

Technical Report Recommendations and Responses

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Environment Canada (EC)	1. EC does not agree with the proposed SSWQOs, and recommends that these not be used as a basis for assessing receiving water impacts nor for developing effluent quality criteria. EC is of the opinion that deferring further discussion of the SSWQOs to the regulatory stage would not compromise the assessment of discharge-related potential impacts provided the proposed treatment system and mitigation commitments go forward.	Agreed	
	2. Provide a commitment table outlining all commitments to Management Plans including those relating to Air Quality.	Updated commitments table has been provided with this submission	
	3. Consult with GNWT-ENR caribou experts to identify any plans to manage undisturbed caribou habitat in the project area, and to discuss how the project aligns with territorial management strategies and actions plans for boreal woodland caribou.	Fortune will consult on this subject with the GNWT. Fortune would request that the Tłı̄chǫ Government be present at these discussions.	
	4. To avoiding disturbance/destruction of nests and eggs of migratory birds, EC recommends that:		
	<ul style="list-style-type: none"> • The Developer consult the fact sheet "Planning Ahead to Reduce Risks to Migratory Bird Nests" available at: http://www.ec.gc.ca/paom-itmb/ 	Agreed	Potential meeting between Fortune and EC.
	<ul style="list-style-type: none"> • The Developer avoid habitat disturbance and vegetation clearing during the migratory bird breeding season 	Fortune is anticipating that all clearing will be performed in winter. If that is not the case, Fortune will work with EC to develop a monitoring and mitigation plan to avoid incidental take of migratory nests and eggs.	
	<ul style="list-style-type: none"> • Areas that cannot be cleared or disturbed outside of the nesting season should be thoroughly surveyed for active nests using a scientifically sound approach a maximum of 4 days before destruction/clearing. Surveys should be carried out by an avian biologist or naturalist with experience with migratory birds and migratory bird behaviour indicative of nesting (e.g. aggression or distraction behaviour; carrying nesting material or food) 	See response to EC recommendation 4, second bullet.	
	<ul style="list-style-type: none"> • Any nests found should be protected within an appropriately sized buffer zone 	See response to EC recommendation 4, second bullet.	
	<ul style="list-style-type: none"> • The Developer design and implement a plan to avoid incidental take of migratory bird nests and eggs during construction and operation of the CDF 	See response to EC recommendation 4, second bullet.	
	5. Implement best management practices to minimize bird collisions with the communications tower. Specifically, EC recommends that:		
	<ul style="list-style-type: none"> • If guy wires must be used on the communications tower they should be fitted with bird diverters. 	See response in Information Request response EC-1, where Fortune commits that the tower would be lit as per the relevant legislation.	
	<ul style="list-style-type: none"> • Flashing red, red strobe or white strobe lights be used on the communications tower. 	See response to EC 5 recommendation, first bullet	
	<ul style="list-style-type: none"> • Flood lights and other light sources at the base of the tower should not be left on all night during the spring and fall migration period. 	See response to EC 5 recommendation, first bullet	
	6. Monitoring waterfowl/waterbird use of water management ponds and levels of contaminants, EC specifically recommends:		
	<ul style="list-style-type: none"> • The Developer monitor water quality in seepage collection ponds, the open pit sump, the surge pond and the CDF as well as the use of these areas by waterfowl and waterbirds, as outlined in the draft Wildlife Effects Monitoring Program. 	Fortune will complete the Wildlife Effects Monitoring Plan as outlined in the DAR.	
	<ul style="list-style-type: none"> • Results of water quality and bird monitoring should be included in annual wildlife monitoring reports. 	Agreed	
<ul style="list-style-type: none"> • If monitoring suggests a potential health risk to waterfowl and waterbirds, adaptive management should be implemented to deter birds from using these areas. 	Adaptive management will be used to determine if bird deterrents are warranted.		

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Environment Canada	7. Impact assessment for species at risk, EC recommends that:		
	<ul style="list-style-type: none"> If species at risk or their nests and eggs are encountered during project activities or monitoring programs the primary mitigation measure for each species should be avoidance. The Developer should contact EC-CWS and/or GNWT-ENR for advice on appropriate buffer zones to protect nest and eggs of species at risk and the surrounding habitat until the young have left the nest. 	See response to EC recommendation 4, second bullet.	
	<ul style="list-style-type: none"> Monitoring should be undertaken by the proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of Species at Risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the Developer to avoid contact or disturbance to the species, its habitat, and/or its residence. The results of monitoring should be provided to the relevant agency with management responsibility for each species. 	See response to EC recommendation 4, second bullet.	
	<ul style="list-style-type: none"> The Developer should ensure that mitigation and monitoring strategies are consistent with any applicable status reports, recovery strategies, action plans and management plans that are currently available or may become available during the duration of the project. The GNWT-ENR and Environment Canada should be consulted on the development of adaptive management strategies should they be required. 	See response to EC recommendation 4, second bullet.	
	8. Relating to the attraction of predators and scavengers to project facilities, EC recommends that:		
	<ul style="list-style-type: none"> Food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. 	Fortune will adhere to the commitments in the draft Wildlife Effects Monitoring Program and Waste Management Plans as stated in the Updated Commitments Table	
	<ul style="list-style-type: none"> The Developer implement the waste management and wildlife monitoring measures outlined in their draft Wildlife Effects Monitoring Program. 	See response to EC recommendation 8, first bullet	
	9. EC recommends the Developer contribute to regional monitoring programs for migratory birds.	When the Tłjchq Road and NICO Project Access Road have been constructed, Fortune will undertake annual bird surveys using the North American Breeding Bird Survey methods.	
Government of the Northwest Territories (GNWT)	1. The GNWT recommends that an updated commitments table be submitted to the public registry prior to the public hearing.	Updated commitments table has been provided with this submission.	
	2. The GNWT recommends that Fortune clarify:		
	<ul style="list-style-type: none"> The discrepancy regarding the FTEs and provide an explanation of how these totals were calculated in order to help the departments understand why the totals differ throughout the document. 	Agreed	Completed at Face-to-face meeting
	<ul style="list-style-type: none"> The duration of the various phases of the mine life. For example, in the DAR the underground phase is two (2) years but in the information provided May 14, 2012 the underground operations are eight (8) months. The length of time for closure and post closure has also changed from 20 years to 12 years. 	Agreed	Completed at Face-to-face meeting
	3. The GNWT recommends that Fortune:		
	<ul style="list-style-type: none"> provide a forecast of how many workers and for which positions it expects to hire southern workers for each phase of the project. 	Agreed	Completed at Face-to-face meeting
	<ul style="list-style-type: none"> indicate the pick-up point(s) for southern workers and whether they will receive a supplemental travel allowance. 	Agreed	Completed at Face-to-face meeting
4. The GNWT recommends that Fortune:			
<ul style="list-style-type: none"> explain how it will mitigate competition with other mines for experienced and trained mine employees. 	The current employment market will dictate recruitment		

