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TARANIS RESOURCES INC.

Taranis Outlines Green Advantage and Design of New Midway Mine Concept

Estes Park, Colorado, December 23, 2020 – Taranis Resources Inc. (“Taranis” or the “Company”) [TSX.V: TRO, OTCQB: TNREF] is pleased to announce developments related to its new “Midway” mine concept, which combines the company’s 100% owned Thor polymetallic mine and the past-producing Max concentrator facility. The company has made progress designing sustainable, low greenhouse gas emitting operations for Midway which meet the mandate and stated goals of the British Columbia Ministry of Energy, Mines, and Low-Carbon Innovation (“MEMLCI”).

MEMLCI has pledged *“implementation of the recommendations of the Mining Jobs Task Force to create and sustain good jobs in the B.C. mining industry”* including *“creating a clean industry brand for B.C., and [helping] the sector compete in a global market where consumers are increasingly demanding cleaner products.”*

Taranis is confident that a popular architectural axiom applies to mining, in that: “the greenest mine is the one that is already built”. By refitting and restarting the Max concentrator facilities, including the permitted tailings storage facility, Taranis can achieve commercial production from Thor without the need for new environmental disturbance. Midway contrasts to projects which require the construction of costly infrastructure with a large ecological footprint in greenfield developments. The company is actively engaged in the design and evaluation of engineered works and processes that capitalize further on this innate advantage.

Initial contact with MEMLCI has been made, and the company expects robust engagement with MEMLCI officials early in 2021. Taranis has signed a Letter of Intent with Metallica Metals Corp. (formerly Cameo Industries Corp.) to purchase FortyTwo Metals Inc., owner of the Max Project. Taranis is currently conducting due diligence on the feasibility of finalizing the purchase including regulatory requirements for reestablishment of site compliance and bonding. Taranis believes that MEMLCI, local stakeholders, and taxpayers have expressed their strict preference that large industrial sites such as Max are re-used wherever possible to maximize their economic and social utility, are financially bonded, and are responsibly managed throughout operations. Midway is already showing outstanding potential for implementation of modern technologies that correspond with the province’s vision of the mining industry in the coming decades.

Midway: Safe, Energy Efficient, and Compact Minimizing Environmental Disturbance Across Multiple Metrics

Taranis has identified three engineering pursuits that, when combined with Thor’s innate potential as a high-grade, near-surface polymetallic mine, would enable Midway to meet MEMLCI’s low-carbon initiative goals, and at the same time improve the mine’s efficiency through operational advantages and lowered costs.

Aerial Tramline - Typical mining operations require massive energy expenditures as raw materials are hauled to the surface from deep open pits or shafts, and then use even more energy to haul these materials to a concentrator. Normally, these activities involve the use of fossil fuels that bloat the carbon footprint of a mine and require extensive and costly infrastructure that impacts capital costs. The Thor deposit’s spatial

relationship to the Max concentrator (8 km away as the crow flies) incorporates 1 km of elevation drop. There is a vast amount of potential energy that can be used to transport mineral products from the Thor deposit to the Max concentrator using a tramline. A tramline dramatically reduces carbon emissions, improves safety margins transporting ore, and improves the economics of the deposit. It is notable that the Silver Cup District of British Columbia pioneered the use of aerial tramways in the early 1900's, and one of the most famous was used at the Silver Cup Mine. Taranis has obtained engineering drawings made in 1952 for a tramline at the Thor mine site, and these are currently being reviewed by a world-renowned company to provide a cost/feasibility assessment. Tramlines can also produce electricity as a means of braking the system, and this electricity can be utilized to further reduce greenhouse gas emissions.

Pre-Concentration of Materials Onsite - Gravity concentration is the oldest form of mineral refining, and Taranis was able to recognize its potential early at Thor given the near total retention of valuable metals in minerals of high specific gravity. The biggest challenges of the Thor project remain terrain and snowfall, therefore the amount of infrastructure onsite needs to be minimal. A small and simple pre-concentrator will be utilized at the Thor site to reduce the volume of materials transported to the Max concentrator – and Taranis has already taken steps toward this approach as the company completes its 10,000 tonne bulk sample permit application. As only 33% of the pre-concentrator feed becomes valuable material shipped to Max, much less energy is required for transport, and the remaining fraction (67%) is used to infill areas that have been mined, ultimately restoring the area to its original contour. Owing to its coarse size ($3/4$ "), this coarse-reject material is not considered tailings. The Gekko IPJ plant minimizes impact on water resources at Thor – using only 10% as much water as a traditional jig.

'Repurposing' of Legacy Max Concentrator and Tailings Storage Facility – The Max facilities (concentrator and tailings storage facility) are currently dormant and converting them from a molybdenum facility to a precious/base metal processing facility is cost-effective and effectively recycles underutilized and valuable, though under-bonded, infrastructure for a value-generating purpose, employing workers in the B.C. interior. Both Thor and the Max Project are legacy environmental disturbances and integrating them into Midway will provide the opportunity to make full use of the existing infrastructure for the benefit of the local economy while ensuring that they are reclaimed properly in the future. These are only some of the benefits of the Midway project, but they underscore how “the greenest mines are the ones that are already built”.

Other Advantages Being Investigated

The combination of a pre-concentrator with a tramline leads to numerous other downstream benefits that include:

- Reduction in volume of material shipped enables tramline transport – raw materials require trucking.
- Minimizing surface disturbance from upgrades to and use of existing roadways.
- Reduction in volume to the grinding circuit at the Max concentrator, reducing grinding costs.
- Reducing waste volume output at the Max Concentrator by 66% when processing pre-concentrates as opposed to run of mine material.
- Tramline towers can be used to convey electricity to the Thor mine site, reducing the need for diesel generators onsite.
- Feed to the Max concentrator can be conducted year-round from stockpiles at Thor mine site without the need for expensive and extensive wintertime snow-clearing operations.
- Thor deposit is a high-grade near-surface deposit, and mining will have a small footprint in a legacy brownfield site, as opposed to large, low-grade open pits.

Comments

Taranis has taken inspiration from renowned architect and sustainability advocate Carl Elefante. He coined the phrase, “**The greenest building is the one that is already built**”. Taranis believes that Midway is potentially the greenest mine in British Columbia because of the same principle.

Elefante says, “Many who hear me say this assume that I am being metaphysical. Preservation philosophy has sensitized me to see the value in the existing world, especially the built world. Taking into account the massive investment of materials and energy in existing buildings, it is both obvious and profound that extending the useful service life of the building stock is common sense, good business, and sound resource management. It requires an understanding of how to respect and renew what is already here and a vision for where and how to transform the legacy of the past into the promise of tomorrow”.

Both the Thor and Max components of the Midway project are legacy projects in some respect, but they can be transformed into the promise of tomorrow provided government and markets recognize that value. It is truly a step forward to MEMCLI’s vision of creating a brand of metals in British Columbia that is green.

About Taranis Resources Inc.

For additional information on Taranis or its 100%-owned Thor project in British Columbia, visit www.taranisresources.com

Taranis currently has 73,594,500 shares issued and outstanding (84,973,266 shares on a fully-diluted basis).

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