has not been completed and therefore this assumption may be incorrect. Recommendations: • Denison needs to revise the fish and fish habitat section as part of the inclusion and consideration of the MKS in the Final EIS. • Denison needs to include additional information in the Final EIS that describes data limitations. A conservative approach would consider all waterbodies in the area to be potential fishing waterbodies for current and future use purposes.	
474.	MN-S (March 4, 2023)	Section 8.3.8 Monitoring and Follow-up	Issue #8-003: Russell Lake is not identified as a location to monitor fish health. Recommendations:	

			• Denison needs to include Russell Lake in the aquatic monitoring program as cumulative effects from the Key Lake operation will be detected in this waterbody and this is an important local fisheries resource waterbody. • Denison should commit to involving MN-S, NR1 and NR3 in the development of management and monitoring plans for the aquatic environment in the Final EIS.	
475.	MN-S (March 4, 2023)	Section 8.5.7.1 Potential Cumulative Effects	Issue #8-004: "Fish Health VC are primarily related to c the controlled" – there is a typo in the report. Recommendations: • Denison needs to address the typo and replace "c" with the complete word.	
476.	MN-S (March 4, 2023)	Section 8.5.8 Monitoring and Follow-up	Issue #8-005: It is unclear whether there is a physical barrier between Whitefish Lake North and Whitefish Lake South that would allow Whitefish Lake North to be considered as an appropriate reference area for monitoring fish health. Recommendations: • Denison needs to clarify in the Final EIS on an appropriate reference area for monitoring fish health. • Denison needs to confirm fish movements between Whitefish Lake North and Whitefish Lake South and that Whitefish Lake North will be an appropriate reference lake. If it is not appropriate, then another reference lake such as Kochichowsky Lake may need to be considered for monitoring fish health.	
477.	MN-S (March 4, 2023)	Section 9.1.1.3 Spatial Boundaries	Issue #9-001: The terrestrial RSA seems small in consideration of woodland caribou and determining the impacts of the Project in association with the SK1 caribou population. Recommendations: • Denison needs to evaluate the terrestrial RSA as it relates to the SK1 caribou population and Environment Canada's woodland caribou management plan. Provide a detailed explanation in the Final EIS as to how the terrestrial RSA was determined.	
478.	MN-S (March 4, 2023)	Section 9.2.3.3 Wetlands Valued Components	Issue #9-002: Figure 9.2-8 identifies lakes and waterbodies separately. There is a lack of clarity between a lake and a waterbody and its treatment in the EIS. Recommendations: • Denison needs to clarify and distinguish in the Final EIS if and why lakes and waterbodies are treated differently.	

479.	MN-S (March 4, 2023)	Section 9.2.7.3 Cumulative Effects Characterization and Determination of Significance	Issue #9-003: There is inadequate evaluation of the combined impact of all of these changes in vegetation on the terrestrial ecosystem. It is unclear whether there will be any short-term or long-term impacts on the overall health of the terrestrial ecosystem due to the individual changes to the terrestrial components. Recommendations: • Denison needs to provide in the Final EIS an assessment of the cumulative impacts of all of the individual changes to the vegetation (e.g., change in vegetation types, a change in the COPC levels in vegetation and a change in wetland composition) on the entire terrestrial ecosystem.	
480.	MN-S (March 4, 2023)	Section 9.3.3.1.1 Scientific Literature Review	Issue #9-004: The EA assumptions for moose harvest numbers and success are based on the SK database information which includes information for hunters in the southern portion of the province and for non-Indigenous peoples. Reliance on draw licences to support Project models does not capture Métis harvesting and traditional use activities in the Northern Administrative District of Saskatchewan. Métis do not participate in the draw system as they are recognized rights holders. Indigenous and non-Indigenous hunters have different hunting patterns. Although the data used in the EA is accurate for non- Indigenous hunters, this data should be used cautiously when assessing a project that is in an area where there is mostly (if not all) Indigenous hunters for moose and other ungulates. Recommendations: • Denison needs to provide confirmation that the assumption that moose harvest information used in the Draft EIS is based on the SK database which includes information for hunters in the southern portion of the province and for non-Indigenous peoples. If yes: ○ Denison to acknowledge in the Final EIS that the Terrestrial Ecosystem Effects Assessment relied on draw licences to support assessment conclusions and these conclusions do not capture Métis harvesting and traditional use activities in the Northern Administrative District of Saskatchewan. In addition, Denison to note Métis do not participate in the draw system as they are recognized rights holders in the Final EIS. • Denison needs to incorporate Métis Knowledge from the MKS to the Project's Terrestrial Ecosystems Effects Assessment. • Denison to co-develop and implement a moose-specific monitoring and management plan with the Métis. • Denison needs to include Métis harvesting patterns in the Final EIS (e.g., rabbit, moose, caribou, fox etc.).	

481.	MN-S (March 4, 2023)	Section 9.3.4.2.1 Alteration and/or Loss of Habitat	Issue #9-005: The nature of vegetation regeneration on an altered landscape can have continuing effects on woodland caribou. This conclusion is sufficiently vague and assume regeneration will be suitable for woodland caribou. Denison does not provide information on the removal and decommissioning of the roads built for the Project or the extension of the transmission line in the Draft EIS. Linear disturbances like these are incredibly impactful to Métis traditional land use in and around the Project. Recommendations: • Denison needs to identify how it will be determined that post-decommissioning revegetated habitat will be suitable for woodland caribou including any risk assessments completed to confirm the predictions. • Denison needs to involve MN-S as well as NR1 and NR3 Locals in decommissioning planning, mitigation, and monitoring. • Denison to provide further information on the removal and decommissioning of roads built for the Project and the extension of the transmission line built by SaskPower in the Final EIS.	
482.	MN-S (March 4, 2023)	Section 9.3.4.2.2 Change in Mortality	Issue #9-006: Changes in the numbers of prey and/or predators during the post-decommissioning period could impact what animals are available for harvesting by the MN-S in the long-term. Recommendations: • Denison needs to clarify and confirm the duration of the habitat changes that may interfere with predator/prey densities including any risk assessments completed to confirm the predictions. • Denison needs to involve MN-S, as well as NR1 and NR3 Locals in decommissioning planning, mitigation, and monitoring.	
483.	MN-S (March 4, 2023)	Section 9.3.5.2 Additional wildlife specific mitigation measures	Issue #9-007: A wildlife monitoring plan and a Woodland Caribou Management Plan are important tools for managing caribou in the short and long-term. Recommendations: • Denison needs to involve MN-S as well as NR1 and NR3 Locals in the creation of the Woodland Caribou Management Plan, and include the plan in the Final EIS	
484.	MN-S (March 4, 2023)	Section 9.3.6.4.1 Alteration and/or Loss of Habitat	Issue #9-008: The woodland caribou may not return to the Project area for up to 20 years following post-decommissioning due to available food resources. This may have an impact on long-term harvesting of woodland caribou by the MN-S. Recommendations:	