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Government of the Northwest Territories (GNWT)	5. The GNWT recommends that Fortune:		
	<ul style="list-style-type: none"> clarify transportation arrangements for employees from Yellowknife, including Dettah and N'dilo. (DAR Section 3.13.7 page 3-92) 	Agreed	Completed at Face-to-face meeting
	<ul style="list-style-type: none"> provide additional information about the pick-up schedule in each community and the commuting time from each community as this may be perceived as a barrier to employment. E.g. care and maintenance workers travelling from Whati will work a 10 hour shift but onsite employees appear to be working 12 hour shifts. 	Agreed	Completed at Face-to-face meeting
	<ul style="list-style-type: none"> advise whether it will consider other pick-up points in the NWT to expand its northern labour pool and increase the likelihood of achieving its Aboriginal and northern hire predictions. 	Agreed	Completed at Face-to-face meeting
	6. The GNWT recommends that Fortune:		
	<ul style="list-style-type: none"> give further consideration to a flexible rotation schedule and offer shorter shifts, where operationally feasible, and communicate this to the potential northern workforce in order to maximize opportunities for all NWT residents including NWT Aboriginal residents and women, and reduce barriers that may limit the availability of the northern workforce to participate in the labour market. 	Agreed	Completed at Face-to-face meeting
	7. The GNWT recommends that Fortune:		
	<ul style="list-style-type: none"> provide more details regarding its pre-employment plans and preparations. 	Agreed	Create onboarding plan
	<ul style="list-style-type: none"> develop an education and training strategy, including on-the-job training that is linked to current programs and initiatives within the NWT. 	Agreed	Create onboarding plan
	<ul style="list-style-type: none"> continue to work with the Department of Education, Culture and Employment and other educational organizations to coordinate training and program delivery to prepare residents for employment opportunities and sustain them in their employment. 	Agreed	Create onboarding plan
	<ul style="list-style-type: none"> provide further details regarding the company's contribution to student achievement awards and its educational assistance program 	Agreed	Develop policy for scholarships
	<ul style="list-style-type: none"> should keep relevant GNWT departments apprised of the company's efforts and activities in this regard. 	Agreed	Continue communication with relevant GNWT dept./organization
	<ul style="list-style-type: none"> develop evaluation criteria or a prior learning recognition model to assess relevant learning gained through work and life experiences to support the company's decision to remove minimum education requirements and in consideration of hiring pre-literate workers. 	Agreed	Develop operational model
	<ul style="list-style-type: none"> identify apprenticeship positions and the number of positions that will be available during the construction and operation phases of the project. 	Agreed	Develop operational model
<ul style="list-style-type: none"> clarify whether there are plans to transition apprentices from the construction to the operation phase of the project. 	Agreed	Develop operational model	
<ul style="list-style-type: none"> develop an apprenticeship policy and coordinate with the NWT Apprenticeship and Occupational Certification Program to identify the number of apprentice positions and the trades that are in demand or needed for the project. 	Agreed	Develop operational model	
<ul style="list-style-type: none"> develop an apprenticeship outreach and promotion strategy to ensure that northern residents are aware of opportunities and prepared to fill the positions. 	Agreed	Continue communication with relevant GNWT dept./organization	

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Government of the Northwest Territories (GNWT)	8. The GNWT recommends that Fortune:		
	<ul style="list-style-type: none"> develop a detailed workplace education strategy and consider hiring instructors to help employees achieve success in their educational and career development activities. 	Further discussion at hearing	Fortune needs to consider this in its financial model
	<ul style="list-style-type: none"> advise whether it will release employees from work for upgrading and skill development and whether there will be onsite support for those employees engaged in professional development. 	Further discussion at hearing	Develop operational model
	<ul style="list-style-type: none"> clarify whether the company intends to provide incentives for employees to pursue training/education on their out rotation. 	Further discussion at hearing	Develop operational model
	<ul style="list-style-type: none"> provide further details on the professional development and training opportunities for Aboriginal and northern employees who would like to pursue supervisory and management roles. 	Further discussion at hearing	Develop operational model
	<ul style="list-style-type: none"> complete the Human Resources Closure Plan and a Sustainable Development Strategy. (DAR Section 16.2.9 page 16-85) 	Further discussion at hearing	Develop operational model
	9. The GNWT recommends that Fortune:		
	<ul style="list-style-type: none"> formalize its employment predictions, training programs, and hiring policies and practices in a socio-economic agreement to demonstrate its accountability to the public. 	Decline at this time	Fortune would like to explore the possibility of signing the Socio-Economic Agreement with the Tłı̨chǫ Government. Fortune hopes these discussions can be initiated in the near future.
	<ul style="list-style-type: none"> provide further details regarding the company's hiring policies and training programs and initiatives for Aboriginal and other northern women. 	Further discussion at hearing	Develop operational model
	10. The GNWT recommends that Fortune:		
	<ul style="list-style-type: none"> continue to work with the Tłı̨chǫ Government, employees, community members and the territorial government in ongoing support of language and cultural pursuits, as feasible. 	Agreed	Continue communication with relevant GNWT dept./organization
	<ul style="list-style-type: none"> these activities be part of the company's socio-economic monitoring plan and used to inform policy, procedures, etc. 	Decline at this time	Fortune would like to explore the possibility of signing the Socio-Economic Agreement with the Tłı̨chǫ Government. Fortune hopes these discussions can be initiated in the near future.
	11. The GNWT recommends that, given the uncertainty surrounding the potential impacts of the NICO Project on NWT businesses, Fortune provide the following information in writing to the public registry prior to the Public Hearing:		
	<ul style="list-style-type: none"> How Fortune plans to engage with, and communicate potential contract opportunities for NWT-based Aboriginal and local businesses. For example, will Fortune: 	Accept	Fortune will continue communication with relevant business development organizations such as the Tłı̨chǫ Investment Corporation and local employment coordinators.
	<ul style="list-style-type: none"> o Designate a NICO employee to act as a liaison between NICO and NWT businesses? 	Accept	Bill Shepard Manager, Fortune Mineral Limited Supply Chain Management is the liaison for Fortune contractors.
<ul style="list-style-type: none"> o Conduct business opportunities seminars or workshops to make the NWT business community aware of its business opportunities forecast and its corporate procurement policy? 	Accept	Fortune has and will continue workshops and communities outreach to develop the supplier network supporting the NICO Project. Fortune has a network of over 100 northern suppliers currently engaged with this project and in partnership with the Tłı̨chǫ Investment Corporation (TIC) identifying and developing opportunities.	
<ul style="list-style-type: none"> o Make available business opportunity information related to NICO business plans to NWT businesses 	Accept	By means of supplier workshops and tendering processes Fortune will make known business opportunities.	
<ul style="list-style-type: none"> o Ensure broad communication to NWT businesses and business industry associations in the NWT about business opportunities arising from the project; 	Accept	Fortune has developed lines of communication with the TIC to identify business opportunities. Fortune and the TIC are awaiting a decision on the all weather road to continue further planning. Fortune currently has a growing network of northern suppliers we maintain in our Vendor database.	

