



FORTUNE MINERALS LIMITED

140 Fullarton Street, Suite 1902, London, Ontario, Canada N6A 5P2
Tel. 519-858-8188 - Fax. 519-858-8155

October 16, 2009

Mr. Chuck Hubert
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
200 Scotia Centre
Box 938, 5102-50th Ave
Yellowknife, NT X1A 2N7

Dear Mr. Hubert

Re: Comments on the Draft Terms of Reference for the Environmental Assessment of Fortune Minerals Limited's NICO Cobalt-Gold-Bismuth-Copper Project (NICO Project)

Fortune Minerals Limited ("Fortune") received the draft terms of reference (ToR) for the NICO Cobalt-Gold-Bismuth-Copper Project (NICO Project) from the Mackenzie Valley Environmental Impact Review Board (MVEIRB) on September 15th, 2009. Fortune appreciates the opportunity to review the draft ToR and specific comments/suggestions are provided in the attached document. For ease of reference, the specific item from the draft ToR that required a comment or suggested wording change is presented first, followed by the comment in *italics*.

Fortune commends the board for keeping the draft Tor focused on the proposed mine development and Fortune's use of the road. In general, we find the draft ToR adequate to describe the potential impacts associated with the development of the NICO Project.

Fortune has been exploring tailings and mine rock disposal options and considers it necessary to update the board on the status of our plans for the management of tailings and mine rock. Studies are currently being completed on the feasibility of having a single co-disposed tailings/mine rock facility in the north basin (location of the previous tailings management area). If the studies prove this to be a viable option for Fortune, this change would result in a significant reduction in the mine footprint by eliminating the need for a separate mine rock management area. The single co-disposal facility would also simplify the management of water during operations and at closure. Once a final decision has been made, Fortune will inform the board and provide updated mine plan drawings if required.

We look forward to working with the board and all interested parties during this environmental assessment of the NICO Project.

Sincerely,

FORTUNE MINERALS LIMITED

A handwritten signature in black ink, appearing to read 'Rick Schryer', with a stylized flourish at the end.

Rick Schryer, Ph.D.
Director of Regulatory and Environmental Affairs

Fortune Minerals Limited Comments on Draft Terms of Reference for the NICO Project