			• Denison needs to clarify and confirm the duration of the habitat changes that may interfere with predator/prey densities including any risk assessments completed to confirm the predictions.	
485.	MN-S (March 4, 2023)	Section 9.3.7.3.3 Woodland Caribou	Issue #9-009: The 5% threshold disturbance is for a viable population which is the SK1 population. Recommendations: • Denison needs to provide confirmation that the Final EIS appropriately used the Environment Canada threshold values on the woodland caribou population as they relate to the SK1 population. • Denison needs to confirm that the RSA and threshold is suitable in areal extent. See comment 9-001. • Denison needs to commit to re-evaluating their woodland caribou information in the Final EIS. Specifically, to ensure the woodland caribou information used by Denison is in alignment with the SK1 Range Plan being developed by the Province.	
486.	MN-S (March 4, 2023)	Section 9.3.8 Monitoring and Follow-up	Issue #9-010: Previous sections of the Draft EIS identified the development of the Woodland Caribou Management Plan. Recommendations: • Denison needs to confirm the preparation and inclusion of a Woodland Caribou Management Plan within this section of the Final EIS.	
487.	MN-S (March 4, 2023)	Section 11.1.1.1 Values Component Selection	Issue #11-001: Arrangements and applicable funding to facilitate MN-S' participation and engagement in the EA process are underway. It is expected that MN-S will be given the opportunity to validate VC selection and have this information reflected in the Final EIS. Recommendations: • Denison, in the Final EIS, needs to demonstrate that it confirmed the selected valued components with Métis Locals in NR1 and NR3. • Denison needs to include in the Final EIS input from the Métis Knowledge Study and any changes in the selection of VCs and their characterization.	
488.	MN-S (March 4, 2023)	Section 11.1.2.3 The Métis Nation of Saskatchewan	Issue #11-002: The EIS states: "The parties have specifically agreed to a process between each other that will be funded by Denison and undertaken on behalf of the MN-S in connection with the EA of the Project: a Métis Knowledge Study, meetings to focus on VCs and preliminary effects, and regular meetings and associated costs for hosting such meetings." The correct name is "Métis Nation-Saskatchewan" (no "of").	

			Recommendations: • Denison needs to correctly reference Métis Nation- Saskatchewan throughout the Final EIS. • Denison needs to include in the Final EIS input from the Métis Knowledge Study and any changes in the selection of VCs and their characterization.	
489.	MN-S (March 4, 2023)	Section 11.1.4.1 Potential Interactions Between the Project and Valued Component/Key Indicators	Issue #11-003: Many of the Project Phase/Activities listed would contribute to a change in the environmental setting for Indigenous land and resource users within the LSA. Interactions should be considered for temporary or longer-lasting aesthetics impact related to Project-related dust, lighting, noise, and visual disturbance. Recommendations: • Denison needs to revise Table 11.1-7 in the Final EIS to include the addition of interactions and effects analysis for "Perceived suitability of lands and resources therein" that considers Project-related construction and decommission impacts to Indigenous Land and Resource Use. For example, the development of access roads and site preparation during construction, and demolition and disposal of surface infrastructure during decommission, would likely result in some interaction with ILRU related to noise, dust, or traffic.	
490.	MN-S (March 4, 2023)	Section 11.1.4.3.1 Terrestrial Resource Availability	Issue #11-004: Missing information to support the claim that other large terrestrial mammals, such as elk and white-tailed deer species, are not found in sufficient abundance in the LSA to be assessed as part the Project. Recommendations: • Denison needs to include additional information in the Final EIS on why large terrestrial mammals that are harvested in the LSA (such as elk and white-tailed deer) are not found in sufficient abundance in the LSA to support this conclusion.	
491.	MN-S (March 4, 2023)	Section 11.1.5 Mitigation Measures	Issue #11-005: In the Draft EIS, Denison has proposed to develop mitigation measures and management planning, but has not begun engaging with Métis Community of Interest and MN-S on contents of mitigation measures or management plans. It is good practice for Communities of Interest, including Métis, to have the opportunity to contribute to the scoping, development, and implementation of mitigation measures and management plans (and monitoring programs), including effectiveness reviews and the application of an adaptive management approach. Recommendations:	

			• Denison needs to include in the Final EIS, effects mitigation, and management and monitoring plans that were prepared with MN-S and NR1 and NR3 Locals involvement and agreement.	
492.	MN-S (March 4, 2023)	Section 11.1.8 Monitoring and Follow-up	Issue #11-06: In the Draft EIS, Denison has proposed to develop monitoring programs, but as not begun engaging with MN-S or NR1 and NR3 Locals on contents of these programs. Recommendations: • Denison needs to include in the Final EIS, management and monitoring plans that were prepared with MN-S and NR1 and NR3 Locals involvement and agreement.	
493.	MN-S (March 4, 2023)	Section 11.1.7 Cumulative Effects Section 11.2.7 Cumulative Effects	Issue #11-07 and 11-12: For many Indigenous communities and governments, cumulative effects analysis requires an assessment that includes pre-development conditions to understand the impacts of past and existing activities that continue to affect the context for environmental and social systems. An evolving best practice during an EA is to consider the fuller context of historic change. This practice is recognized through numerous Canadian cumulative effects assessment initiatives and management frameworks (e.g., Indigenous Centre for Cumulative Effects) and recent Indigenous led environmental assessment (e.g., Squamish Nation Assessment Process).	
494.	MN-S (March 4, 2023)	Section 11.2.3.1.2 Big Game Hunting	Issue #11-08: The EA assumptions for big game numbers and success are based on the SK database information which includes information for hunters in the southern portion of the province and for non-Indigenous peoples. Reliance on draw licences to support Project models does not capture Métis harvesting and traditional use activities in the Northern Administrative District of Saskatchewan. Métis do not participate in the draw system as they are recognized rights holders. Recommendations: • Denison to acknowledge in the Final EIS that the Terrestrial Ecosystem Effects Assessment relied on draw licences to support assessment conclusions and these conclusions do not capture Métis harvesting and traditional use activities in the Northern Administrative District of Saskatchewan. In addition, Denison to note Métis do not participate in the draw system as they are recognized rights holders in the Final EIS. • Denison needs to incorporate Métis Knowledge from the MKS to the Project's Terrestrial Ecosystems Effects Assessment.	
495.	MN-S (March 4, 2023)	Section 11.2.3.1.4 Upland Game Bird Hunting	Issue #11-09: To characterize trends in wildlife harvesting it would be more appropriate to show a period longer than 1 year; at least 5 years where available.	