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Government of the Northwest Territories (GNWT)	<ul style="list-style-type: none"> Identify the steps Fortune will take to help build NWT business capacity. For instance, will Fortune: 		
	<ul style="list-style-type: none"> Design and deliver clear business development strategies for local communities and communicate the scope and scale of business opportunities and project requirements in a timely and effective manner; 	Accept	Fortune is prepared to continue working with the local communities to identify and match business opportunities with local capacities and within in Fortune's purchasing policy provisions have been made for set aside contracts to enable matching opportunities to local capacities. Detailed planning will take place when clear timing is provided by the GNWT on road access to the NICO site.
	<ul style="list-style-type: none"> Identify project components, at all stages of construction, operations and closure of the project that could be targets for a business development strategy; 	Accept	Project components have been identified along with strategies. Timing on road construction from the GNWT is key to the execution plan.
	<ul style="list-style-type: none"> Identify possible joint venture opportunities for NWT businesses; 	Accept	This is an on going discussion with the Tłı̄ch̄ Investment Corporation. Both parties have identified opportunities.
	<ul style="list-style-type: none"> Match the size and scope of contracts to the capacity of NWT business where feasible; 	Accept	Provision have been make in the Fortune purchasing policy to provide the opportunity to size contract opportunities to local capacities.
	<ul style="list-style-type: none"> Describe how Fortune plans to engage NWT-based Aboriginal and local businesses, how it will communicate potential contract opportunities, and steps it will take to help build local business capacity. 	Accept	Fortune is in continued contact with local business development group, as well as our existing northern supply base to maintain Fortune's supplier data base. Fortune continues to identify business opportunities aligned with the current stage of the project. In partnership with the Tłı̄ch̄ Investment Corporation, Fortune is taking steps to build capacity within northern communities.
	<ul style="list-style-type: none"> Provide an estimate of total annual procurement from NWT-based businesses for the closure and reclamation phase of the NICO Project. 	Accept	Closure cost models have been provide in the DAR and updates are being provide during detailed engineering.
	<ul style="list-style-type: none"> Provide an estimate of total annual purchases from NWT-based Aboriginal businesses for each phase of the development. 	Accept	Information relevant to this stage of the development has been provided in the DAR and updated in Information Request GNWT response #9.
	<ul style="list-style-type: none"> Provide a table that shows the total annual project procurement, including capital equipment, for each phase of the Project. 	Accept	Information relevant to this stage of the development has been provided in the DAR and updated in Information Request GNWT response #9.
	<ul style="list-style-type: none"> Provide a copy of the NICO Project Contracting Policy, referenced in DAR section 16.2.4.2.2 which outlines Fortune's contracting policies specific to the NICO Project. 	Accept	Policy has been provide and is documented on public record.
<ul style="list-style-type: none"> Describe how Fortune will assist NWT suppliers to meet the requirements for Canadian Council Aboriginal Business membership 	Accept	Fortune is a member of the Canadian Council of Aboriginal business (CCAB). In partnership Fortune and the CCAB are identifying resources to allow northern suppliers to become involved with the CCAB. As an example CCAB is establishing a presents in Yellowknife to support the Aboriginal supply base.	

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Government of the Northwest Territories (GNWT)	<p>12. The GNWT recommends:</p> <ul style="list-style-type: none"> The GNWT recommends Fortune's measures to mitigate the negative impacts of closure and to assist transition to post-closure for its employees be formalized in the Closure and Reclamation plan that will be developed in cooperation with communities, the GNWT and regulators. 	Further discussion at hearing	Fortune needs to develop the closure costing before this can be given consideration.
	<p>13. The GNWT recommends that:</p> <ul style="list-style-type: none"> Socio-economic effects monitoring and reporting be incorporated into the NICO Project Socio-economic Monitoring Plan as described in the DAR (section 16.2.13.2) and that this monitoring and reporting be further formalized in a socio-economic agreement. This follow-up program should be a condition of approval of the project. 	Decline at this time	Fortune would like to explore the possibility of signing the Socio-Economic Agreement with the Tłı̄chǫ Government. Fortune hopes these discussions can be initiated in the near future.
	<ul style="list-style-type: none"> Fortune publicly report its results each year and to distribute a copy of the report to both the GNWT and to affected communities. 	Agreed	Fortune will report the results of relevant aspects of a socio-economic monitoring plan on an annual basis. The exact format for this report has yet to be decided.
	<p>14. (AIR) Commitments made during the environmental assessment should be reviewed by parties and refined. The commitments should be categorized, prioritized, given a completion date (where possible), identify responsible parties as well as identify, where appropriate, the tool(s) that will be used to enforce, monitor, follow-up and report on the completion the commitment. A revised draft of the commitments should be provided for review prior to the Public Hearings to allow parties to review and comment on those commitments.</p>	Updated commitments table has been provided with this submission.	
	<p>15. (CARIBOU) Commitments and mitigations made during the environmental assessment should be written in a consolidated table and submitted prior to the public hearing. The final commitments should be worded so that the all parties and regulators can ensure the attainment of commitments is tracked and, if necessary, enforced.</p>	Updated commitments table has been provided with this submission.	
Fisheries and Oceans Canada (DFO)	<p>1. DFO recommends that Fortune follow DFO's Northwest Territories Clear-Span Bridges Operational Statement at the Marian River crossing. All mitigation measures contained therein should be incorporated into the construction of the Marian River crossing to avoid any negative impacts to fish habitat and to maintain fish passage.</p>	Agreed	
	<p>2. DFO recommends that Fortune develop a comprehensive Sediment and Erosion control plan for the construction, operation and decommissions of all components of the project located near water, including the bridge, to ensure that potential impacts on the aquatic environment are avoided.</p>	Updated commitments table has been provided with this submission. Refer to Table 1-1: 7.1 in Commitments Table.	
	<p>3. DFO recommends the development of a mitigation and monitoring plan for the construction, operation and decommissioning of the proposed water intake and diffuser to ensure adverse physical impacts to fish and fish habitat are avoided. This should include fish salvage procedures, monitoring details for total suspended solids and contingency planning in the event of failure of these structures.</p>	Fortune will develop a mitigation and monitoring plan for the construction, operation, and decommissioning of the proposed water intake and diffuser.	Development of the plan prior to construction of the water intake and diffuser.