<p>Cover Page Title Page 1.1 Overview</p>	<p>From ToR: Terms of Reference for the Environmental Assessment of Fortune Minerals Ltd.'s NICO Cobalt-Gold-Copper-Bismuth Project</p> <p>Comment: <i>Should NICO Cobalt-Gold-Bismuth-Copper Project. This is the order of economic significance for this proposed mine.</i></p>
<p>1.2 Referral to Environmental Assessment</p>	<p>From ToR: Fortune has applied to develop an underground and open pit mine and milling complex approximately 90km north of Bechoko and 50km northeast of Whati. The proposed site is approximately 10km east of Hislop Lake. Fortune Proposes to ship concentrate from the proposed mine by trucks to a processing plant in southern Canada.</p> <p>Comments: <i>Open pit should be stated before underground as we are primarily an open pit operation. Behchoko is misspelled. The location is northeast of Hislop Lake, not east. Fortune proposes to ship concentrate from the proposed mine by truck/rail to a processing plant in southern Canada.</i></p>
<p>2.1 Scope of Development Paragraph 2</p>	<p>From ToR: Where this document refers to the "NICO mine site", that means the area covered by Fortune's mineral claims and mining leases, generally located between Lou and Bourke Lakes.</p> <p>Comment: <i>Burke Lake is misspelled.</i></p>
<p>2.1 Scope of Development Construction Bullets 1, 5 and 8</p>	<p>From ToR: Construction •Construction of the mine rock management area, tailings pond and tailings management area (or co-mingled deposition of rock and tailings), including water management systems; •Construction of the Effluent Treatment Facility that will treat effluent form the tailings pond;</p> <p>Comments: <i>Bullet 1 See update in cover letter on Co-disposal of rock and tailings. Bullet 8 Suggested wording: "Construction of the Effluent Treatment Facility that will treat effluent form the tailings pond and other sources";</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>2.1 Scope of Development Mining and Materials Storage Bullets 5, 6 and 8</p>	<p>From ToR: Mining and Materials Storage</p> <ul style="list-style-type: none"> •Transportation of materials to, and management of, the mine rock management area, tailings pond and tailing management area (or co-mingled deposition of rock and tailings), including water management systems; •Management of a water disposal facility within the tailings management area; •Backfilling of mined out stopes using cemented rock fill and engineered bulkheads; and <p>Comments: <i>Bullet 5 Suggested wording: "Transportation of materials to, and management of ore and tailings, the mine rock management area, tailings pond and tailing management area (or co-mingled deposition of rock and tailings), including water management systems";</i> <i>Bullet 6: Replace water with waste. Note: Fortune is considering a new location for the waste disposal facility if co-disposal of tailings and mine rock is selected and will inform the board once a decision on its location is made</i> <i>Bullet 8 Delete. No longer considering backfilling the stopes. It is not required.</i></p>
<p>2.1 Scope of Development Milling Bullet 1, (sub-bullets 1 and 2)</p>	<p>From ToR: Milling</p> <ul style="list-style-type: none"> •Use of facilities for milling, initial separation and concentration of ore including: •Conventional concentrator with ball mill •Initial flotation, second flotation of bulk rougher concentrate, bulk cleaner flotation and any other processing <p>Comments: <i>Bullet 1, sub-bullet 1 Ball mills should be plural.</i> <i>Bullet 1, sub-bullet 2 Should read secondary</i></p>
<p>2.1 Scope of Development Closure and Reclamation Bullets 7, 8 and 9</p>	<p>From ToR: Closure and Reclamation</p> <ul style="list-style-type: none"> •Reclamation of the new road proposed by Fortune, and all roads on the NICO Project mine site; •Re-vegetation of areas affected by mining, or support activities; •Backfilling , bulkhead installation and other capping of the underground works; and <p>Comments: <i>Bullet 4 Suggested wording: "new access road"</i> <i>Bullet 7 Suggested wording: "Re-vegetation of areas affected by mining, access road or support activities"</i> <i>Bullet 8 Suggested wording: "Bulkhead installation and other capping of the underground works"; and,</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>2.2.1 Geographic Scope Points 1) and 3)</p>	<p>From ToR:</p> <p>The geographic scope will include all areas that may be affected by activities related to the NICO Project. The geographic scope considered for each valued component must be appropriate for the characteristics of that component or impact. For example, consideration of impacts on air should reflect the airshed and wind patterns, while the ranges of wildlife using the area may be relevant from a cumulative effects perspective. All of these areas together will be considered in the environmental assessment study area, which will be further defined by the developer in its Developer's Assessment Report (see section 3.2.3).</p> <p>The minimum geographic scope will include the following areas:</p> <ol style="list-style-type: none"> 1) Fortune's mineral and surface leases and mining claims in the area of the NICO Project mine site, sub-surface workings, and a reasonable impact footprint radius centered on the mine site; 2) The NICO access road connecting the NICO Project mine site to the potential GNWT road and a reasonable impact footprint corridor centered on the NICO access road and the potential GNWT road, including any portions of watercourses that may be affected; 3) The watersheds from Peanut Lake and Lou Lake downstream of the NICO Project to Marian River, Marian Lake and to the confluence of the North Arm of Great Slave Lake, as well as areas further downstream if project-related impacts there are foreseeable. <p>The geographic scope for assessing impacts to the human environment includes the communities of Whati, Gameti, Wekweti, Bechoko and Yellowknife and includes the Tlcho region as a whole. The concerns of aboriginal residents who use the land in the environmental assessment study area for traditional pursuits must be considered. Together, these groups are described in this document as "potentially-affected communities".</p> <p>In its response to section 3.2.3 (below) the developer is required to define and provide rationales for the specific spatial boundaries it used to examine the potential impacts on each of the valued components considered in its impact assessment.</p> <p>Comments:</p> <p><i>Item 1 could be interpreted to mean inclusion of all lakes/watersheds within the claim block. We feel that for the aquatic component, it should be limited to waterbodies/watersheds that would be impacted by the development, as suggested in item 3 above. For example, Chalco Lake is in the claim block but not within the proposed land use area, but will not in the watersheds or parts of the watershed that would potentially be impacted by the development.</i></p> <p><i>Item 3: Fortune will provide rational for the spatial boundaries used in the assessment of potential mine-related impacts for each discipline (e.g. wildlife, aquatics). The assessment will not be carried forward beyond those boundaries is no foreseeable impact can be determined.</i></p>
