
Fortune Minerals to locate NICO hydrometallurgical process facility

Tuesday, 04 Aug, 2009

Fortune Minerals Limited announced that its decision to locate the hydrometallurgical part of the process plant to treat concentrates produced from its NICO Gold Cobalt Bismuth Copper development in the Northwest Territories to a site in southern Canada.

This change in the NICO project will have a material positive impact on both capital and operating costs for the development. It will also help mitigate future exposure to increasing energy costs, accelerate the construction schedule, reduce environmental impacts and help speed the permitting process already in progress.

The NICO mine is located 160 kilometers northwest of the City of Yellowknife, 22 kilometers west of the Snare hydro complex and 50 kilometers northeast of the community of Whati, NWT. NICO is a proposed vertically integrated project to mine and process ores to high value metal products including gold doré, cobalt and bismuth cathodes and a minor amount of copper and nickel by products using proven hydrometallurgical process methods that have been confirmed in 2 pilot plant tests and are used at existing refineries.

The Mackenzie Valley Environmental Impact Review Board, that is conducting the environmental assessment for the NICO development and representatives of the federal, NWT and Tlicho governments have been notified of Fortune Minerals' decision. The mine, mill and flotation concentrator will be constructed in the NWT as originally planned. Conversely, the downstream hydrometallurgical part of the process plant comprised of pressure and acid leaching followed by electro winning to high value metal products and the gold leach circuit, will now be constructed at a site in southern Canada. Numerous locations have been investigated to construct this "Southern Hydrometallurgical Facility" over the past 6 months. Fortune Minerals has now shortlisted four sites in Alberta, Saskatchewan and Manitoba and plans to acquire one of these sites shortly.

Approximately 80,000 tonnes of metal concentrates produced at NICO each year will be transported from the property by truck to the rail head at Hay River, NWT for delivery to the SHMF by rail.

The economic, social and environmental benefits of relocating the SHMF to southern Canada are as follows:

- 1) To materially reduce capital, costs for the development there will be a significant reduction in the amount of process and construction materials to be transported to the NWT during construction, the camp facilities to accommodate workers at the NICO site will be smaller and labour and travel expenses during construction will be lower;
- 2) To materially reduce power, costs during operations electricity rates in the NWT are projected to be more than 20 cents per kWh as compared to rates as low as 3.7 cents per kWh in some southern provinces;
- 3) To reduce reagent transportation, costs savings in reagent transportation to the NWT will offset approximately half the costs of transporting metal concentrates to the SHMF;
- 4) To accelerate the construction period, construction of the NICO site and SHMF will be carried out concurrently and the most technically advanced part of the process plant will be less constrained by weather and access issues;
- 5) To simplify the NICO project for permitting, moving the process facilities to southern Canada will eliminate the need for most of the process chemicals at the NICO site and will remove some waste products from processing, both simplifying the management of waste rock and tailings and help reduce treatment, monitoring and bonding costs;
- 6) To accommodate aboriginal concerns for perceived potential water quality impacts, the Tlicho Government has informed the Company that removing most of the process chemicals and simplifying waste management will address most of the concerns from Elders;
- 7) To mitigate risk of worker turnover, the labour requirements for the mine and concentrator as well as additional personnel required to transport concentrates south can be easily sourced from the existing labour pool in the NWT. Conversely, engineers and chemical plant operators would need to be imported from southern Canada to work at a remote site and will now have the opportunity to commute daily from their homes near the SHMF;

8) To align the Company's power requirements with existing and planned hydro electric generation in the NWT, existing and planned hydro power in the NWT cannot satisfy the increased power loads at NICO as a result of recent operational improvements but could supply the 9 MW of electrical demand from the mine and concentrator. Selling hydro power to the NICO development presents an attractive long term, environmentally sustainable business opportunity for the local Tlicho people and NWT government.

NICO will have average annual production of approximately 4 million pounds, each of cobalt and bismuth, as well as 81,000 ounces of gold in each of the first 2 years of the mine life followed by 27,000 ounces of annual gold production in subsequent years. The project will also produce a minor amount of copper and nickel by products. NICO will be a significant global producer of cobalt to service increasing demand in high performance rechargeable batteries used in portable electronic devices and electric and hybrid electric cars. Cobalt is also used in superalloys, magnets, high strength steels, catalysts, pigments and food additives.

NICO is expected to be the largest independent producer of bismuth in the world to service growth in the demand for traditional products, plus a variety of new products that have been developed because bismuth is an environmentally safe replacement for lead due to lead toxicity issues. The gold contained in the NICO deposit is an attractive counter cyclical hedge, which is primarily recovered during early years of the mine life.

For more news visit at www.steelguru.com