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Yellowknives Dene First Nation (YKDFN)	3.1 Woodland Caribou Impact Predictions a) YKDFN recommend that the Board require the company to collaboratively develop an assessment evaluating the impacts that this project will have on Woodland Caribou.	Impacts to woodland caribou were addressed in the DAR and Undertaking #4. The results of the WRRB report and Technical Report from the GNWT confirm the results presented in Undertaking #4. Fortune agrees to host a workshop on woodland caribou.	
	b) YKDFN respect the Board's ruling on the delay to allow the Tłjchq Traditional Knowledge report currently in preparation to be entered prior to the hearing, but we ask the Board to:		
	<ul style="list-style-type: none"> keep the registry open to allow the report to be submitted after the hearing 	In its June 8th letter to the board, Fortune reaffirmed its commitment to integrate, into monitoring and management plans where applicable, information from the WRRB Report as well as further information submitted as a result of completion of Tłjchq Traditional Knowledge report. The overall timeline for completion of the Board's process and regulatory permitting of the Project still allows ample time for consideration of the Report and Tłjchq TK study results.	
	<ul style="list-style-type: none"> allow Parties be allowed to submit comments to the Board 	See response to YKDFN recommendation 3.1.b), first bullet	
	<ul style="list-style-type: none"> ensure that the evidence submitted in the Tłjchq study is reviewed prior to the decision being issued. 	See response to YKDFN recommendation 3.1.b), first bullet	
	3.2 Using Woodland Caribou Research as a Surrogate for Barren Ground Caribou Recommendation: Prior to the commencement of the Wek'eezhi Land and Water Board permitting:		
	<ul style="list-style-type: none"> the proponent should identify all of the areas that Woodland Caribou or Reindeer research was used as an analog or substitute for Barren Ground Caribou 	Ecologically relevant information for both woodland and barren-ground caribou was considered and applied appropriately in DAR, information requests, and undertakings. Predictions were based on the most ecologically conservative estimates from the literature.	Prepare list of areas where woodland caribou information used in the DAR.
	<ul style="list-style-type: none"> for each of these instances, the proponent should review the available behaviour research, including traditional knowledge, and prepare a discussion that considers the uncertainty and impacts if the reliance on scientific of a different kind of caribou is misplaced. 	See response to YKDFN recommendation 3.2, first bullet	
	<ul style="list-style-type: none"> the proponent should be required to undertake behavioural research of both woodland Caribou and Barren 	Behavioural monitoring of woodland caribou is very difficult in a boreal environment, due to poor visibility in the forest, low density and solitary nature of woodland caribou, as indicated in the WRRB boreal caribou report. Fortune will have a workshop to refine management plans (e.g. WEMP) for caribou (see commitment to Tłjchq 19) and the Updated Commitments Table.	
	a) This information would be extremely useful for helping the Parties improve the design of the WEMP, ensuring that conclusions drawn are being thoroughly examined.	No response required	
3.3 Caribou Assessment Recommendation: YKDFN would like the Review Board to make a measure that requires the proponent:			
a) Update and submit a cumulative effects analysis that considers not just all the reasonably foreseeable projects across the annual range of the Bathurst Caribou but also the relative difference of effects on different seasonal ranges – for instance, how do the impacts on the post calving compare and contribute to the cumulative effects for the herd.	Fortune has analyzed cumulative effects to caribou different scales, reasonably foreseeable developments, and methods. All the analyses produced similar results, which indicate that the Project will have no significant effect on caribou and the people that hunt caribou. Please see the DAR, Informal Undertaking dated April 13, 2012, response to First Round Information Request YKDFN 2.8, and responses to Second Round Information Requests YKDFN 2.1, 2.2, 2.3.		

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Yellowknives Dene First Nation (YKDFN)	b) This analysis should consider the impacts as a result of the creation of barriers to movement and prepare a comprehensive analysis of Barren Ground Caribou responses to roads and road activity.	As indicated in the response to Second Round Information Request YKDFN 2.3, satellite collar data suggest that Bathurst caribou encounter rate and residency time with the Tłjchq Road route and NPAR have been very low during the past 15 years.		
	Once these are complete, only then can the decision on significant impacts be considered. The YKDFN are already under considerable strain and have made great sacrifices – if development results in an extension to that hardship, then a significant impact will be occurring. Contrary to the assertions of developers, once the mines and their infrastructure are in place there is little real mitigation possible.	No response required		
	3.4 Traditional Knowledge in the Environmental Assessment Recommendation: YKDFN recommend that:			
	<ul style="list-style-type: none"> the Board should keep the registry open until after the Tłjchq TK Study is completed 	In its June 8th letter to the board, Fortune reaffirmed its commitment to integrate, into monitoring and management plans where applicable, information from the WRRB Report as well as further information submitted as a result of completion of Tłjchq Traditional Knowledge report. The overall timeline for completion of the Board's process and regulatory permitting of the Project still allows ample time for consideration of the Report and Tłjchq TK study results.		
	<ul style="list-style-type: none"> develop a concordance table that examines how and where the developer used Traditional Knowledge, what the information that they had was, and what the information from the Tłjchq TK Study is 	See response to YKDFN recommendation 3.4, first bullet		
	<ul style="list-style-type: none"> provide parties the opportunity to review and comment on these matters 	See response to YKDFN recommendation 3.4, first bullet		
	3.5 Wildlife Effects Management Plan Recommendation: YKDFN recommend that the Board			
	a) Make the development and full implementation of a Wildlife Effects Management Plan a requirement for any future permits or authorizations	KLOI Caribou (Section 8) and SON Wildlife (Section 15) include Fortune's commitment to developing a WEMP as stated in the Updated Commitments Table		
	b) Require the proponent to collaborate with parties to develop a consensus approval to the methods employed. This ensures that the proponent cannot simply refuse to meet its commitments and provides the Parties with a tool to use if best practices are not applied. This approach could also be used to develop thresholds and triggers for adaptive management plans	Fortune will adhere to its commitments in the Wildlife Effects Monitoring Program		
	c) Require the proponent to include (but not be limited to) research to evaluate and monitor: trends associated with the hunting effort on the NPAR and associated all weather road, applying the best practices for researching behavioural response of Barren-Ground Caribou, and evaluating caribou interactions with the NPAR access and all weather road.	Fortune has committed to assisting with monitoring of the NPAR (see response to First Round Information Request YKDFN 1.2). Research on the behaviour of barren-ground caribou in a boreal environment would be very difficult due the poor visibility of animals in the forest (see response to Second Round Information Request YKDFN 2.3, and WRRB Boreal Caribou report). Attempting to monitor caribou behaviour in the forest using ground-based methods would likely create greater stress for caribou at this food-limited time of year, and provide inaccurate results.		
YKDFN are not asking the Board to design the plan, rather to develop a system that provides for meaningful collaborative development where there is a regulatory tool for parties to utilize to require best practices aimed at effective monitoring and research rather than simply cheapest which may or may not properly evaluate the impacts.	No response required			