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Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>2.2.2 Temporal Scope</p>	<p>From ToR: The developer will use temporal boundaries for this environmental assessment according to potential long-term impacts on valued components, rather than on a single generic timeline. In all cases, the temporal boundary does not end with the duration of the operating phase of the NICO Project.</p> <p>For project specific (that is non-cumulative) impacts, the temporal scope will include all phases of the NICO Project lifespan including construction, operation, closure and reclamation, and extends until no potentially significant adverse impacts are predicted. For cumulative impacts, the temporal scope includes the period of the effects of past, present and reasonably foreseeable future projects that are predicted to combine with the impacts of the NICO Project.</p>
	<p>Comments: <i>Fortune acknowledges that "contaminated sites in the area that are not part of the NICO Project are excluded from the scope of the development." (Section 2.2.3)</i></p>
<p>3.1.1 ToR Issues Prioritization paragraphs 1 (with bullets 1 and 2) and 2</p>	<p>From ToR: However, two particular issues were identified during scoping as requiring increased attention, because of high impact potential and concerns raised during scoping. Fortune is required to give special consideration to the following key lines of inquiry in the Developer's Report:</p> <ul style="list-style-type: none"> • Impacts of the NICO Project on water quality, particularly in relation to the quality of mine water and effluent released to groundwater and surface waters, and related impacts to human and environmental health downstream. • Long-term impacts following mine closure, including risks of environmental contamination and related reclamation plans and practices. This includes risks to water, wildlife and people. <p>Comments: <i>Bullet 1: Impacts of NICO Project on Water Quality – Based on previous EIS experience in the NWT, and general environmental assessment principles, the ultimate aquatic assessment endpoint is fish health/community, rather than water quality, which is one of a number of steps along the way in assessing effects on the aquatic ecosystem. It is surprising to see the other components of an impact assessment as Subjects of Note, when in fact some of these represent the ultimate endpoints of the assessment (e.g., fish, wildlife), or are necessary to address the KLI (e.g., hydrology). To be "stand-alone", which is required for each KLI, the assessment for the first KLI will need to include those components, thereby calling into question the usefulness of designating them as separate Subjects of Note.</i> <i>Although the description of KLI 1 specifies downstream impacts, we assume this also entails evaluating effects in the immediate vicinity of the project (i.e., in the watershed).</i> <i>The term "environmental health" should be clarified. It implies that other aspects in addition to water quality should be discussed as part of this KLI; however, many of those appear under Subjects of Note.</i> <i>Bullet 2: Long-term Impacts Following Mine Closure – This would normally be assessed in the first KLI across various time scales (i.e., construction, operation, closure, post-closure), but could be assessed separately under a second KLI. This KLI is later referred to as "Closure and Reclamation", which is different from long-term impacts.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>3.1.1 Issues Prioritization Paragraph 3</p>	<p>From ToR: These key lines will be presented in comprehensive stand-alone sections in the <i>Developer's Assessment Report</i>.</p> <p>Comments: <i>Fortune requests guidance on the format of the key line of inquiry sections of the DAR, especially with respect to the section on closure and reclamation. Fortune has already met with the closure and reclamation working group and a preferred format has been suggested. Fortune would like to ensure that this format meets the needs of the DAR.</i></p>		
<p>3.1.1 Issues Prioritization Paragraph 4</p>	<p>From ToR: All other issues that require examination in the Developer's Assessment Report are treated as Subjects of Note. These issues do not have the same priority or expected level of detail as key lines of inquiry, but are nonetheless issues that require serious consideration and substantive analysis.</p> <p>Comments: <i>It is unclear what the SNs are, as sections 3.3.4 onwards are not identified as such (we assumed these were SNs by process of elimination). SNs in other TORs have been specific issues of importance to stakeholders. In this TOR, they appear to be the usual components of an impact assessment. This is inconsistent with the KLI/SN approach as applied elsewhere, and simply adds a layer of new terminology without a real change to the assessment approach</i></p>		
<p>3.2.4 Description of Existing Environment Column 2 bullet 1</p>	<p>From ToR: describe the human environment, including:</p> <table border="0"> <tr> <td> <ul style="list-style-type: none"> •surrounding communities •existing infrastructure •regional labour pool, skill levels and regional business capacity •socio-economic conditions in communities and the region </td> <td> <ul style="list-style-type: none"> •historic and present land use, including harvesting •heritage resources •other economic activities </td> </tr> </table> <p>Comment: <i>Fortune will use available information to determine the regional labour pool, skill levels and regional business capacity.</i></p>	<ul style="list-style-type: none"> •surrounding communities •existing infrastructure •regional labour pool, skill levels and regional business capacity •socio-economic conditions in communities and the region 	<ul style="list-style-type: none"> •historic and present land use, including harvesting •heritage resources •other economic activities
<ul style="list-style-type: none"> •surrounding communities •existing infrastructure •regional labour pool, skill levels and regional business capacity •socio-economic conditions in communities and the region 	<ul style="list-style-type: none"> •historic and present land use, including harvesting •heritage resources •other economic activities 		

