

NEWS RELEASE TSX.V: FCC OTCQX: FTSSF

First Cobalt Announces \$2 Million Work Program to Advance Cobalt Refinery Plans

TORONTO, ON — (May 13, 2020) — First Cobalt Corp. (TSX-V: FCC; OTCQX: FTSSF) today announced a \$2.1 million work program for its cobalt refinery in Ontario, Canada. The program is intended to build upon the successful feasibility study completed on May 4 to further improve the project's long-term success and viability.

WORK PROGRAM HIGHLIGHTS

- Prepare and submit permit amendments to expand the refinery to its design rate of 25,000 tonnes per annum of cobalt sulfate
- Assess alternative approaches to manage effluent sodium levels to lower capital and operating costs and further enhance project economics
- Conduct additional metallurgical test work to increase cobalt recoveries
- Extend project economics assessment from 11 years to 17 years to align with the phase 1 dry stack tailings design storage capacity
- Scoping studies in progress to assess three early commissioning strategies to operate as a demonstration plant and produce sample product for EV manufacturers
- Target substantial completion for most of the work program within 90 days

Trent Mell, First Cobalt President & CEO, commented:

"This work will enable us to meet our commitments to shareholders and stakeholders to move the project forward in 2020. According to Benchmark Mineral Intelligence, there are currently no plans to commission new cobalt refineries outside of China other than First Cobalt. China accounts for approximately 79% of the world's refined cobalt sulfate production and we are seeing that many automotive companies outside of China are interested in sourcing cobalt sulfate closer to their manufacturing facilities."

Peter Campbell, P.Eng., First Cobalt Vice President, Business Development added:

"The feasibility study that we released last week demonstrated very strong economics for an expanded First Cobalt Refinery producing cobalt sulfate for the battery market. The study also identified several opportunities that could further enhance project economics and today's work program announcement intends to address several high impact opportunities over the next 90 days. I am confident that our project team will be able to build upon the strong results we already achieved."

The Company recently completed a feasibility study on its permitted refinery demonstrating that the First Cobalt Refinery project can become a viable, globally competitive player in the North American and European electric vehicle (EV) supply chain. The study confirmed that the facility could become North America's only producer of cobalt sulfate in an EV market that today is entirely dependent on foreign supply.

The report estimates an initial capital cost of US\$56 million, US\$37 million in undiscounted

pre-tax free cashflow to the Project forecasted during the first full year of production and a 53% after-tax internal rate of return, representing a payback period of 1.8 years. The study outlined a number of measures that the Company should pursue to further improve the economic returns from the facility.

Project Overview

The First Cobalt Refinery is a hydrometallurgical cobalt refinery located north of Toronto, Canada. The facility was permitted in 1996 with a nominal throughput of 12 tonnes per day (tpd) and operated intermittently until 2015, producing a cobalt carbonate product along with nickel carbonate and silver precipitate.

In July 2019, First Cobalt and Glencore AG agreed to a partnership framework providing for a non-dilutive, fully funded, phased approach to recommission the Refinery. Subject to certain conditions, the framework agreement contemplates that First Cobalt will treat cobalt feed material supplied from Glencore's DRC operations for an initial term of up to $4\frac{1}{2}$ years on a tolling basis, with Glencore providing up to 100% of the capital required to recommission and expand the facility.

A May 4, 2020 feasibility study confirmed the Refinery's suitability to treat cobalt hydroxide and produce a high purity, battery grade cobalt sulfate. In conjunction with the feasibility study, discussions have been ongoing with potential automotive offtake partners as well as several lenders interested in providing a portion of the capital cost along with Glencore.



Site Rendering of the expanded First Cobalt Refinery

Sodium Management

Owing to the use of sodium hydroxide in the proposed process flowsheet, effluent from the refining process would have an elevated concentration of sodium. There are no federal or provincial discharge limits nor surface water quality objectives or guidelines for sodium but it was determined that the amount of sodium in the effluent could be toxic to aquatic life. The study contemplates installing an established technological solution of evaporation, crystallization and offsite disposal to manage sodium content, which is a proven method but more expensive than other alternatives.

First Cobalt and its consultants identified several other solutions to manage the sodium that could significantly reduce capital and operating costs. Due to feasibility study time constraints, Ausenco incorporated an established treatment process and recommended that alternatives be assessed over the next few months.

The capital cost in the feasibility study for the selected method is US\$9.4 million representing almost 17% of the total capital cost. The operating cost associated with evaporation and crystallization is US\$0.85/lb of cobalt produced, representing 31% of the total operating cost. There is significant opportunity in other sodium management methods that were reviewed but not assessed in sufficient detail to be incorporated into the feasibility study.

Permitting Advancement

Three environmental approvals and a closure plan are required to operate the Refinery in Ontario. A current closure plan is on file with the Ontario Ministry of Energy, Northern Development and Mines (ENDM) and First Cobalt recently increased the amount of Financial Assurance held as cash by ENDM. An Air Environmental Compliance Approval (Air ECA) and an Industrial Sewage Works ECA remain in good standing. A Permit to Take Water (PTTW) is the third environmental approval and requires renewal from time-to-time. As the Refinery has not operated since 2015, the current PTTW has expired. A new PTTW application was submitted in March 2020, with the new permit expected within 6 months.

For the expansion scenario envisioned by this feasibility study, the Air ECA, Industrial Sewage Works ECA and the Closure Plan will all require amendment to reflect the new operating and environmental conditions. Work commenced in 2019 to collect baseline and other data in support of these ECA amendments. First Cobalt expects to be able to make an application for these ECA amendments before the end of 2020. Based on the feasibility work conducted to date, no hurdles have been identified which would compromise the approval of these applications. Indigenous Community and public consultation will be continuing throughout the ongoing scoping studies and the approval process.

Other Deliverables

The feasibility study assumed a cobalt recovery of 93%, based on a batch metallurgical testing and METSIM[™] modelling that yielded a 93.3% recovery. The Company and its advisors believe that recoveries in excess of 95% can be achieved through additional leach testing.

The phase 1 dry stack tailings design has 17 years of storage capacity whereas the financial model assumes an 11-year project life. The Refinery can continue operating indefinitely provided sustaining capital expenditures are made to maintain and replace parts and equipment over time. By extending the financial model for the entire 17 years of the phase 1 tailing design or the 34 years for phases 1 and 2, the NPV is expected to have a material increase.

In tandem with the feasibility study, the Company completed a prefeasibility level assessment of an early restart of the Refinery using existing permits and equipment to operate at 12 tpd. The resulting prefeasibility report was intended as a benchmark from which various restart scenarios could be assessed. Using the prefeasibility study as a benchmark, three scoping studies are underway to assess alternate early commissioning scenarios. Results will guide the Company's restart strategy to test the flow sheet and produce sample cobalt sulfate product for EV manufacturers.

About First Cobalt

First Cobalt owns North America's only permitted cobalt refinery. Cobalt refining is a critical component in the manufacturing of batteries for electric vehicles, consumer electronics and industrial applications. Cobalt is a critical mineral and forms a foundational piece of the next generation of the North American auto sector. First Cobalt also owns an advanced cobalt

project in the United States and controls significant mineral assets in the Canadian Cobalt Camp.

On behalf of First Cobalt Corp.

Trent Mell
President & Chief Executive Officer

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