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Yellowknives Dene First Nation (YKDFN)	<p>3.6 Incinerator Management Plan – Persistent Organic Pollutants Recommendation: YKDFN recommend that the Board make a measure that requires</p>		
	<p>a) the company to conform to the CCME guidelines</p>	<p>Updated commitments table has been provided with this submission. Refer to Table 1-2: YKDFN_3.1 in Commitments Table</p>	
	<p>b) implement a monitoring regime that includes testing to confirm that the company is meeting the guidelines. This monitoring regime should include regular testing as directed by Environment Canada.</p>	<p>As stated in the response to the Second Round IR from the YKDFN (YKDFN 1.1):</p> <p>Fortune has committed to purchasing an incinerator that is capable of meeting the Canadian emissions standards for dioxins and furans emissions. Acquiring the appropriate equipment is part one. A second and equally important part of the issue is the operation of the “compliant” incinerator. Care is required to operate any incinerator in such a manner that it will meet the emissions criteria. Waste loading practices, burn-times, control of residence time, temperature control, waste segregation and other factors are all considerations in meeting the standard.</p> <p>The operational management of the incinerator will be directed by the Incineration Management Plan (IMP) that Fortune has committed to producing in due course. It will be developed consistent with the Environment Canada Technical Guidance Document on Batch Incineration and in cooperation with representatives from Environment and Natural Resources and Environment Canada. Those representatives are currently Ms. Aileen Stevens and Mr. Dave Fox, respectively.</p> <p>Testing the incinerator will be carried out under typical load conditions, including during the incineration of sewage sludge if it is ultimately decided that disposal of the sludge will be by incineration. It is expected that testing under these conditions would represent a worst-case scenario.</p> <p>In the event that the monitoring shows non-compliance with the standard, the pending IMP will direct an appropriate response. It may include different waste segregation practices, different operating parameters, or any other of number of variables that contribute to the emissions profile of the incinerator. It is also important to note that incinerator emissions testing is very expensive and every effort will be made to ensure that the equipment and waste management practices result in compliant emissions to avoid unnecessary emissions testing. The frequency of testing has yet to be determined, but it would be reasonable to anticipate that there may be a few years between compliant tests. Frequency of testing will be one of the parameters that will be addressed in the IMP.</p>	

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Yellowknives Dene First Nation (YKDFN)	c) develop a local baseline for persistent pollutants	Also as stated in the response to the Second Round IR from the YKDFN (YKDFN 1.1): Specific monitoring of environmental effects associated with incineration (apart from periodic stack testing) is not currently proposed; however, various options for doing so may be considered if the need to do so arises.	
	This will allow the parties to have a regulatory mechanism to utilize. Absent this measure, the company is free to pollute in any manner they wish.	No response required	
	3.7 Failure to provide adequate closure information Recommendation: The Board must require the proponent to collaboratively develop and submit an updated closure plan which adequately meets the guidance of the Terms of Reference and the policy frameworks in the NWT. This must be done prior to the issuances of any decisions or authorization.	Fortune is currently compiling closure costs and will be working with AANDC, Tłı̄chq Government, WLWB and others on a more detailed closure plan in preparation for the water licensing process.	
	3.8 Closure – Security Bonding Recommendation: The review Board should provide guidance to the Land and Water Board that this project will likely result in significant effects unless a security is posted that contains not just sufficient monies for a ‘worst case situation’ (perpetual water treatment) as well as a significant contingency for unforeseen events.	See response to YKDFN recommendation 3.7	
Aboriginal Affairs and Northern Development Canada (AANDC)	1. Site Specific Water Quality Objectives and Effluent Quality Criteria AANDC recommends that the Report of EA should include narrative statements that describe the level of protection to be afforded to the aquatic receiving environment downstream of the Initial Dilution Zone. These statements could include:	Fortune agrees with the recommendation made by EC that states "EC does not agree with the proposed SSWQOs, and recommends that these not be used as a basis for assessing receiving water impacts nor for developing effluent quality criteria. EC is of the opinion that deferring further discussion of the SSWQOs to the regulatory stage would not compromise the assessment of discharge-related potential impacts provided the proposed treatment system and mitigation commitments go forward."	Initiation of regulatory stage of permitting
	<ul style="list-style-type: none"> Water quality changes due to mining activities will not significantly affect benthic macro-invertebrate and plankton abundance, taxonomic richness or diversity. 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Water quality changes due to mining activities will not significantly alter fish abundance or diversity or fish consumption at current levels. 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Water quality changes due to mining activities will not negatively affect areas utilized as traditional drinking water sources. 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Water quality changes due to mining activities will not significantly affect mammals or wildfowl using the area as a drinking water, food source or habitat, or the current ability for people to harvest these animals. 	See response in AANDC 1	See action required response to AANDC 1
<ul style="list-style-type: none"> Water quality in the Marian River remains unchanged. 	See response in AANDC 1	See action required response to AANDC 1	

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Aboriginal Affairs and Northern Development Canada (AANDC)	2. Site-specific Water Quality Objectives AANDC recommends that final SSWQOs are based upon the use of the downstream aquatic environment, now and into the future. This could be achieved through consideration of:	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Natural background concentrations. 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Existing human use of the water (such as for drinking or fishing). 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Assimilation/mixing capacity. 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Long-term Chronic Toxicity exposure in the receiving environment, 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Single and joint-action toxicity of analytes being released, 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Degradation, transport and sequestration mechanisms. 	See response in AANDC 1	See action required response to AANDC 1
	<ul style="list-style-type: none"> Chemical characteristics that modify toxicity (such as hardness, pH, organic matter, etc.). Protecting ecosystem diversity which will provide protection for critical species such as ecological “keystone” species. 	See response in AANDC 1	See action required response to AANDC 1
	3. Site-Specific Water Quality Objectives AANDC recommends that Site Specific Water Quality Objectives derived for the Fortune NICO Project should, as a first step, consider the practically achievable concentrations demonstrated for the RO effluent treatment system, existing background concentrations as well as available CCME Guidelines for the Protection of Freshwater Aquatic Life. Following this, derivation of SSWQOs be derived from a review of available toxicity literature and/or developing new toxicological information, conducting of ecological risk assessments, etc. could be considered.	See response in AANDC 1	See action required response to AANDC 1
	4. Site-specific Water Quality Objectives AANDC recommends that SSWQOs be achieved at the outlet of Peanut Lake.	See response in AANDC 1	See action required response to AANDC 1
	5. Aquatic Effects Monitoring Program (AEMP) and Adaptive Management AANDC recommends that Fortune Minerals Limited be required to follow the “Guidelines for Designing and Implementing Aquatic Effects Monitoring Programs for Development Projects in the Northwest Territories, June 2009” in the development of its Aquatic Effects Monitoring Program, action levels, and related management response framework for the NICO Project.	Fortune will consider these guidelines in the development of the AEMP and applicable adaptive management plans.	Fortune will resume meeting with the AEMP working group.
	6. Closure and Reclamation AANDC recommends that active flooding of the open pit be the preferred closure scenario for the Fortune NICO Project, unless additional information collected during the operations phase of the project determines that the passive filling scenario provides significant advantages, beyond financial benefit, from a closure perspective.	Fortune will collect additional information during operations to examine the feasibility of the passive filling scenario.	Fortune will develop a plan to gather additional information on the passive filling option.
	7. Closure and Reclamation AANDC recommends that a key element of the closure planning process, during operations, should be to identify and develop methods to eliminate the need or passive or active long-term treatment of water leaving the site post-closure.	It is to Fortune's advantage to develop methods to eliminate the need for passive or active long-term water treatment at closure. Fortune will be working towards this goal during operations.	Fortune will examine closure water treatment options during operations.
Transport Canada	1. Consultation: Transport Canada recommends that Fortune Minerals Inc. consult with members of the public and aboriginal people who may have concerns related to works requiring <i>Navigable Waters Protection Act</i> approval. Transport Canada has requested that details of such consultation be forwarded to our Navigable Waters Protection Program for consideration along with applications for approval under the <i>Navigable Waters Protection Act</i> .	Fortune will provide consultation records. Future consultation will also likely occur.	Fortune to supply consultation records to Transport Canada
	2. All Works In and Around Navigable Waters: In order to fully assess impacts to navigation and navigational safety posed by the NICO Project, and to prescribe appropriate mitigation measures, Transport Canada recommends that Fortune Minerals Inc. submit applications for approval of works in, on, over, under, through or across any navigable waterway under the <i>Navigable Waters Protection Act</i> once design plans have been finalized. Fortune is aware of this requirement and has committed to providing Transport Canada's Navigable Waters Protection Program with information as it becomes available.	Agreed	