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>3.2.5 Development Description Column 1 last bullet</p>	<p>From ToR: This description will include:</p> <ul style="list-style-type: none"> •facilities, mine components •any on-site processing •chemicals and explosives •tailings and mine rock management •stockpiling, water usage •management and treatment •power generation •transportation •site infrastructure •employment •any other activities
	<p>Comment: <i>Suggested wording for final bullet: "management and treatment of water"</i></p>
<p>3.3.1 Bullets 4, 5 (sub-bullet 1) and 6</p>	<p>From ToR: In order to facilitate the consideration of the specific questions posed in this section, the developer is required to address the following impact assessment steps. In assessing impacts on the biophysical environment, the Developer's Assessment Report will for each subsection:</p> <ul style="list-style-type: none"> • Identify natural range of background conditions (where historic data are available), and current baseline conditions, and analyze for discernible trends over time in each valued component, in light of the natural variability for each; • Predict the likelihood of each impact occurring prior to mitigation measures being implemented, providing a rationale for the confidence held in the prediction; • Assess the significance of any residual adverse impacts predicted to remain after mitigation measures; and <p>Comments: <i>Bullet 4 Trends over time usually aren't analyzed for lower trophic levels, and it is unlikely that data will be available.</i> <i>Suggested Wording:</i></p> <ul style="list-style-type: none"> • <i>Identify natural range of background conditions (where historic data are available), and current baseline conditions, and analyze for discernible trends over time in each valued component, where appropriate, in light of the natural variability for each;</i> <p><i>Bullet 5 The requirement for the assessment is to "predict the likelihood" of each impact prior to mitigation being implemented and then describe mitigation and assess residual effects. The more typical assessment sequence entails identifying potential pathways/effects, identifying planned mitigation, evaluating the validity of each pathway in light of mitigation and then assessing residual effects. Because mitigation will be built into the Project design, predicting the likelihood of impacts before mitigation is superfluous and will not add any new information to the DAR.</i></p> <p><i>For some effects, the likelihood of an impact occurring will be 100% (e.g. vegetation loss, wildlife displacement), while for a variety of other effects, only a qualitative assessments can be made. It should be noted, however, that the likelihood of the impact occurring would be a qualitative assessment, at best, for a variety of different impact linkages.</i></p> <p><i>Bullet 6: The Review Board will determine significance, as stated on page 13, so this should refer to providing an "opinion regarding significance", as also indicated on page 13.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>3.3.2 Key line of Inquiry: Water Quality</p> <p>First paragraph & Bullet 2 (sub-bullet 2)</p> <p>Bullet 1 (sub-bullets 1 and 2)</p> <p>Bullet 5</p>	<p>From ToR:</p> <p>During the issues scoping process, potential impacts of the NICO Project on water quality was identified as a top priority by most interested parties, including the developer. The developer will consider all potential impacts of water quality in the watershed to the point where no changes can be measured in a stand-alone section of the Developer's Assessment Report.</p> <ul style="list-style-type: none"> • Discuss these in terms of: <ul style="list-style-type: none"> • potential impacts on aquatic resources and habitat • changes to the safety of water for drinking in Bechoko and for people on the land • Describe any predicted changes from the NICO Project on • Predict potential impacts to water quality from accidents in transport of processing chemicals and other dangerous goods. <p>Comments:</p> <p><i>First paragraph and Bullet 2 (sub-bullet 2) relating to Water Quality Endpoint: Changes in water quality will occur as a result of natural variability as we have recently seen with the forest fires in the area of the project. Therefore, changes in water quality associated with the mine discharge will need to be assessed within the range of natural variability determined by the baseline studies.</i></p> <p><i>Suggested wording: Consideration of "all potential impacts to water quality in the watershed to the point where no mine-related changes can be measured".</i></p> <p><i>Bullet 1 sub-bullet 1: There is a subject of note (SN) entitled "Fish and Aquatic Habitat", which will fulfill this requirement. As noted above, for the first key line of inquiry (KLI) to be stand-alone, it would need to duplicate much of the information in this SN.</i></p> <p><i>Bullet 1 sub-bullet 2: The word safety should be changed to quality.</i></p> <p><i>Bullet 5: Consideration of potential impacts to WQ from accidents, and 'likelihood and consequences of accidents and malfunctions, or impacts of the environment on the development influencing WQ' (Appendix C, page 23) will be considered, but not necessarily in the specific WQ assessment sections. Accidents and Malfunctions are generally provided as a separate section of the DAR, which will include the information specific to WQ, and other components.</i></p>
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Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>3.3.3 Bullet 1 and 3 and Appendix D, Closure and Reclamation</p>	<p>From ToR: During the issues scoping process, long-term impacts related to closure and reclamation of the NICO Project were identified as a high priority by most interested parties. Fortune will present on its preliminary Closure and Reclamation Plan for the NICO Project in the Developer's Assessment Report. The developer should consider existing guidance, such as Indian and Northern Affairs Canada's mine closure and reclamation policy and guidelines for the NWT, when developing its reclamation plan for the NICO Project. The developer is also advised to work with communities and other parties to determine clear closure objectives and link them to measurable closure criteria and indicators.</p> <ul style="list-style-type: none"> • Describe to what standard Fortune plans to reclaim the site, and how that standard was selected. • Describe how and when the mine site will be reclaimed, including how plans will ensure that the site does not contaminate water or pose an ongoing hazard to people or wildlife. • Describe plans for reclaiming the NICO access road. • Describe consultations with governments and communities regarding reclamation, and how plans have been adapted as a result. <p>Appendix D elaborates on the information required on closure and reclamation.</p> <p>Comments: <i>Bullet 1: The Wek'eezhii Land and Water Board is developing a new set of Closure and Reclamation guidelines in collaboration with INAC and other agencies. Fortune has already met with the Closure and Reclamation working group and will develop the Closure and Reclamation plan for the NICO Project in collaboration with this working group and the communities. Specific reclamation standards will be discussed with community focus groups.</i> <i>The Board should re-examine the concept of having Closure and Reclamation as a KLI. This is Project Description information, not environmental assessment. It is conceptually difficult to conduct an effects assessment on closure. The usual measures of magnitude, duration, geographic extent and significance have no meaning with regards to the Closure and Reclamation Plan, re-vegetation, photo rendering of what the mine will look like after closure, and slope stabilization. In other words, Closure and Reclamation is not an assessment endpoint, it is a pathway. Recovery of the environment following closure will be discussed in the other sections, by VEC.</i> <i>Ultimately, closure is conducted to reverse environmental effects, so the net direction of the effect to VECs and assessment endpoints will be positive or beneficial.</i></p>
<p>3.3.4 Water Quantity Bullet 1 sub- bullet 1</p>	<p>From ToR: •Describe the potential impacts of the NICO Project on upstream and downstream water quantity, with a particular emphasis on changes in: •Lou, Peanut Lake and Burke lake</p> <p>Comment: <i>NICO Lake should be added to this list.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>3.3.5 Bullet 4</p>	<p>From ToR: Describe the potential impacts of the NICO Project on fish and fish habitat. • Describe how accidents and malfunctions could affect fish and the aquatic environment, how Fortune will avoid these incidents, and what actions Fortune will take if they happen.</p> <p>Comments: <i>Typically, accidents and malfunctions are included as a separate section of the assessment, which pulls together information from all components. Accidents and malfunctions also appear in greater detail in Section 3.5 of the TOR, which would result in duplication of information.</i></p>
<p>3.3.7 and Appendix G Terrain</p>	<p>From ToR: • Describe plans to mitigate impacts on terrain, including plans for monitoring, evaluation and adaptive management of the mine rock management area, tailings management area the system of dykes and dams. Appendix G elaborates on the information required on terrain.</p> <p>Comments: <i>Similar comments apply as above in Section 3.3.3 and Appendix D. This section requests existing conditions and Project Description information. It would be very difficult to conduct an effects assessment on changes to terrain. Fortune can supply the information, but should not be required to conduct an effects assessment on terrain. Change to terrain is not an assessment endpoint; rather, it is a pathway that would be assessed, as appropriate for the valued components.</i></p>