			Recommendations: • Following best practices, Denison should include at least 5 years of data in the Final EIS for upland game bird harvest and harvest effort in Game Bird Management.	
496.	MN-S (March 4, 2023)	Section 11.2.3.9 Indigenous Perspectives on Other Land and Resource Use	Issue #11-10: The characterization of Indigenous perspectives on other land and resource use does not yet reflect MN-S and NR1 and NR3 Locals values or interests as this has not yet been provided. It is expected that when made available, this information will be reflected in the Final EIS. Recommendations: • Denison needs to include in the Final EIS, information provided by Métis Locals in NR1 and NR3 on their perspectives on other land and resource use.	
497.	MN-S (March 4, 2023)	Section 11.2.4.5.1 Aesthetic Experience	Issue #11-011: This conclusion is not consistent with the methods detailed on page 5-30 in section 5.8 as the Draft EIS identifies noticeable residual effects related to traffic (increased traffic volume) and noise (low to moderate impact). These effects should be taken to residual effects assessment. Recommendations: • To be consistent with the methods detailed in section 5.8, Denison should include all noticeable Project-related effects for residual effects assessment. For example, effects were identified related to traffic (increased traffic volume) and noise (low to moderate impact) but were not taken to residual effects assessment for Other Land and Resource Use in the Final EIS.	
498.	MN-S (March 4, 2023)	Section 12.1.2.3 Other Sources of Information and Local Knowledge	Issue #12-001: Arrangements and applicable funding to facilitate the MN-S' participation and engagement in the EA process are underway. It's expected that MN-S will be given the opportunity to provide information related to cultural expression and this information will be reflected in the Final EIS. Recommendations: • Denison needs to include in the Final EIS, information provided by Métis Locals in NR1 and NR3 on their input related to cultural expression.	
499.	MN-S (March 4, 2023)	Section 12.1.4.2.1 Potential Effect 1: Change in Knowledge Transmission	Issue #12-002: Need some clarification on this statement as it's reasonable to assume that both parents (mother and father), aunts' and uncles, and other relatives who are members of the community/family would potentially be employed and be away from home. Transmission of knowledge has the potential to be disturbed if multiple family and community members are away on working rotation. Recommendations:	

			• Denison needs to provide clarity in the Final EIS on the statement that “knowledge transmission is likely to continue because the entire family and community are involved'” considering the potential that with local hiring practices in place, multiple family and community members may be away on working rotation and not able to adequately facilitate knowledge transfer.	
500.	MN-S (March 4, 2023)	Section 12.1.4.2.1 Potential Effect 1: Change in Knowledge Transmission	Issue #12-003:The Draft EIS points to follow-up programs as a way to address any uncertainties identified during the EA process. Insufficient detail is provided to reflect how avoidance of areas near the Project may occur; monitoring (and adaptive management) is needed. More clarity on how monitoring will be developed (in section 12.1.8, p. 12-34) to address this uncertainty. Recommendations: • Denison needs to provide more detail in the Final EIS on monitoring (and adaptive management) for areas of uncertainty such as displacement of cultural activities. This includes management and monitoring plans that were prepared with MN-S involvement and agreement.	
501.	MN-S (March 4, 2023)	Potential Effect 2: Change in Traditional Diet	Issue #12-004: The EIS states: "Experience from other uranium operations in northern Saskatchewan suggests that resource use will continue despite the potential selenium exceedance. . . members had developed their own culturally appropriate practice of risk assessment and management based on their relationship with the land. . . .The ERFN Trapper had a positive relationship with other uranium operations in the ILRU LSA." The claims made in this section sound like the potential Project effects being identified are to be mitigated by ILRU users’ behavior, based on past behavior patterns, rather than Project mitigation. Recommendations: • Denison needs to include in the Final EIS, health risk assessment management and monitoring plans that are prepared with MN-S involvement and agreement to address suitability of land and resources for Indigenous land users. • Denison should confirm this assertion through a monitoring program that will focus on providing data to verify the predictions and include communication planning to convey health risk assessment results. This may also address assumptions about perceived suitability of lands and resources.	
502.	MN-S (March 4, 2023)	Section 12.1.8 Monitoring and Follow-up	Issue #12-006: Areas of uncertainty were identified in the analysis of Cultural Expression (e.g., displacement of cultural activities). Adaptive management is an appropriate strategy for helping to reduce uncertainty about environmental effects and the effectiveness of	

			mitigation. It provides flexibility to identify new mitigation measures or to modify existing ones during the life of the Project. In the Draft EIS, Denison has proposed to develop monitoring programs, but has not begun engaging with MN-S on contents of these programs. As a rights holder, MN-S should have the opportunity to contribute to the scoping, development, and implementation of monitoring programs, including effectiveness reviews and the application of an adaptive management approach. Recommendations: • Considering areas of uncertainty were identified in the analysis of Cultural Expression (e.g., displacement of cultural activities) in the Draft EIS, MN-S request more details in the Final EIS on monitoring (and adaptive management) for areas of uncertainty related to Indigenous cultural expression. This includes a monitoring program that will focus on providing data to verify the predictions and include communication planning to convey health risk assessment results. This may also address assumptions about perceived suitability of lands and resources.	
503.	MN-S (March 4, 2023)	Section 12.2.2 Influence of Indigenous Knowledge, Local Knowledge, and Engagement on the Assessment	Issue #12-007: Arrangements and applicable funding for a Métis Knowledge study is underway but not yet incorporated in the assessment. Recommendations: • Denison, in the Final EIS, needs to incorporate the outcome of the Métis Knowledge Study.	
504.	MN-S (March 4, 2023)	Section 12.2.4.1 Potential Interactions Between the Project and Valued Component / Key Indicators	Issue #12-08: The interaction table (12.2-5) identifies “Employment and Expenditures” as the only project component that would influence community well-being. This is inconsistent with previous interactions tables and information in the Draft EIS that identified potential interactions with the physical components and activities of the project that could affect aspects of community identity and cohesion (e.g., section 12.1 Cultural Expression). Comments were raised in the Draft EIS that community health and well- being is related to the relationship with the environment including issues such as changes in water quality or quantity, and mental health being affected by industrial development. Furthermore, section 12.2.3.3 (p. 12-66 to 12-73) identifies the natural environment as a component of community cohesion. This should be better reflected in the analysis of Community Well-being. Recommendations: • In the Final EIS, Table 12.2-5: Potential Project Interactions for Community Well-being (p. 12-74 to 12-77) should include the addition of interactions and effects analysis for “Change in Community Cohesion” that considers Project- related construction,	

