



QUESTIONS AND ANSWERS

Question #1

Critical Minerals: How many critical minerals are included in the project, and what are the primary focus areas for these technologies (mining, mineral processing, pyro, and hydro)?

Answer #1

The projects can encompass a wide range of critical minerals as identified by the Government of Canada. While the specific number of critical minerals involved in each individual TEA study may vary, the scope includes any of the 31 minerals listed as critical.

The primary focus areas for the technologies to be evaluated under this contract are:

Mineral Processing, Hydrometallurgy and possibly some Pyrometallurgy

Given the broad and evolving nature of our R&D efforts, the specific critical minerals and the exact focus areas for each TEA study will be determined based on the needs of ongoing and future projects.

Question #2

Flow Sheet Information: Is there an existing flow sheet, or do we need to create one based on lab results?

Answer #2

The development of process flow sheets will depend on the specific TEA study being conducted. While there may be instances where an existing flow sheet is available as a starting point, the contractor will be responsible for preparing the Process Design Criteria and Process Flow Diagrams using the laboratory results, supplemented with information from technical reports on similar technologies/applications, and/or provisional estimates and assumptions based on the Contractor's experience. Design criteria will be reviewed and finalized in collaboration with the NRCan researchers to ensure alignment with project objectives and outcomes.

Question #3

Mineral Accounting: How many minerals should we account for in our analysis?

Answer #3

The number of minerals to be accounted for in each analysis will depend on the specific requirements of the TEA being conducted. The scope of each study will be defined based on the R&D focus at that time.

Question #4

Scope of Work: Could you provide an overview of the scope of work for mathematical modeling and energy balance? Does the project cover mining, mineral processing, and extraction? Additionally, are multiple disciplines involved?



Answer #4

The scope of work for mathematical modeling and energy balance will depend on the specific process flow sheet and the requirements of the TEA being conducted. The projects focus on mineral processing and extraction technologies and do not cover mining activities. The involvement of multiple disciplines may be necessary depending on the complexity and requirements of each TEA study.

Question #5

Equipment Selection: Typically, equipment selection involves trade-offs. How many trade-offs should we consider based on the number of unit operations?

Answer #5

The number of trade-offs to consider during equipment selection will vary based on the number of unit operations involved in the process flow sheet for each TEA study.

Question #6

Techno-Economic Evaluation: Is the techno-economic evaluation limited to CAPEX and OPEX estimates, or should we consider other factors such as market status, NPV, and return on investment?

Answer #6

It is valuable to consider factors such as market status, Net Present Value, and return on investment in the techno-economic evaluation. These additional factors provide insights into the economic viability and feasibility of the processing technologies being assessed, aligning with the broader objective of advancing Canadian critical minerals projects towards commercialization. Therefore, including these factors in the evaluation would offer a more comprehensive understanding of the technology's potential economic impact.

Question #7

Project Timeline: What is the expected timeframe for completing the project? Is it intended to be finished within this fiscal year? There is a schedule till 2029. Is the time frame of the project is 500 hr/ year till 2029?

Answer #7

The expected timeframe to completion is aligned with the contract duration, which extends until March 31, 2025. While the primary contract period covers this timeframe, there is the option to extend the contract for additional years until 2029, as outlined in the project schedule.