



FORTUNE MINERALS LIMITED

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

February 22, 2012

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

Dear Ms. Hayden

**Re: Undertaking Response # 7 for the NICO Project - EA0809-004
Developer's Assessment Report Technical Meetings**

Fortune Minerals Limited ("Fortune") is pleased to submit this response for undertaking # 7 to the Mackenzie Valley Environmental Impact Review Board (MVEIRB). This undertaking was generated during the Technical Meetings held for the NICO Cobalt-Gold-Bismuth-Copper Project Developer's Assessment Report (DAR) from February 7-9, 2012.

We trust the information in this undertaking response provides the answers required to fulfill our requirements.

Undertaking #7: Fortune is to provide the technical and economic feasibility information used when it made the determination that an all-season road was the only appropriate haul system for the NICO Project.

Response:

Fortune did consider both technical and economic factors when considering the need for an all-season road for the NICO Project. The financial impact of not having an all-season road on the economics of the NICO Project is dramatic. Fortune estimated that the capital cost increase due to seasonal road access is in excess of \$ 88 million dollars. Cost increases were primarily associated with having to build the capacity to store various consumables and concentrate for a year rather than building capacity for approximately one month. Examples of where costs would increase are:

- Airstrip construction;
- Fuel farm;
- Increased initial fills for diesel fuel and other items;



- Reagent storage;
- Explosives plant and storage;
- Warehousing;
- Concentrate storage;
- Increased storage at the Saskatchewan processing site;
- Costs for stranded construction equipment;
- Increased construction time; and
- Construction staff mobilization.

In summary, the NICO Project economics are significantly reduced if only a seasonal road is available for the transportation of people, materials and consumables.

Logistically, the movement of all of the consumables and other items required to construct and operate the mine would be difficult with a seasonal road. Fortune estimates that 6,000 truck loads per year would be required to service the needs of the mine during operations. Of this 6,000, approximately 3,000 loads would be concentrate and 2,500 would be fuel. As reported in the DAR (Annex L, Section 4.2.1), the 10 year average for the winter roads to be open is 75 days for the Whati winter road and 42 days for the Gamètì winter road. The NICO Project would primarily use the Whati winter road and only a segment of the Gamètì winter road if a seasonal road were in place. As such, Fortune used the conservative figure of 75 days as the base case for the following calculations. It is estimated that an all-land winter road route would extend the life of the winter road to Whati by 21 days (GNWT Department of Transportation pers.comm.).

Consequently, the average length of time that an all-land winter road route can be expected to be open is 96 days. Given the volume of traffic, a total of 63 loads/day would need to use the winter road to supply the mine for a year. This is assuming that the trucks could run 24/7, that no truck weight restrictions are in place for the entire 96 days, that no accidents occurred and that this number of trucks would be available. None of these assumptions is realistic given known weather conditions in this area and the demand for haul trucks during that time period in the NWT. The number of trucks that would be required for mobilization of equipment and supplies for construction of the project would be similar to operations.

Operating costs would also increase without the use of an all-season road by an estimated \$ 10 million dollars per year for the 18 year operations period. The NICO Project Access Road would not be built as an all-season road since it would only be connected to a seasonal road. Fortune would have to build an ice road every year of operations to move materials in and out of the mine site. The largest single cost increase would be in the air transportation of employees to and from the mine site which would add \$ 5 million dollars to the operating cost alone.



As Fortune announced in its September 30th, 2011 Developer's Assessment Report (DAR) update letter to MVEIRB, the airstrip at the NICO Project site would no longer be constructed in favour of using the existing airport facility at Whatì. Fortune outlined both the environmental and socio-economic benefits of this change in the update letter. The impacts due to the airstrip at the NICO Project site described in the DAR for dust generation, ground disturbance and noise would also be re-instated as part of the overall mine disturbance. Noise impacts over Hislop Lake would certainly be greater due to the large increase in air traffic.

As mentioned earlier, the lack of an all-season road would force Fortune to construct the airstrip at the NICO Project site to allow for the transportation of workers by air when the all-land winter road was not in operation. In this scenario, there would be no flexibility for work rotations as discussed in the Technical Meetings. For economic reasons, work rotations would have to be 2 weeks in/2 weeks out. Fortune would regret not having the ability to offer more flexible work rotations to workers as we feel this is a unique feature of this project that would attract and retain a larger segment of Tłjchq and other First Nations employees. There would also be a loss of opportunities for the development of small businesses in Whatì, Gamètì and Behchokò if no all-season road existed.

There would also be a loss of sustained employment for trucking if only a seasonal road were in place. As detailed above, the volume of trucks moving materials to and from the mine site when the all-land winter road was operational was significant. However, the work would only occur for a period of approximately 96 days. There would be no work for truckers during the remainder of the year.

As detailed above, Fortune has given considerable thought to the use of an all-land winter road for the construction and operation of the NICO Project. The results of the technical analyses clearly indicate that project economics will be severely impaired if operated with a seasonal road. There would also be a loss of opportunities for Tłjchq people for flexible work rotations, trucking jobs and small business ventures. We hope this memo is helpful in demonstrating the need for an all-season road if the NICO Project is to become a reality.

Sincerely,

Fortune Minerals Limited

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