			operations, and decommission impacts to mental, physical, and cultural health that stem from a relationship with the environment.	
505.	MN-S (March 4, 2023)	Section 12.2.4.2.1 Potential Effect 1 – Change in Population and Demographics	Issue #12-009: In the Draft EIS, Denison has proposed to develop mitigation measures and management planning, but as not begun engaging with MN-S on contents of mitigation measures or management plans. As a rights holder, MN-S should have the opportunity to contribute to the scoping, development, and implementation of mitigations, such as input into the location of pick-up points and commuter transportation options. Recommendations: • The Final EIS should include detail on how the input provided by Métis Locals in NR1 and NR3 and MN-S will influence the development of the location of pick-up points and commuter transportation options and address concerns related to in-migration and out-migration pressures.	
506.	MN-S (March 4, 2023)	Section 12.2.4.2.2 Potential Effect 2 – Change in Income	Issue #12-010: The EIS states: “Best efforts will be made to make sure employment is maximized, including within the LSA communities and to encourage business participation within the LSA.” (p. 12-80) “Best efforts will be made . . .” is a vague statement about project-related plans to maximize local training, employment, and procurement opportunities that would beneficially impact income levels for residents. More detail is needed to understand Denison's approach and commitment to increased personal income for residents of the LSA. Recommendations: • Denison needs to provide more certainty and detail within the Final EIS related to local employment and procurement mitigation as well as supports for employee retention. More information is needed to understand Denison's approach and commitment to increased personal income for residents of the LSA • Denison to expand the LSA communities to include all potentially impacted NR1 and NR3 Locals.	
507.	MN-S (March 4, 2023)	Section 12.2.4.2.2 Potential Effect 2 – Change in Income	Issue #12-011: “Community concerns” are identified related to broader spatial (having to move away to work) and temporal (“crash” after project) uncertainty for increased income. More detail is needed to understand Denison's approach and commitment to addressing community concerns related to income for residents of the LSA. Recommendations: • Denison needs to provide more certainty and detail within the Final EIS related to local employment and procurement mitigation as well as supports for employee retention. More information is needed to understand Denison's approach and commitment to	

			addressing community concerns related to increased personal income for residents of the LSA. • Decommissioning planning needs to consider employment transition in addition to site clean-up to avoid boom and bust scenarios.	
508.	MN-S (March 4, 2023)	Section 12.2.4.2.3 Potential Effect 3 – Change in Community Cohesion	Issue #12-012: “Community concerns” are identified related to impact to family and community cohesion due to working away from home for long periods. More detail is needed to understand Denison's approach and commitment to addressing community concerns related to community and family cohesion effects for residents of the LSA. Recommendations: • Denison needs to provide more detail within the Final EIS related to worker rotation system mitigation. Particularly considering the identification of reported difficulty in balancing the demands of a worker rotation system with domestic commitments, and many local community members concern of being unable to achieve a work-life balance.	
509.	MN-S (March 4, 2023)	Section 12.2.4.2.3 Potential Effect 3 – Change in Community Cohesion	Issue #12-013: Terminology like “could” is a vague indicator of commitment to developing strategies to address training and support systems for workers. More detail is needed to understand Denison's approach and commitment to addressing community concerns related to providing appropriate local resources for training and support as access to education and supports systems effects for residents of the LSA. Recommendations: • Denison needs to provide more detail within the Final EIS related to their role in developing and providing culturally appropriate resources for training, education and supports systems as access has already been identified as a barrier to local communities. • Denison needs to support Métis training opportunities through Northlands College.	
510.	MN-S (March 4, 2023)	Section 12.2.5 Mitigation Measures	Issue #12-014: More detail is needed to understand the types and scope of health and wellness programs. Many of the services listed below this statement are standard health and safety measures for industrial sites and only accessible to on-site staff. They do not address community issues of health and well-being. Recommendations: • Denison needs to provide more detail within the Final EIS related to the health and wellness programs and their role in developing and providing resources of this type. This should include the provision of services more broadly within communities, not just to individuals on-site. • Denison to confirm how Métis input is considered in mitigation development.	

511.	MN-S (March 4, 2023)	Section 12.2.5 Mitigation Measures	Issue #12-015: Terminology like “may” is a vague indicator of commitment to development of life skills programming. More detail is needed to understand Denison's approach and commitment to addressing community concerns related to providing appropriate local resources for supporting the well-being of residents of the LSA. Recommendations: • Denison needs to provide more detail within the Final EIS related to a commitment to developing and key components of life skills programs. It is appropriate to address the issues as they are identified as an effect of the project in the proceeding section regardless of the certainty of these effects. • Denison to confirm how Métis input is considered in mitigation development.	
512.	MN-S (March 4, 2023)	Section 12.2.5 Mitigation Measures	Issue #12-016: In the Draft EIS, Denison has proposed to develop mitigation measures and management planning, but has not begun engaging with MN-S on contents of mitigation measures or management plans. As a rights holder, MN-S should have the opportunity to contribute to the scoping, development, and implementation of mitigations, such as input into the location of pick-up points and commuter transportation options. Recommendations: • Denison needs to provide additional detail within the Final EIS, on how the input provided by MN-S, NR1 Locals, and NR3 Locals will influence the development of the location of pick-up points and commuter transportation options See also MN-S Issue #12-010	
513.	MN-S (March 4, 2023)	Section 12.2.5 Mitigation Measures	Issue #12-017: More clarity and commitment are required from Denison on social management mitigations and programming. For example, Denison could implement established mitigations to address effects that are identified in the Draft EIS related to community well-being, such as: a) maintain a Community Liaison Coordinator position to work with communities throughout the Project and provide a grievance mechanism through which individuals can confidentially and independently raise issues should they arise. b) develop a Community Readiness program to support communities and businesses in assessing local capacity, identify critical gaps that would prevent community members from successfully gaining employment, and capture business and economic opportunities related to the Project. c) involving local communities in the development and implementation of monitoring programs could provide opportunities for employment during Construction to beyond the Decommissioning stage. Recommendations:	

			• Denison needs to provide additional detail within the Final EIS related to Denison's commitment to developing mitigations that address potential effects to community well-being such as support for community accessible health and wellness programs, community liaisons, community readiness programs, and long-term monitoring opportunities. This includes mitigations that are prepared with MN-S, and NR1 and NR3 Locals involvement and agreement.	
514.	MN-S (March 4, 2023)	Section 12.2.6.2.2 Community Cohesion	Issue #12-018: This analysis does not address the concerns expressed in the existing conditions reporting (section 12.2.3, p. 12-47 to 12-50) related to mental and physical health being affected by quality of water and land is being affected by industrial developments. This should be better reflected in the analysis of Community Cohesion. Recommendations: • Denison needs to provide additional effects analysis of "Change in Community Cohesion" that considers Project- related construction, operations, and decommission impacts to mental, physical, and cultural health that stem from a relationship with the environment. For example, concerns were expressed in the Draft EIS reporting (section 12.2.3) related to mental and physical health being affected by quality of water and land is being affected by industrial developments.	
515.	MN-S (March 4, 2023)	Section 12.2.6.2.2 Community Cohesion	Issue #12-019: This statement, and the existing conditions reporting, presents evidence that stress and related responses are a potential indirect effect of changes to employment and income that could be related to the Project. Recommendations: • Considering the uncertainty identified in the Draft EIS about social effects of the Project on community cohesion, Denison needs to provide additional detail within the Final EIS related to Denison's commitment to developing monitoring and management programs to understand and respond adaptively to potential effects of the Project on community cohesion. This includes monitoring and management programs prepared with MN-S, and NR1 and NR3 Locals involvement and agreement that could support community members dealing with use of alcohol/substances and/or related violence and crime.	
516.	MN-S (March 4, 2023)	Section 12.2.8 Monitoring and Follow-up	Issue #12-020: This statement is vague about who will monitor community cohesion and whether Government departments and private- sector companies are committed to provide those services for the life of the Project. It also ignores previous statements in the Draft EIS that identify direct and indirect effects of uncertainty related to changes to community well-being that would be related to the Project. Denison's earlier statements indicate that monitoring and follow-up will be an aspect of mitigation. The statements seem contradictory.	