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Transport Canada	3. Water Intake and Diffuser Transport Canada recommends that Fortune Minerals Inc. assess final design plans for the proposed water intake in Lou Lake and the proposed diffuser in Peanut Lake against Transport Canada Navigable Waters Protection Program's minor works criteria for water intakes (Appendix I). Risk to navigational safety is low for works meeting these criteria. If the intake and/or diffuser meet the minor works criteria, Fortune Minerals Inc. should forward this information to Transport Canada. If the minor works criteria are not met, applications for approval under the <i>Navigable Waters Protection Act</i> should be submitted to Transport Canada's Navigable Waters Protection Program and appropriate safety mitigation measures will be determined.	Agreed	
	4. Temporary Works: Transport Canada recommends that Fortune Minerals Inc. assess final design plans for any ancillary temporary works required for construction of the proposed bridge, water intake and diffuser against Transport Canada Navigable Waters Protection Program's minor works criteria for temporary works (Appendix II). Risk to navigational safety is low for works meeting these criteria. If temporary works meet the minor works criteria, Fortune Minerals Inc. should forward this information to Transport Canada. If the minor works criteria are not met, applications for approval under the <i>Navigable Waters Protection Act</i> should be submitted to Transport Canada's Navigable Waters Protection Program and appropriate safety mitigation measures will be determined.	Agreed	
Tijchq Government	RECOMMENDATIONS ON CO-DISPOSAL AND MINE ROCK		
	1) There remain major substantive gaps in the developer's work, particularly on seepage. The Review Board should require new work from the developer on the soundness of the seepage quality predictions.	Fortune will continue to develop the CDF management/monitoring plan in collaboration with various agencies and the Tijchq Government.	Development of the CDF management/monitoring plan.
	2) Large gaps remain on the costs associated with closure, and the practicality of the developer's proposals. The developer should be required to provide (as was asked for) the future costs associated with the full suite of closure options that are mentioned.	See response to YKDFN recommendation 3.7	
	3) Strong management guidelines should be required of the developer for the co-disposal technology proposed with independent oversight by Inspectors trained to recognize likely issues. These management guidelines should clearly articulate how the developer will manage key performance challenges.	Fortune will continue to develop the CDF management/monitoring plan in collaboration with various agencies and the Tijchq Government.	
	4) The developer should be required to develop a peer reviewed management strategy for thiosalts.	Fortune will consider the management of thiosalts in the CDF management plan.	
	5) Future iterations of the waste rock management plan should describe waste rock monitoring protocols that will be followed during operations.	The waste rock management plan is appropriate for this phase of the project but should be reviewed and revised when detail design/construction activities take place as more information becomes available.	Re-visit waste rock management plan when appropriate.
	6) Fortune should provide a simple table that identifies volume of waste rock produced each year by the main waste types with no further classification of rock.	Refer to Appendix 3.1 ; Table 3.1.5.3 of the Developer's Assessment Report	
	7) The Review Board should require new work on the classifications of rock, based on any emergent information by AANDC and/or Natural Resources Canada, to determine if the developer's sulphur criterion level is defensible—requiring the developer to prove that —clean waste is just that.	The classification is appropriate and will be reviewed as part of operational monitoring in consultation with appropriate regulations and guidelines concerning ARD/ML management.	Fortune will consider ARD/ML management in the CDF management/monitoring plan.
	RECOMMENDATIONS ON MINE ECONOMICS		
8) The developer should be asked once again to provide detailed costing for the changed closure plans, including for all treatment options that have been proposed and to clearly identify the difference in costs if the passive treatment option fails.	Agreed - response will be provided for the Public Hearing		
9) The developer should demonstrate the effect of failure of the passive treatment option on the net present value, i.e., to compute the present value of the costs incurred in the event of failure of the option, in order to illustrate that this mine is feasible if the water has to be treated forever.	Agreed - response will be provided for the Public Hearing		

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Tijchq Government	RECOMMENDATIONS ON WATER QUALITY		
	10) Specific action should be taken, as noted in the SENES Technical Report on SSWQOs, on aluminum, arsenic, copper and selenium. Specifically, these are:		
	a. Fortune should discuss whether the aluminum SSWQO is appropriate for the conditions expected throughout the year.	Fortune agrees with the recommendation made by EC that states "EC does not agree with the proposed SSWQOs, and recommends that these not be used as a basis for assessing receiving water impacts nor for developing effluent quality criteria. EC is of the opinion that deferring further discussion of the SSWQOs to the regulatory stage would not compromise the assessment of discharge-related potential impacts provided the proposed treatment system and mitigation commitments go forward."	Initiation of regulatory stage of permitting.
	b. Fortune should discuss whether an EC50 is an appropriate basis for setting the SSWQO.	See response in Tijchq Government 10. a)	See action required response to Tijchq Government 10. a)
	c. Either additional justification should be provided for the appropriateness of the derived copper SSWQO or the parameters used in the BLM should better reflect the conditions in the water bodies.	See response in Tijchq Government 10. a)	See action required response to Tijchq Government 10. a)
	d. The assumptions used in the derivation of the selenium SSWQO should be re-examined.	See response in Tijchq Government 10. a)	See action required response to Tijchq Government 10. a)
	e. The developer should revisit and revise predictions made about the level of risk based on revised exposure ratios for these arsenic, selenium and vanadium.	See response in Tijchq Government 10. a)	See action required response to Tijchq Government 10. a)
	11) The developer should be required to establish SSWQOs that are as protective as feasible, given the nature of the water treatment that is being proposed. The Review Board should require the developer to revisit its currently stated SSWQO goals in this light, especially considering the high public concerns about water contamination.	See response in Tijchq Government 10. a)	See action required response to Tijchq Government 10. a)
12) The developer should clarify if the SSWQOs will apply in the receiving environment or at the end of the pipe, as the technical information to date has been confusing.	See response in Tijchq Government 10. a)	See action required response to Tijchq Government 10. a)	