<p>3.3.8 and Appendix I Air Quality</p>	<p>From ToR: The Developer's Assessment Report will evaluate the NICO Project's potential impacts on air quality due to project emissions. While considering impacts and mitigation on air quality, the developer is encouraged to enter dialogue with Environment Canada and the Government of the Northwest Territories about appropriate methods for modeling air quality and strategies for minimizing air quality impacts, and should consider the Guideline for Ambient Air Quality Standards in the Northwest Territories and Government of the Northwest Territories Guideline for Dust Suppression. • Predict the emissions and potential impacts from all stages of the NICO Project.</p> <p>Comments: <i>Same comments as above in Section 3.3.3. Changes to air quality is a pathway, not an assessment endpoint.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>3.3.7 Terrain & 3.3.9 Vegetation</p>	<p>From ToR: 3.3.7 Terrain <ul style="list-style-type: none"> • Describe the stability of the proposed mine rock management and tailings management areas and evaluate potential impacts. • Describe how Fortune will ensure the stability of all engineered structures against a range of climate, seismic and precipitation scenarios. • Describe plans to mitigate impacts on terrain, including plans for monitoring, evaluation and adaptive management of the mine rock management area, tailings management area the system of dykes and dams. Appendix G elaborates on the information required on terrain.</p> <p>3.3.9 Vegetation <ul style="list-style-type: none"> • Describe the total amount of land cleared (relative to pre-fire conditions), and related impacts on soil • Describe potential impacts on rare plants Describe how Fortune will prevent the introduction of invasive plants <ul style="list-style-type: none"> • Describe mitigations and best management practices related to vegetation Appendix I elaborates on the information required on vegetation.</p> <p>Comments: <i>Please clarify how soils are to be addressed in the EA. Based on 3.3.7, the Terrain component seems to pertain to geotechnical related issues and not surficial soil description, though there is some overlap with soils. Instead it appears that soils have been combined with vegetation under the vegetation component as there is a comment under vegetation for the assessment of the loss of soil and associated impacts.</i></p>
<p>3.3.9 Vegetation Bullet 3</p>	<p>From ToR: <ul style="list-style-type: none"> • Describe how Fortune will prevent the introduction of invasive plants. <p>Comments: Bullet 3: <i>Suggested wording: Fortune will use best management practices to limit the introduction of invasive plants</i></p> </p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>3.5 Accidents & Malfunctions</p>	<p>From ToR:</p> <ul style="list-style-type: none"> • Conduct a risk assessment for the NICO Project, including components, systems, hazards, and failure modes. • Assess likelihood and severity of each risk identified. • Describe all accident and emergency response plans that will be in place during the construction phase and operations phase, including emergency communication plans. <p>Comments: <i>The section on risk is quite clear and would include natural risks (i.e., earthquakes) and transportation risks along the NICO access road and the potential GNWT road but not Highway 3.</i> Suggestion: <i>The scope does not include transportation along Highway 3.</i></p>
<p>3.6 Cumulative Effects Bullets 1, 2 and 4</p>	<p>From ToR:</p> <p>Pursuant to paragraph 117(2)(a) of the Mackenzie Valley Resource Management Act, the Review Board considers cumulative effects in its determinations. Cumulative effects are the combined effects of the development in combination with other past, present or reasonably foreseeable future developments and human activities. In addressing cumulative effects, the developer is encouraged to refer to Appendix H of the Review Board's Environmental Impact Assessment Guidelines.</p> <ul style="list-style-type: none"> • Identify which of the valued components may be affected by other past, present or reasonably foreseeable future developments and human activities. • Describe which past, present or reasonably foreseeable future developments and human activities may affect the valued components identified above. • Describe any mitigations and monitoring proposed to reduce or avoid the predicted effects, specifying if and how adaptive management will be used, and what remaining impacts are predicted. <p>Comments: <i>Bullets 1 & 2: It would seem be more appropriate to identify the past, present or reasonably foreseeable future developments first, and then identify the valued components that would be expected.</i> Suggestion: <i>reverse the order of these two bullet clauses.</i> <i>Bullet 4: Monitoring usually isn't included in this section (Cumulative Effects), because monitoring described in an assessment of this nature will be focusing on Project-related effects rather than cumulative effects. Cumulative effects monitoring is a regional effort, requiring regional coordination or all potential contributors to cumulative effects.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix A Existing Environment 6 Bullet 4</p>	<p>From ToR: 6) Aquatic organisms and aquatic habitat in the environmental assessment study area. Include waterbodies on the mine site, water sources and downstream areas. Describe the following for key aquatic species: • the health of the food chain that supports the species;</p> <p>Comment: <i>Health can have many different meanings, depending on your background, and depending on the interpretation of health, in many cases, data would not be available.</i> <i>Suggested Wording:</i> • the food chain that supports the species.</p>
<p>Appendix A Existing Environment 7</p>	<p>From ToR: 7) Wildlife (including resident and migratory bird species) and wildlife habitat and migration corridors. Special emphasis will be placed on key harvested species including moose, caribou and furbearers. For each species, information on the following is required (by population if more than one distinct population is present in the environmental assessment study area): • population trends, including abundance, distribution and demographic structures; • habitat requirements, including identification of local areas of important habitat, attributes of the seasonal habitats that relate to how the species use them (e.g. travel routes, forage) and sensitive time periods; • migration routes, patterns and timings including typical patterns and the range of known variation; • factors known or suspected to be currently affecting the species in the environmental assessment study area (e.g. harvesting, disease); • known or suspected sensitivities to human activities; and • gaps in current knowledge of the species such as the impacts of disturbance on behaviour or abundance.</p> <p>Comments: <i>The bullets in Section 7) outline information that is quite detailed and is likely available for some species but not all species; therefore, we suggest that the bullets could be more generalized as per the following suggestion:</i> <i>Describe the general habitat requirements, life history, limiting factors and gapes in current knowledge for each indicator species or population using existing and current information that is useful background or used to support the effects assessment.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix A Existing Environment 8</p>	<p>From ToR: 8) Wildlife at risk occurring in the environmental assessment study area. The developer will:</p> <ul style="list-style-type: none"> • Identify any species present or potentially present in the environmental assessment study area that are listed under schedule 1 of the federal Species At Risk Act (SARA); • Identify any species present or potentially present in the project area assessed by the Committee on the Status of Endangered Wildlife in Canada; and • Describe each species in terms of the requirements of Item #8 above. <p>Comment: <i>The Board may want to include the additional identification of those species listed under the NWT Species at Risk Act in addition to COSEWIC and SARA.</i></p>
<p>Appendix A Existing Environment 8</p>	<p>From ToR: 8) Wildlife at risk occurring in the environmental assessment study area. The developer will:</p> <ul style="list-style-type: none"> • Identify any species present or potentially present in the environmental assessment study area that are listed under schedule 1 of the federal Species At Risk Act (SARA); • Identify any species present or potentially present in the project area assessed by the Committee on the Status of Endangered Wildlife in Canada; and • Describe each species in terms of the requirements of Item #8 above. <p>Comments: <i>Please clarify what is meant by "Describe each species in terms of the requirements of Item #8 above". Is this a reference to habitat requirements?</i></p>
<p>Appendix A Existing Environment 17</p>	<p>From ToR: 17) Traditional harvesting activities for - and traditional values about – all relevant animal (including fish) and plant species, including annual average harvesting data by species where available;</p> <p>Suggested wording: <i>17) Describe traditional harvesting activities, including relevant species, observed trends, and any traditional values expressed about the harvested species.</i></p> <p>Rationale: <i>Providing annual average harvesting data by species will be difficult. Current studies do not exist, and the older studies do not include the Tlicho communities of interest. It would be an onerous task to complete a detailed harvest study for the most recent year, let alone conducting a retrospective study for previous years. We can describe harvesting activities, describe the relevant animals, fish, and plant species, and can describe any trends that came to light during the Traditional Knowledge Study interviews.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