			Recommendations: • Denison, in the Final EIS, needs to demonstrate that whether Government departments and private-sector companies are committed to provide community cohesion- related services for the life of the Project. • Denison needs to distinguish and clarify earlier statements of monitoring and follow-up with the assertion here.	
517.	MN-S (March 4, 2023)	Section 12.3.1.3.1 Spatial Boundaries	Issue #12-021: Contrary to the text describing the Traffic Study Area, Highway 914 and Highway 165 are not labelled on Figure 12.3-3. Recommendations: • MN-S request the revision of Figure 12.3-3 to include labelling of Highway 914 and Highway 165 in the Final EIS.	
518.	MN-S (March 4, 2023)	Section 12.3.4.2.1 Potential Effect 1 – Change in Traffic	Issue #12-022: The 31% or 51% increase in truck traffic on Highway 914 seems to represent a more than slight increase in traffic volume. It is acknowledged that this is related to 18 additional trucks per day. Clarification is required to determine if there would be a similar % increase in potential collisions. Recommendations: • Denison needs to clarify and provide analysis of the impact of traffic volume and what is a suitable threshold.	
519.	MN-S (March 4, 2023)	Section 12.3.4.2.1 Potential Effect 1 – Change in Traffic	Issue #12-023: Clarity is required to explain why collisions can not be predicted with accuracy given the availability of existing predictive modelling for traffic management planning. Recommendations: • Denison should provide further clarification in the Final EIS of why collisions can not be predicted with accuracy given the availability of existing predictive modelling for traffic management planning.	
520.	MN-S (March 4, 2023)	Section 12.3.4.2.2 Potential Effect 2 – Change in Community Infrastructure and Services	Issue #12-024: Clarification is required to explain how Denison intends to provide employee maintenance support services that address the indirect effect to the community members (e.g., childcare, etc.) identified in this statement. Recommendations: • Denison to provide in the Final EIS additional detail on commitments to support employee families while on rotation.	

521.	MN-S (March 4, 2023)	Section 12.3.4.2.2 Potential Effect 2 – Change in Community Infrastructure and Services	Issue #12-025: The services listed in Table 12.3-14 are predominately crisis management services and general health care services which are provided by existing organizations in the community/region. Clarification is required to identify the community services that Denison will make available to the families of local employees to address shift rotation issues (e.g., childcare services) and how Denison will help families with access these services. Recommendations: • Denison should clarify their commitment to providing provide community social services to the families of local employees to address issue identified in relation to the shift rotation (e.g., childcare services)	
522.	MN-S (March 4, 2023)	Section 12.3.2 Influence of Indigenous Knowledge, Local Knowledge, and Engagement on the Assessment (p. 12- 108)	Issue #12-026: Arrangements and applicable funding for a Métis Knowledge study is underway but not yet incorporated in the assessment. Recommendations: • Denison needs to include in the Final EIS, Métis Knowledge study findings on their perspectives on infrastructure and services.	
523.	MN-S (March 4, 2023)	Section 12.3.4.2.2 Potential Effect 2 – Change in Community Infrastructure and Services	Issue #12-027 and 12-028: Clarification is required to indicate how the on-site programs would support community-based health services. Recommendations: • Denison to provide additional information of on-site health services that will alleviate community-based health services in NR1 and NR3. • Denison needs to confirm how social responsibility guidelines will support community infrastructure and services in NR1 and NR3 to help offset some of the interactions and effects to local communities and timelines for the action.	
524.	MN-S (March 4, 2023)	Section 12.3.5 Mitigation Measures	Issue #12-029: Most of the mitigations provided are standard worker health and safety and materials handling measures required for worker and environmental safety and don't address potential effects to traffic within the LSA. Detail is required to demonstrate how measures will address potential hazards from increased traffic volumes, and potential risk for conflict between road users and mining traffic. Recommendations: • Denison needs to provide additional information in the Final EIS on how the mitigation will alleviate traffic related impacts.	
525.	MN-S (March 4, 2023)	Section 13.1.1 Valued Component Selection	Issue #13-001: This section of the draft EIS states: "Residents in the LSA and Regional Study Area (RSA) have expressed interest and concern about the Project's effect on the local economy, through income, training and employment opportunities, and business opportunities.	

			Initial direction and input into VC selection was obtained from: • discussions with Indigenous and non-Indigenous Communities of Interest (COI); • discussions with LK holders; • discussions with government agencies and the public; • results of Denison's baseline studies; • regional data from other EAs; • results from engagement and consultation activity; and • similar or recent projects in the region." (p. 13-5 to 13-6) Recommendations: • In the Final EIS, Denison needs to include the input from MN-S, NR1 Locals, NR3 Locals and indicate if VCs were altered.	
526.	MN-S (March 4, 2023)	Section 13.1.3.1 Spatial Boundaries	Issue #13-002: Denison has not included MN-S or NR1 and NR3 Métis communities in the LSA for the assessment of the economy. Recommendations: • Denison needs justify its selection of LSA communities and why no Indigenous Communities of Interest nearest to the site are not in the LSA. The omission calls into question any economic interests of Métis in close proximity to the Project could have. • In the Final EIS, Denison to expand its evaluation to Métis communities.	
527.	MN-S (March 4, 2023)	Section 13.1.3.2 Temporal Boundaries	Issue #13-003: MN-S is interested in understanding all potential Project-related effects during Post-Decommissioning including economic impacts. Recommendations: • MN-S requests that in the Final EIS, Denison include the addition of interactions and effects analysis for Post- Decommissioning impacts to economics that may stem from Employment Income within the LSA communities related to monitoring and the implementation of management programs to respond adaptively to potential effects of the Project. This includes monitoring and management programs prepared with MN-S, NR1 Locals, and NR3 Locals involvement and agreement.	
528.	MN-S (March 4, 2023)	Section 13.1.4 Influence of Indigenous Knowledge, Local Knowledge, and Engagement on the Assessment	Issue #13-004: Denison has not sufficiently engaged MN-S, NR1 communities, and NR3 communities on the assessment of the Economics VC. Recommendations: • Denison needs to meet with MN-S, NR1 Locals, and NR3 Locals to discuss Project-related economic issues and interests.	