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Tłjchq Government	RECOMMENDATIONS ON SOCIO-ECONOMICS		
	13) The Review Board should require the developer to report on progress made toward all commitments and undertakings for further work made at the Technical Sessions on socio-economic matters, far enough in advance of the Public Hearing to facilitate meaningful review and preparation of response materials by the Parties.	No Further Discussion Required	A follow-up meeting from the Technical Hearings regarding socio-economic matters was held between Fortune and the GNWT's Finance Group on May 17, 2012. A subsequent meeting was held on June 20, 2012 between Fortune and the GNWT Health and Social Services Group. The meeting records of the May 17th and June 20th meetings have been posted to the Public Registry. Both parties consider these socio-economic issues dealt with satisfactorily. Specific and/or detailed commitments regarding employment, training, and business opportunities cannot realistically be made. Fortune cannot conduct further development of a potential workforce without the confirmation of an all weather road. At this point in time Fortune cannot predict or plan with any certainty what the available workforce or entrepreneurial capacity will exist if it has no idea when or if construction can begin. As such, Fortune cannot invest in the communities until it has certainty with regards to road construction. Continued delays and/or lack of willingness to act only delays Fortune's investment into the Tłjchq People and their communities.
	14) The developer should be asked to clarify its current commitments/goals/targets and likely actual percentages for northern Aboriginal and Tłjchq citizen employment and business procurement. The developer should be required to clearly present on these numbers at the public hearings, as there have been many inflated numbers spoken of in Tłjchq communities during recent developer engagement activities.	No Further Discussion Required	See action required response to Tłjchq Government 13
	15) The developer should provide the results of its previously committed to labour force/workforce evaluation study (how does the current excess labour supply, skill sets, and demographics —fit with the type of jobs on offer should the mine proceed) in Tłjchq communities, given that useable data on this area has not yet surfaced in the environmental assessment.	No Further Discussion Required	See action required response to Tłjchq Government 13
	16) As previously committed to at the Technical Sessions, the developer should actually show evidence it has reconsidered the shift schedule, and show evidence that it has engaged in dialogue with the Tłjchq Government and affected communities about this issue.	Fortune can provide evidence of dialogue with communities on shift schedule at the public hearing.	Discussion with Tłjchq Government on shift schedule
	17) The developer should provide evidence of all work conducted to date with Community Development Officers to identify and manage recruitment, retention and advancement issues.	Decline	See action required response to Tłjchq Government 13
	18) The developer should conduct a credible scenario analysis of likely in-migration and out-migration effects of the proposed development on Tłjchq communities.	Agreed	Fortune and Tłjchq Government to discuss scope of the study the timing.

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Tłjchq Government	RECOMMENDATIONS ON CARIBOU		
	19) The developer should revisit caribou assessment endpoints and refine management plans using Tłjchq based values once the Tłjchq Traditional Knowledge study is complete. This exercise should be completed in a developer funded workshop that includes the scientists from Golder, the GNWT and Indigenous scientists (i.e., traditional knowledge holders) from the Tłjchq region.	Fortune has committed to having a workshop to refine monitoring and management plans for caribou.	Discussion with Tłjchq Government on logistics of workshop
	20) The developer, responsible government authorities, and Aboriginal authorities should commit to discussions on an independent oversight body for environmental monitoring, which provide independent oversight and engages both scientific and Indigenous knowledge in tracking the changes due to development.	Fortune is of the view that there are sufficient oversight monitoring processes and mechanisms in place through existing regulatory systems and does not see the need for creation of project specific oversight mechanisms that operate outside the regulatory framework.	
	21) The developer should be required to review measures or data on noise and the impacts of noise on caribou, and identify through results of the Tłjchq Traditional knowledge study whether there has been a return of caribou to the Colomac or Rayrock mine areas after mining.	Accept	Fortune will review the Tłjchq TK study to determine if this information is available.
	22) The developer should review the estimates of impact on boreal caribou, and seek measures to minimize the total disturbance on habitat in light of the Boreal Caribou Habitat and Habitat Use in Wek'èezhii report issued by the WLWB. Given that total disturbance is already higher than the 37% limit suggested in the National Recovery Strategy for the Woodland Caribou, any new or further disturbance is of significant concern.	Fortune has already designed the NICO Project to have smallest physical footprint possible which will minimize impacts during operations and make closure efforts more achievable	
	23) The developer should respect and commit to disturbance thresholds that are designed after the Tłjchq Land Use Plan is issued.	Further discussion at Public Hearing	Fortune will discuss "disturbance thresholds" with the Tłjchq Government once the Land Use Plan has been finalized.
	RECOMMENDATIONS ON CLOSURE		
	24) The developer should commit to actively refilling the pit within ten years of closure, in order to provide early proof of their passive treatment proposal.	Fortune agrees with the recommendation made by AANDC that "AANDC recommends that active flooding of the open pit be the preferred closure scenario for the Fortune NICO Project, unless additional information collected during the operations phase of the project determines that the passive filling scenario provides significant advantages, beyond financial benefit, from a closure perspective."	Fortune will develop a plan to gather additional information on the passive filling option.
	25) The developer should commit to using reverse osmosis until the wetlands technology has been proven. The proof of concept should be subject to independent peer review on whether the system is operating to reduce metal loads from seepage to defined and acceptable levels.	Fortune will utilize the most appropriate treatment system (if required) for the water quality at closure.	
	26) The developer has not shown just how big the wetlands might need to be in order to manage maximum flows and cold weather performance. Given space constraints, the developer should model the maximum space required for the wetlands.	Agreed - response will be provided for the Public Hearing	
	27) The developer should incorporate aerobic cells into closure plans as it evolves.	Agreed - response will be provided for the Public Hearing	
	28) The developers should identify mitigation measure options for discussion and use in keeping animals (including birds) away from the wetlands.	Adaptive management will be used to determine if animal (including birds) deterrents are warranted.	
	29) The developer should commit to use a geo-membrane cover on the co-disposal pile, and to replace it at agreed upon intervals.	Further discussion at Public Hearing	
	30) The developer should clearly state the thickness of the till layer that will be used as a cover, and then explain if there is a need for a deeper till layer.	Agreed - response will be provided for the Public Hearing	
31) The developer should discuss what management procedures will be followed if thickener performance issues emerge. The developer should also discuss what could cause thickener problems, the implications of these problems, and their risk management strategies.	Agreed - response will be provided for the Public Hearing		