Appendix B Development Description 9	<p>From ToR: 9) The backfill technology to be used, the backfill plant (if any), transport of the backfill to the underground works, the planned bulkheads system, and when and how rock stored on the surface will be transported to and used in the backfill system;</p> <p>Comment: <i>Delete. This is no longer part of our mine plan.</i></p>
Appendix B Development Description 13	<p>From ToR: 13. The type, volume, storage (location and method), handling, and disposal of all potentially hazardous materials used on site (including Material Safety Data Sheets);</p> <p>Comments: <i>The requirement to include Material Safety Data Sheets for all potentially hazardous materials as part of the development description would likely result in a large volume of paper. As an example, the MSDS sheet for motor oil is seven pages; the MSDS sheet for WD40 is 13 pages.</i> <i>Suggestion:</i> <i>Remove requirement for including MSDS sheets.</i></p>
Appendix B Development Description 18	<p>From ToR: 18. Water quality and quantity monitoring proposed for the NICO mine site and its surroundings;</p> <p>Comments: <i>The requirement for water quality and quantity monitoring in the Development Description seems out of place; Fortune believes the monitoring plans should be part of the assessment, but should be related to expected effects rather than part of the Development Description.</i></p>
Appendix C Water Quality 11c	<p>From ToR: 11c. Failure of existing water retention structures;</p> <p>Comment: <i>There are no existing water retention structures.</i></p>
Appendix D Closure and Reclamation 3a	<p>From ToR: 3a. Creating sufficient barrier for the prevention of tailings and waste rock oxidation;</p> <p>Comment: <i>Please clarify if this request is in relation to operations or closure.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix E Fish and Aquatic Habitat 1</p>	<p>From ToR: 1) Describe fish and aquatic habitat in Lou Lake, Peanut Lake, Nico lake and any other water bodies within the mine site on the Fortune Claim Block, Burke Lake, and any water bodies the NICO access road crosses or that the development otherwise affects;</p> <p>Comments: <i>Comment: Several waterbodies on the claim block would not be affected by the project (e.g., in separate watersheds or upstream in the watershed). The term "any water bodies that the development may otherwise affect" located at the end of the clause would include any of the waterbodies on the claim block that potentially could be affected.</i></p> <p><i>Suggested Wording</i> 1) Describe fish and aquatic habitat in Lou Lake, Peanut Lake, Nico Lake, and any other water bodies within the mine site on the Fortune Claim Block, Burke Lake, and any water bodies the NICO access road crosses or that the development otherwise affects;</p>
<p>Appendix F Wildlife 1</p>	<p>From ToR: For potential impacts to wildlife, the developer will do the following: 1. Describe the impacts the NICO Project is likely to have on wildlife and wildlife habitat. For each species, consider a. Potential impacts to habitat, including degradation and fragmentation, with a focus on important wildlife habitat; b. Potential for increased mortality from all sources (including from vehicle collisions and changes to hunting access); c. Potential for increased attraction to the NICO mine site, risk of bear-human encounters, risk to people and associated carnivore mortality; d. Potential for increased sensory disturbance from all sources (e.g., noise, odours, activity, vibrations, overflights, dust). Predict effective habitat loss resulting from changed behaviour; e. Potential for disruption of movement and migration patterns; and f. Potential for increased contamination of food and water, including bio-accumulation, from all sources;</p> <p>Comments: <i>Often, it is more practical and useful to conduct the effects assessment on a guild (or similar group of species) rather than by species. For example, typically, effects assessment is conducted on the guilds of waterfowl or songbirds rather than the individual species.</i></p> <p><i>Suggested Wording:</i> <i>"Describe the impacts the NICO Project is likely to have on wildlife and wildlife habitat. For each species and/or species group, consider the following:"</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix F Wildlife 3</p>	<p>From ToR: Considering that the NICO Project is on a regionally distinctive plateau landform, describe: a. Fortune's efforts to determine whether the plateau landform and surrounding cliffs supports regionally limited wildlife habitat b. How the NICO Project is expected to affect any specialized species using this distinctive habitat c. How Fortune proposes to mitigate those impacts identified.</p> <p>Comments: <i>There are many plateau landforms in the region of the proposed mine. The location of the proposed mine seems distinct if you approach it from the lowlands to the west and this is simply a reflection of the major geological boundary that exists along the Marian River Valley.</i></p>
<p>Appendix J1 Employment and Business Opportunities 3a</p>	<p>From ToR: 3. A description of any barriers to direct or contract employment, advancement and retention for Mackenzie Valley residents, with particular emphasis on Tlicho residents and Aboriginal people. This description must include employee availability and employability in light of minimum skill requirements and an investigation of current training opportunities for community members. The developer will also discuss: a. Current skills gaps in the available labour pool that require additional training programs;</p> <p>Comments: <i>We are not aware of a current skills survey for the potentially affected communities. Skills inventories (or Human Resource Inventories) are not usually asked of mining companies. Carrying out this would entail significant time and resources, and would likely be out-of-date by the time the project begins.</i> <i>Suggested Wording:</i> <i>A qualitative description of any barriers to direct or contract employment, advancement and retention for Mackenzie Valley residents, with particular emphasis on key informant interviews, Tlicho residents and Aboriginal people where possible. The developer will also discuss:</i> <i>3a. Estimates of the current skills gaps in the available labour pool that require additional training;</i> <i>Rational: We don't see a need for additional training programs because all of our proposed positions are already in existence. Operating mines in the NWT have previously trained people for these types of jobs. The skill are therefore already in existence. For the majority of new employees they will receive on the job training as part of their orientation. That should be all that is required for training.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix J1 Employment and Business Opportunities 7</p>	<p>From ToR: 7. An estimate of all contractor and subcontractor goods and services that the NICO Project will require, by project phase, as well as an estimate of what percentage of required goods and services can feasibly be sourced from local and regional businesses;</p> <p>Comment: <i>Fortune will use the existing information to derive the requested estimates.</i></p>
<p>Appendix J2 Distribution of Beneficial and Adverse Socio- Economic Impacts 1e and 2</p>	<p>From ToR: 1. Qualitative and quantitative estimates of all beneficial and adverse economic impacts from the NICO Project, including at minimum: a. Capital costs associated with placing the NICO Project in operation, broken down by major components (estimates should be in 2009 dollars Cdn. and may be in a +/- 20% range); b. Annual operating costs during the life of the NICO Project (estimates should be in 2009 dollars Cdn. and may be in a +/- 20% range); c. Federal, territorial and municipal taxes that the developer may remit by year, as well as from linked economic development (a +/- 20% range is acceptable); d. Total employment impact on the Tlicho region and Mackenzie Valley, including a prediction of employment multipliers from the development; e. A prediction of any adverse impacts the development may have on public infrastructure maintenance and associated costs (with emphasis on the potential GNWT road between the NICO Project and Highway 3); 2. Discussion of any plans, strategies or other commitments the developer has to help potentially affected communities avoid over-exposure to "boom and bust" economic fluctuations, with a focus on:</p> <p>Comments: 1 e: <i>The analysis will require information from the GNWT on the predicted construction and maintenance costs of the potential road in relation to Fortune's proposed use of the road.</i> <i>Suggested Wording:</i> <i>A prediction of any adverse impacts the development may have on public infrastructure maintenance and associated costs, depending upon availability (with emphasis on the potential GNWT road between the NICO Project and Highway 3);</i> 2: <i>Boom-bust issue economic fluctuations are due to world market forces beyond our control. Fortune will work with the communities to identify potential strategies that may limit the effects of economic fluctuations.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix J3 Social Impacts 1</p>	<p>From ToR: J3 Social Impacts While conducting a social impact assessment, the developer will describe: 1. Potential impacts associated with the development on community wellness and population health issues such as: a. Population in- and out-migration; b. Alcohol and drug access and use; c. Sexually-transmitted infections rates; d. Crime rates; e. Access to child care; f. Language retention and other key indicators of cultural maintenance; and g. Education completion rates by level.</p>
	<p>Comments: <i>Community-level data are not publicly available for some of the issues listed. Qualitative data (and perhaps additional quantitative data) are available through interviews with health care professionals and service providers; however, permission will be needed from the Tlicho government to conduct further interviews with Tlicho community health providers or to use existing Tlicho community interview data.</i> Suggested Wording After Listed Points: <i>The description of the community wellness and population health issues, as listed, should consist of a review of publicly available, quantitative statistics (e.g., NWT Social Indicators) and key informant interviews with community health providers and social service providers, where possible.</i></p>
<p>Appendix J3 Social Impacts 3</p>	<p>From ToR: J3 Social Impacts The physical, mental, and cultural health of mine workers and mine workers' families, considering potential impacts of long-distance commuting and greater engagement in the wage economy on the population health status of small, primarily aboriginal communities. This discussion should identify any alternative shift rotations considered by the developer, with the rationale for the chosen rotation;</p> <p>Comments: <i>Data may not be available to fully address this requirement.</i> Suggested Wording: <i>The potential impacts of long-distance commuting and greater engagement in the wage economy estimated based on a review of select and pertinent peer-reviewed studies and through key informant interviews with Tlicho residents currently working at mines in the NWT.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix J3 Social Impacts 6</p>	<p>From ToR: Any lessons learned about short and long-term social and economic impacts of previous mine developments in the Mackenzie Valley and the Canadian north, and how the developer has incorporated such lessons into its impact assessment and mitigation commitments for the NICO Project.</p> <p>Comments: <i>This item can be addressed through a review of publicly available Project documents available through the MVEIRB public registry. The Projects considered can include recent mine developments of similar size to the NICO Project.</i></p> <p>Suggested Wording: <i>Any lessons learned (through a review of documents on the MVEIRB public registry) about short and long-term social and economic impacts of previous mine developments in the Mackenzie Valley and the Canadian North, and how the developer has incorporated such lessons into its impact assessment and mitigation commitments for the NICO Project.</i></p>
<p>Appendix J4b Traditional Land Use and Wildlife Harvesting 2</p>	<p>From ToR: The developer will: 2. Provide a prediction of the total impact of the NICO Project on traditional economic activity in the areas (expressed in dollar terms as well as in terms of reduced or increased harvesting success); and</p> <p>Comments: Suggested wording: <i>2. Provide a prediction of the impact of the NICO Project on traditional activities, and on the potential for increased or reduced harvesting success.</i></p> <p>Rationale: <i>There are two issues of quantification in the original term: quantification of traditional activities, and assigning a dollar value to the traditional activity. Due to the nature of traditional knowledge, much of the information we collect is qualitative. As a result, we can formulate an assessment that describes traditional activities, how they may have changed over time, and general trends in the availability of traditional resources, and describe the factors that community members believe contribute to any changes in traditional activities. To undertake a detailed survey of traditional activities over time to the extent required to assign a monetary economic value would be a specialized study. The issue of quantification also pertains to the term discussed below.</i></p>

Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix J5 Human Environment Monitoring and Management Plans 1c, 1d and 1e</p>	<p>From ToR</p> <p>1. Describe any commitments, plans and strategies to engage with responsible authorities and potentially-affected communities in monitoring impacts on the human environment such as:</p> <ul style="list-style-type: none"> a. Success of local and regional residents and Aboriginal people in gaining employment at the NICO Project, and the success of training initiatives; b. Success of local and regional businesses in providing goods and services to the NICO Project, with identification of gaps to maximizing engagement; c. Employee retention and worker and family wellness; d. The contribution of the NICO Project to beneficial and adverse social impacts at the regional and local levels across a spectrum of appropriate indicators; e. Impacts on wildlife harvesting and practice of traditional culture on the land. <p>Comments:</p> <p><i>Item 1c: Fortune suggests listing "worker and family wellness" as a separate item to avoid confusion with employee retention.</i></p> <p><i>Item 1d: add to the end of item d</i></p> <p><i>"Appropriate indicators will be determined in collaboration with Tlicho communities and government authorities."</i></p> <p><i>Item 1e: There is little or no available baseline data for current wildlife harvesting on the land. In addition harvest of the Bathurst Caribou herd may be drastically reduced for given the results of the latest census leading to the potential of hunting limits or bans. There is no way to ensure if the changes in wildlife harvesting have been caused by the NICO Project or not. These factors would make our opinions and personal beliefs only qualitative and not based upon empirical facts.</i></p>
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Comments on Draft Terms of Reference for the NICO Project (Continued)