			• MN-S request additional detail is included within the Final EIS, on how the input provided by MN-S, NR1 Locals, and NR3 Locals will influence the assessment of the Economics VC.	
529.	MN-S (March 4, 2023)	Section 13.2.1.2 Participation Rate	Issue #13-005: Denison has not assessed the participation rate, employment rate, or unemployment rate of MN-S or NR1 and NR3 communities. Recommendations: • In the Final EIS, Denison needs to expand the description of the existing environment to include NR1 communities and NR3 communities.	
530.	MN-S (March 4, 2023)	Section 13.2.1.3 Employment Rate	Issue #13-006: Denison acknowledges that several barriers to employment in northern Saskatchewan exist without providing solutions to address and/or mitigate such barriers. Recommendations: • Denison needs to provide more detail within the Final EIS related to their role in developing and providing resources for training and employment as access has already been identified as a barrier to local communities.	
531.	MN-S (March 4, 2023)	Section 13.2.3 Key Indicator: Traditional Economy	Issue #13-007: The Métis Knowledge study by MN-S has not been completed and included in the Draft EIS. Recommendations: • Denison needs to engage all potentially impacted Métis communities. Specifically, Denison should equally engage all NR1 and NR3 Locals in addition to Kineepik Metis Local #9 on potential Project-related effects to Métis traditional economy throughout the life of the Project. • The Final EIS needs to include the Métis Knowledge Study once completed.	
532.	MN-S (March 4, 2023)	Section 13.2.4.1 Local Businesses	Issue #13-008: The EIS states: “Economic leakage (i.e., money leaving the local economy) is a relevant concern, particularly for small, concentrated economies. Economic leakage can occur at various points through the cascade of spending in an economy, but the closer that leakage occurs to the point source of investment, the more potential economic benefit that is lost.” (p. 13-51) Recommendations: • Denison needs to provide more certainty and detail within the Final EIS related to local employment and procurement mitigation to manage for and reduce ‘economic leakage’.	

533.	MN-S (March 4, 2023)	Section 13.3.1 Potential Interactions Between the Project and Valued Component / Key Indicators	Issue #13-009: Denison does not include MN-S or NR1 communities within the LSA in the assessment on the economy and therefore employment, training, and business opportunities will not be prioritized for all potentially impacted Métis. Recommendations: • Denison to include MN-S and all NR1 communities in the LSA for the economy VC in the Final EIS.	
534.	MN-S (March 4, 2023)	Section 13.3.1 Potential Interactions Between the Project and Valued Component / Key Indicators	Issue #13-010: Potential Project interactions for the Economy VC do not reflect feedback shared by MN-S/NR1 and NR3 Locals. Recommendations: • Denison needs to discuss potential Project interactions for economy to Métis peoples and update Table 13.3-1 to reflect feedback shared by MN-S/NR1 and NR3 Locals.	
535.	MN-S (March 4, 2023)	Section 13.3.2.1 Potential Effect 1 - Employment and Training	Issue #13-011: Denison has not included MN-S or NR1 and NR3 Métis communities in the LSA for the assessment of the economy. Denison also has not engaged MN-S or all potentially impacted NR1 and NR3 communities to understand Métis concerns and/or interests related to employment and training opportunities. Recommendations: • Denison needs to engage all potentially impacted Métis communities. Specifically, Denison should equally engage all NR1 and NR3 Locals in addition to Kineepik Metis Local #9 on interests and concerns related to employment and training opportunities throughout the life of the Project. • Denison needs to provide more detail within the Final EIS related to their role in developing and providing resources for training and employment as access has already been identified as a barrier to local communities. This includes training programs prepared with MN-S/NR1 and NR3 Locals involvement and agreement.	
536.	MN-S (March 4, 2023)	Section 13.3.2.1 Potential Effect 1 - Employment and Training	Issue #13-012 and 13-013: Denison has not identified Métis-specific considerations to their employment and training program. Denison has indicated that there will in-house training, as well. It is not clear how this will be delivered. Recommendations: • Denison needs to provide more certainty and detail within the Final EIS related to local training and employment. More detail within the Final EIS related to Denison's role in developing and providing resources for training and employment as access has already been identified as a barrier to local communities. This includes training programs prepared with MN-S/NR1 and NR3 Locals involvement and agreement.	

			• More information is needed to understand Denison's approach and commitment to addressing effects to local employment especially as it relates to Foundational positions and why a Grade 12 education is required. • Denison needs to update the Economics Section to reflect the latest census and the effects that Covid has had on employment in the LSA and RSA. • Denison needs to engage MN-S, NR1 Locals, and NR3 Locals to discuss employment and training opportunities for Métis (e.g., discussing Métis-specific recruitment strategies). Opportunities to discuss include (but are not limited to): hiring and training practices during all phases of the Project, on-the-job training and career counselling to help with advancement from foundational positions, advance sharing of job qualification requirements, clearly identifying training requirements and working with various training institutions to make sure such appropriate training is available, and creation of scholarship and support programs.	
537.	MN-S (March 4, 2023)	Section 13.3.2.2 Potential Effect 2 – Income	Issue #13-014: Initiating efforts with LSA communities excludes most of the Métis communities and keeps them from benefiting. Recommendations: • The Final EIS needs to include additional evaluation of non- LSA communities potential for income benefits.	
538.	MN-S (March 4, 2023)	Section 13.3.2.3 Potential Effect 3 - Traditional Economy	Issue #13-015: Denison has not incorporated Métis Knowledge from MN-S, NR1, or NR3 (except Métis Knowledge from Kineepik). Recommendations: • Denison will need to revise the potential effects evaluation after completion of the MKS.	
539.	MN-S (March 4, 2023)	Section 13.3.2.3 Potential Effect 3 - Traditional Economy	Issue #13-016: Denison has not included details on closure planning including traditional economic activities that can be expected upon decommissioning. Recommendations: • In the Final EIS, Denison needs to provide additional information on closure planning and what traditional economic activities can be expected upon decommissioning.	
540.	MN-S (March 4, 2023)	Section 13.3.2.3 Potential Effect 3 - Traditional Economy	Issue #13-017: Denison has not engaged MN-S, NR1, and NR3 to understand Métis-specific effects of the Project's proposed commuter-rotation schedule. Recommendations: • In the Final EIS, Denison needs to provide more detail related to worker rotation system mitigation. Particularly considering the identification of reported difficulty in	

			balancing the demands of a worker rotation system with traditional economy activities.	
541.	MN-S (March 4, 2023)	Section 13.3.2.3 Potential Effect 3 - Traditional Economy	Issue #13-018: As identified in section 11.1.6 (p. 11-66 to 11-68), Indigenous land use may be affected by the Project despite mitigations. It is reported that Project-related effects such as noise and dust can cause avoidance of the area by some resource harvesters while others may be undeterred. Recommendations: • Denison needs to include in the Final EIS, information provided by Métis in NR1 and NR3 once the MKS is completed. • Denison needs to support Métis training opportunities through Northlands College.	
542.	MN-S (March 4, 2023)	Section 13.4 Mitigation and Enhancement Measures	Issue #13-019: Limited listing of potential measures for consideration. Recommendations: • It is unclear from the description of Mitigation and Enhancement Measures whether Impact and Benefit Agreements (IBAs) will be included. Impact and Benefit Agreements are a normal vehicle for extending economic benefits to Indigenous communities. • In the Final EIS, confirm whether IBAs are also a mitigation and enhancement measure.	
543.	MN-S (March 4, 2023)	Section 13.4 Mitigation and Enhancement Measures	Issue #13-20: Denison has not engaged MN-S or all NR1 Locals and NR3 Locals to understand employment and training needs to support Métis involvement in the Project. Recommendations: • Denison indicated multiple pick-up points but a minimum of 3 points (2 in the LSA and 1 in Saskatoon). In the Final EIS, Denison needs to clarify if pick-up points will be extended to the RSA communities so that they can take advantage of employment opportunities.	
544.	MN-S (March 4, 2023)	Section 13.5.1.1 Employment and Training	Issue #13-021: Denison has not identified mitigation and enhancement measures to support their conclusion that employment and training residual effects are expected to be low to moderate in magnitude. Recommendations: • Denison needs to expand its description of mitigation and enhancement measures to better support their conclusion that employment and training residual effects that are low to moderate in magnitude in Section 13.5.	