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Tl'jchq Government	RECOMMENDATION ON HUMAN HEALTH		
	32) The Tl'jchq Government requests written discussion of this human health issue, and whether a more conservative approach is warranted, and whether there is indeed concern for human health indicated. The Tl'jchq Government takes this issue very seriously, given that country foods are fundamental to diet, culture, and way of life. However, concern should not be raised in conditions where it is not warranted, so the Tl'jchq Government simply requests a plain language description and response to this issue.	Fortune can provide a plain language description on this issue.	
Natural Resources Canada (NRCAN)	1. NRCAN recommends that the Proponent consider, during final detailed design, the potential localized uranium anomalies near Borrow Source 1. NRCAN is willing to working collaboration with the Proponent.	Fortune will consider this anomaly near Borrow Source 1	
	2. NRCAN recommends that the Proponent provide		
	a) Explanation in which projects, where and how the runoff coefficients and infiltration coefficients for CDF, perimeter dyke and till cover shown in Table 3.III.3-4 were determined	Fortune would like to meet with NRCAN staff to discuss these specific issues. Results of the meeting will be posted on the public registry prior to the closing of the registry.	
	b) Clarification how recharge rates of 10 mm/y in lowlands and 30 mm/y in highlands were estimated;	See response to NRCAN recommendation 2.a).	
	c) Explanation how the specific yield values in Table 11.I.4-3 were determined; and	See response to NRCAN recommendation 2.a).	
	d) Clarification what the right mean precipitation value is for the NICO site.	See response to NRCAN recommendation 2.a).	
	3. NRCAN recommends that the Proponent provide:		
	a) Explanation why the piezometric map was produced using the topography as an indicator of mean groundwater depth, while the correlation between topography and groundwater levels is very low;	See response to NRCAN recommendation 2.a).	
	b) Clarification how groundwater levels were estimated in lowlands, beyond streams;	See response to NRCAN recommendation 2.a).	
	c) Explanation which method of interpolation was used to create the piezometric map; and	See response to NRCAN recommendation 2.a).	
	d) Clarification if groundwater levels were measured during packer tests, and if vertical hydraulic gradients were estimated.	See response to NRCAN recommendation 2.a).	
	4. NRCAN recommends that the Proponent provide:		
	a) A few (or at least one) cross-sections showing borehole logs with their depth, depth to bedrock and stratigraphy, as well as associated piezometric levels (at different depths if available) to better understand the hydrogeological context;	See response to NRCAN recommendation 2.a).	
	b) Clarifications how hydraulic conductivities (K) of the 1st, 5th, and 6th layers of the conceptual model (show in Figure 11.1-9) were selected;	See response to NRCAN recommendation 2.a).	
	c) Explanation if the K values were measured before or determined a posteriori during numerical modelling;	See response to NRCAN recommendation 2.a).	
	d) Clarification if different combinations of K and recharge values were tried in groundwater flow model runs;	See response to NRCAN recommendation 2.a).	
	e) Explanation if the high value for layer 1 (10 ⁻⁶ m/s) was selected to be on the conservative side for infiltration;	See response to NRCAN recommendation 2.a).	
f) Clarification if the modelled discharge (outflows) in different areas were compared in measured low flow values, and how the model was calibrated;	See response to NRCAN recommendation 2.a).		
g) Explanation why not at least one pumping test was conducted, if a pumping test is planned, and if it is planned, when it will be conducted;	See response to NRCAN recommendation 2.a).		
h) Clarification is the reason for this underestimated hydraulic heads could be a locally increased recharge; and	See response to NRCAN recommendation 2.a).		
i) Justification to neglect runoff in this work, since the open pit floor will soon be situated at a lower elevation than a large part of the watershed.	See response to NRCAN recommendation 2.a).		
5. NRCAN recommends that the Proponent provide:			
a) Information on the expected K value of the thickened tailings; and	See response to NRCAN recommendation 2.a).		
b) Information on the expected groundwater flow through the CDF, and from the CDF into the underlying material	See response to NRCAN recommendation 2.a).		

Source	Recommendation	Response (Indicate Either: Accept or Further Discussion at Hearing)	Action Required
Natural Resources Canada (NRCAN)	6. NRCAN recommends the following in order to identify sensitive areas along the road corridor and to support final route selection and road design to ensure environmental effects are minimized:		
	a) Conduct detailed terrain analysis supported by geotechnical investigations to characterize terrain sensitivity along the proposed route and to identify areas of potential instability. The product associated with this analysis will be large scale route alignment sheets that include this detailed information;	Fortune will complete this study once the final route for the road has been agreed upon with the Tłı̨ch̨ Government.	
	b) Conduct thermal analysis and determined potential ground settlement for representative terrain types to support detailed road design including determination of the embankment height and other mitigation measures (such as drainage control). The analysis should consider changes in snow cover and drainage that may influence the ground thermal regime; and	Fortune will complete this study once the final route for the road has been agreed upon with the Tłı̨ch̨ Government.	
	c) Include in the assessment of environmental impacts, consideration of longer term effects associated with vegetation removal and changes in permafrost and drainage conditions along the road corridor.	See response to NRCAN recommendation 2.a).	
	7. NRCAN recommends the following with respect to environmental monitoring and management plans:		
	a) Environmental monitoring and management plans include installation of instrumentation in addition to visual inspections to monitor changes to the ground thermal regime and ground movements especially in sensitive areas; and	See response to NRCAN recommendation 2.a).	
	b) Monitoring and mitigation/management plans be developed that define the criteria for the need for mitigation and selection of the appropriate mitigation technique.	Fortune has already committed to the development of the required management plans.	
	8. Recognizing the design of the CDF is at a preliminary design level, NRCAN recommends the following for detailed and final design of the CDF:		
	a) The Proponent conduct further geotechnical investigations within the footprint of the CDF to improve the characterization of foundation materials and to support the detailed design;	Detailed design to be completed at the start of construction.	
	b) The Proponent refine the seepage and stability analysis for the CDF incorporating the new information from detailed geotechnical investigations. This will also include updated creep analysis and consideration of effects related to the possible presence of frozen and unfrozen layers within the pile such as porewater expulsion and elevated pore pressures; and	Detailed design to be completed at the start of construction.	
	c) The Proponent follow through on commitments to develop an effective CDF monitoring and management plan which includes installation of instrumentation (such as piezometers, slope inclinometers, settlement plates, thermistors). Plans should also include a definition of triggers (or critical values) that determine the need for implementation of mitigation and the criteria for selection of mitigation techniques.	This cannot be initiated until the start of construction.	
	9. NRCAN recommends the Proponent provide information about the open pit slope stability analysis.	See response to NRCAN recommendation 2.a).	
	10. For the CDF slope stability modelling, NRCAN recommends that the Proponent clarify how the 22° friction angle was derived for the glacio-lacustrine unit.	See response to NRCAN recommendation 2.a).	
	11. NRCAN recommends that the Proponent provide further information to justify the use of a 22° friction angle for the glacio-lacustrine material and the use of circular slip surface in a cross-section in which a weak foundation layer exists.	See response to NRCAN recommendation 2.a).	
	12. NRCAN recommends that, if Figure 13.2-4a and Figure 13.2.2 (DAR: 13 SON Terrain and Soils, Section 13.2) are to be used in the future for regulatory or other applications, that the following inconsistencies be corrected:		
a) Figure 13.2.4a and Figure 13.2.2 should use the same terrain units	See response to NRCAN recommendation 2.a).		
b) Figure 3.2-1 should make use of other sources of data to complete "unclassified" regions; and	See response to NRCAN recommendation 2.a).		
c) glacio-lacustrine deposits/soils and till exposed on hillsides and elsewhere should appear on terrain maps.	See response to NRCAN recommendation 2.a).		

AANDC = Aboriginal Affairs and Northern Development Canada; AEMP = Aquatic Effects Monitoring Program; CDF = Co-Disposal Facility; DAR = Developer's Assessment Report; EC = Environment Canada; GNWT = Government of the Northwest Territories; SSWQO = Site-specific Water Quality Objectives; TIC = Tłı̨ch̨ Investment Corporation; WEMP = Wildlife Effects Monitoring Program; YKDFN = Yellowknives Dene First Nation