<p>Appendix K Cumulative Effects 1 b and 1c</p>	<p>From ToR: The following items are required for consideration of cumulative effects: 1. In terms of cumulative effects, predict: a. Potential impacts of the NICO Project on the Bathurst caribou herd in combination with impacts of other developments in the range of the Bathurst caribou herd; b. Potential socio-economic changes, cultural changes and changes to community well-being from the NICO Project in combination with the potential GNWT road to Whati and Gameti c. Potential socio-economic changes, cultural changes and changes to community well-being from the NICO Project in combination with other with other industrial developments including: i. existing and proposed diamond mines ii. the proposed Yellowknife Gold Project iii. the proposed Mackenzie Gas Project</p> <p>Comments: <i>Item 1b: The concept of well-being and socio-cultural change can be very broad and subjective. It is best answered by an analysis of publicly available statistics that measure change over a given time period, if possible (e.g., population in- and out-migration may increase, crime rates may increase, unemployment rates may decrease, etc.).</i> <i>Suggested Wording 1b:</i> <i>b. Potential socio-economic changes, cultural changes and changes to community well-being from the NICO Project in combination with the potential GNWT road to Whati and Gameti, using publicly available data.</i> <i>Item 1c: Fortune can accept items (i), and (ii) but item (iii) is still quite speculative. Fortune assessment of the Mackenzie Gas Project will be limited to publically available summaries of the project. Although Fortune may impact the diamond mine's Tlicho labour pool, this will open up opportunities for other aboriginal groups closer to the diamond mines.</i></p>
<p>Appendix K Cumulative Effects 2</p>	<p>From ToR: Determine any other past, present and reasonably foreseeable human activities or developments that may affect the same valued components as the NICO Project.</p> <p>Comments: <i>Suggest deleting the work "past" as this assessment is examining and evaluating predicted changes from current (baseline) conditions.</i> <i>Suggested Wording:</i> <i>Determine any other present and reasonably foreseeable human activities or developments that may affect the same valued components as the NICO Project.</i></p>