545.	MN-S (March 4, 2023)	Section 13.6.1 Climate Change Considerations	Issue #13-022: Denison did not identify how the Métis would be involved in the development, review, and/or implementation of the Project's detailed plans and procedures. Recommendations: • The Final EIS needs to include the detailed plans and procedures for review. • The plans and procedures need to include input from MN-S, and NR1 and NR3 Locals.	
546.	MN-S (March 4, 2023)	Section 15.5.3 Effects on the Project	Issue #15-001: Meeting current regulations and building codes may not be sufficient for short-term or long-term environmental effects as they are characterized in the Draft EIS (e.g., forest fires, flooding). Please provide detail on how the Project will be designed to exceed current regulations in anticipation of changing to environmental conditions. Recommendations: • Denison needs to provide additional detail in the Final EIS describing how the Project will be designed beyond current regulations and building codes in anticipation of changes to environmental conditions.	
547.	MN-S (March 4, 2023)	Section 15.5.3 Effects on the Project	Issue #15-002: Further details are required on how emergency preparedness and response plans will adaptively respond to changing climatic conditions and potential unforeseen effects to the Project. Recommendations: • Denison needs to provide additional detail in the Final EIS about their commitment to developed adaptive emergency preparedness and response plans to address unforeseen effects to the Project resulting from climate change.	
548.	MN-S (March 4, 2023)	Appendix 2-A 19-EN-CNSC-1.23, Workshop, 2018-01-16	Issue #2A-001: The site tour on January 16, 2018 only included the following Métis representation: A La Baie Métis Local #21, Kineepik Métis Local #9, MN-S, and Patuanak Métis Local #82. In addition, other Indigenous Nations were present. It is unclear from Denison's table format who asked how long to freeze and would the freeze wall be kept intact for the life of the operation. Denison shared responses to these questions in their Draft EIS. Recommendations: • Engagement on the proposed Project needs to extend to NR1 communities. The Final EIS should include proof of this engagement and responses to concerns raised.	
549.	MN-S (March 4, 2023)	Appendix 2-A 22-EN-EQC-648.1, Presentation, 2022-03-03	Issue #2A-002:These meetings had representation from Métis Local #39 (La Loche) and no other Métis. It is unclear who asked, "What are the concerns with groundwater monitoring…". MN-S does not consider Denison's engagement with the EQC as engagement	

			with MN-S or Métis communities. MN-S prefers Denison specify feedback shared at join workshops by Indigenous Nation. Recommendations: • Denison engagement with Métis communities has been limited. In the Final EIS, MN-S expects to see more informed engagement and responses to concerns raised.	
550.	MN-S (March 4, 2023)	Appendix 7-C, Numerical Modelling: Post-decommissioning Evaluation, Executive Summary	Issue #7C-001: Page ii of this document states states: ""By accounting for these reactions, the simulated dissolved constituent plumes emanating from the ore zone reach their maximum extents within the deeper units (i.e., Lower Sandstone Aquifer and deeper parts of the Desilicified Zone) after approximately 10,000 years. Consequently, concentrations at Whitefish Lake throughout the future centuries are simulated to be similar to background concentrations. Under the base case scenario, which represents a conservative estimate of the conditions present, there are no exceedances of the groundwater quality screening criteria protective of freshwater aquatic life in the receiving environment." Whether conditions are "conservative" or not, is dependent on perspective. Recommendations: • Denison needs to provide further rationale detailing how the "base case scenario" represents a conservative estimate of the conditions present.	
551.	MN-S (March 4, 2023)	Appendix 7-C, Numerical Modelling: Post-decommissioning Evaluation, Executive Summary	Issue #7C-001: Denison provides no rationale for "conservative dispersivity values" in the Draft EIS. Recommendations: • Denison needs to provide site-specific research to confirm literature dispersivity values are conservative in the Final EIS.	
552.	MN-S (March 4, 2023)	Appendix 7-C, Numerical Modelling: Post-decommissioning Evaluation, Executive Summary	Issue #7C-001: Additional modelling will be needed to confirm at the time of decommissioning the assumption that there is "large assimilative capacity" of the groundwater system, in order to manage risk in Whitefish Lake. Recommendations: • Denison to complete simulations that increase focus on maintaining containment of the contaminant source for a greater period of time (i.e., a higher level of focus on source term control and flushing), and less reliance on management of contaminant along the pathway, prior to the contaminant reaching the receptor. In other words, simulations that focus, to a greater extent, on evaluating the benefit of additional effort and time on source term control (the first step in the risk hierarchy of source, pathway, receptor).	

553.	MN-S (March 4, 2023)	Appendix 7-C, Numerical Modelling: Post-decommissioning Evaluation, 2.4 Scope of Work	Issue #7C-001: Denison assumes non-surface reaching groundwater will not extracted or accessed by future generations. Recommendations: • Denison to study and provide further understanding of deep groundwater characteristics with MN-S, NR1 Locals, and NR3 Locals prior to commencement of mining operations. This information may affect final closure options. • Denison to consider modelling for surface receptors of deep groundwater beyond the boundaries identified in Section 1.1.	
554.	MN-S (March 4, 2023)	Appendix 7-C, Numerical Modelling: Post-decommissioning Evaluation 2.4.1 Groundwater Recharge	Issue #7C-001: Denison's Draft EIS does not confirm if the groundwater recharge rates were adjusted for potential changes to recharge as a result of climate change. Recommendations: • Denison should develop a Project-specific climate change model database, which clearly articulates the shared socioeconomic pathway (SSP) the Project is choosing from IPCC AR6, and show how that scenario has been down- scaled for use within Project modelling predictions, and present the results in the Final EIS.	
555.	MN-S (March 4, 2023)	Appendix 7-C 2.4.2 Surface Water Features	Issue #7C-001: Water levels in surface water features are not static; they change in response to regional climate and flow conditions. This would influence the interaction between groundwater and surface water, as the assumption by the model developer is that water levels are input as static head boundary conditions. Recommendations: • Denison needs to explain in the Final EIS why static head boundary conditions are used for the modelling beyond a need to simplify the modelling.	
556.	MN-S (March 4, 2023)	Appendix 7-C 2.5.2.1 Water Level Elevations – Quantitative Calibration	Issue #7C-001: Denison does not provide the basis, explanation, or literature to state that a calibrated model to observe water levels is sufficient with a deviation of +/- 2m. Recommendations: • Denison needs to provide an explanation, basis, and/or literature to state that a calibrated model to observe water levels is sufficient with a deviation of +/- 2m in the Final EIS.	
557.	MN-S (March 4, 2023)	Appendix 7-C 2.5.2.3 Statistical Measures of Calibration to Water Levels	Issue #7C-001: Denison provides no rationale/basis for considering a mean error of 0.23 considered to be an "excellent match" to the observed water levels. Recommendations:	

			• Denison should provide an explanation, basis, and/or literature for why a mean error of 0.23 is considered to be an "excellent match" to the observed water levels in the Final EIS.	
558.	MN-S (March 4, 2023)	Appendix 7-C 2.6.3 Groundwater Flow Quantity	Issue #7C-001: Ecological receptors could potentially be exposed to groundwater flows. Recommendations: • Denison should provide an understanding of deep groundwater as a contaminant pathway to ecological receptors within immediate vicinity in the Final EIS.	
559.	MN-S (March 4, 2023)	Appendix 7-C 2.7.1 Groundwater Demand	Issue #7C-001: The Project has assumed that it is "conservative" to supply all water for the Project from outside the ore zone, and assume minimal influent from re-cycled / treated water. This statement supports that position. Recommendations: • Denison should provide simulations that maximize recycling treated water, rather than minimize using recycled water for the Project. • Denison to confirm how groundwater quality predictions differ when recycled and treated water is used to supply water to the Project, as compared to assuming conditions as noted in this statement.	
560.	MN-S (March 4, 2023)	Appendix 7-C 2.7.3 Hydrogeological Change Due to Mine Operations	Issue #7C-001: The interaction of increase drought or increased precipitation (i.e., climate change) could potentially affect the length of time for full recovery of groundwater recharge due to potential changes in climate conditions. Recommendations: • MN-S requests that interaction between climate change scenarios and groundwater modelling should be included in the Final EIS.	
561.	MN-S (March 4, 2023)	Appendix 7-C 2.7.3 Hydrogeological Change Due to Mine Operations	Issue #7C-001: It is unclear if the statements made about full recovery and 90% recovery are defendable given that calibrated hydraulic conductivity values, as shown in Table 2-2 (p. 2.7), for the lower sandstone aquifer ranges over 2 orders of magnitude, and the ore zone calibrated hydraulic conductivity over nearly 5 orders of magnitude, and that no range in hydraulic conductivity is reported for the desilicified sandstone aquifer (i.e., a single calibration value is reported). Recommendations: • Denison should provide simulations that consider the full range of calibrated hydraulic conductivity values in the Final EIS.	

562.	MN-S (March 4, 2023)	Appendix 7-C 3.1.1 Groundwater Remediation	Issue #7C-001: No time period is provided to reach acceptable levels of remaining contaminants or effective remediation accomplished in order to leave the area in a pre-mining condition. Recommendations: • Denison needs to provide more clarity on what the expected time period to reach acceptable levels of remaining contaminants or effective remediation in order to leave the area in a pre-mining condition. This unknown time frame may play into the viability of remediation and final closure costing.	
563.	MN-S (March 4, 2023)	Appendix 7-C 5.2.2 Assumptions	Issue #7C-001: Climate change as a variable does not appear to have been incorporated into the modelling. Recommendations: • Denison needs to provide more clarity in the Final EIS on how climate change as a variable has been incorporated into the ground water modelling as climate changes scenarios and effects on the groundwater could affect the closure pathway.	
564.	Prince Albert Grand Council (PAGC) (March 6, 2023)	General Comments	Overall Comments from the PAGC submission: The EIS does not address multiple issues related to ecosystems, human health, and the long-term sustainability of the Wheeler River project, particularly Indigenous concerns regarding the loss of caribou, wolverine and other culturally significant animals. There are no details on economic benefits from the mines through Indigenous partnerships, including equity-based participation in the workforce with training opportunities for Indigenous personnel to operate in management roles. [Additional questions on this topic directed to regulators or government entities are included in the CNSC table]	
565.	PAGC (March 6, 2023)	Loss of Use and Access to Traditional Lands and Resources	The EIS does not capture Indigenous Elders' understanding of the human impact, climate change and cumulative effects on wildlife including caribou or other species at risk and the resulting impacts on Indigenous livelihoods. Denison's EIS states that existing disturbances in the area are from exploration activities with a general description of how disturbances from these activities will be managed. PAGC does not find sufficient evidence that the affected areas can be restored to their former state and will impact woodland caribou habitats. PAGC Elders prioritize the removal or reduction of human disturbances to the landscape for caribou recovery and wish to avoid projects which have a significant environmental impact. PAGC elders do not want to see any animals or plants disappear from the landscapes they use based on their traditional understanding of the relationship between humans and nature. This impacts the ability to practice treaty rights and entitlements to the lands which	

			impact physical and mental health and mixed economy connected to hunting and gathering. PAGC urges Denison to understand and take an eco-cultural approach to preserve wildlife and landscape health when planning mining operations and decommissioning processes. This should include use of Indigenous Knowledge in delineating caribou habitats despite the data and woodland caribou traditional ecological knowledge available in the report published by Mamun and Brook (2017).	
566.	PAGC (March 6, 2023)	Transportation Corridor Impacts to Lands and Resources	Additional traffic and associated noise from the proposed project are a concern and PAGC requests that Denison puts a speed limit of about 70km/hour for trucks in the boreal forest where woodland caribou reside and are used by barren land caribou in winter.	
567.	PAGC (March 6, 2023)	Consultation and Engagement	PAGC finds that science-based models used for EIA reports put Indigenous people at a disadvantage as Indigenous communities are not involved in the collection, analysis and interpretation of data for models. Indigenous culture does not make use of models, rather, they follow natural changes and patterns which sometimes are not reflected in scientific findings. Requesting feedback from Indigenous communities on a report full of models prepared without Indigenous involvement has limited value as PAGC members are not fully engaged throughout the process. This approach is somewhat disrespectful to Indigenous communities as they are not part of the development process and PAGC reserves the right to reject the EIA or EIS. PAGC requests a commitment from Denison to get Indigenous communities involved in each stage of the documentation and report preparation process.	
568.	PAGC (March 6, 2023)	Economic Benefits, Training and Funding Opportunities	PAGC request additional details from Denison regarding plans to incorporate Indigenous partnership in the economic benefit of the mines, equity-based participation in the workforce and training opportunities for Indigenous personnel to operate in management roles. PACG suggest arranging long-term funding for youth education in science that would prepare them for careers in biology and environmental science, which is very uncommon among Indigenous communities. Increasing Indigenous representation in science and technology, and participation in development planning is therefore a valuable long-term goal.	