

Company Announcement, March 26th, 2019

Engineering Studies Complete, Optimised Feasibility Update Advanced

HIGHLIGHTS:

- **Engineering studies to optimise civil design and construction complete**
 - **Civil construction costs reduced by 44% to US\$175M including indirect costs and contingencies**
 - **Optimised process flowsheet and process engineering design nearing completion**
 - **Capital and operating cost reductions currently being finalised drawing on highly successful optimisation program**
 - **Kvanefjeld on track to become a long-life, low-cost producer of rare earth products, critical to clean energy technologies**
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Greenland Minerals Ltd ('GML' or 'the Company') is pleased to update on the Kvanefjeld Project optimisation program. This builds on the April 2016 Feasibility Study and addresses both processing performance and civil design and engineering, to establish optimal capital and operating costs. The optimisation program has involved inputs from leading industry specialist groups.

Kvanefjeld has a number of unique attributes from the nature of the ore-bodies to the project setting in Greenland. This necessitated a tailored approach to establish the optimal development strategy, maximising project advantages and minimising costs.

Civil Design and Construction

Civil construction costs were previously a large component of the 2016 Feasibility Study capital cost estimate. A group of specialist engineering firms was tasked to review civil design optimisation and utilisation of local site aspects.

In August 2018 a multi-disciplinary team visited the site. The team of independent consultants were Tetra Tech and PND Engineers, constructors Nuna Logistics and China Communications Construction

Co (C-CCC). The information gained from the field trip provided input into optimisation design studies and cost estimation. New designs for the following areas were completed:

1. **Port Off-shore design – PND Engineers**
2. **Port On-shore design – C-CCC First Harbour Consultants**
3. **Civil Design – Tetra Tech**
4. **Civil Construction – Nuna Logistics**

Nuna Logistics provided updated civil cost information for the Kvanefjeld Project based on the site survey. The costs were reduced significantly while improving the overall design to better match updated project requirements. Nuna Logistics worked closely with other consultants to provide inputs into materials selection and construction methods. Their experience in executing projects in remote locations will contribute strongly to the success of the project. Nuna also has an excellent record of involving the local community.

The revised civil costs are now estimated to be US\$175M including indirect costs and contingency. This is an overall capital cost reduction of US\$138M (-44%) of the previous 2016 Feasibility Study. Cost reductions were primarily achieved through substantial reductions in civil earth works for site preparation (company announcement October 22nd, 2018), updated port design by specialist groups, and greater use of local materials.

Process Plant Optimisation

Process plant optimisation addressed both the concentrator circuit and refinery circuit. This was a technical collaboration with Shenghe Resources Holding Co Ltd and leading Chinese technical institutes. The work is nearing completion with validation of the new concentrator performance being made in current metallurgical test work. Major improvements to the performance of both the concentrator (flotation) and refinery circuits have been achieved.

GML has completed an updated process engineering design of the concentrator which includes the production of a high-grade concentrate. Improvements to the refinery flowsheet are also being incorporated into an optimised process design.

The increase in concentrate grade will reduce the size of processing equipment required in the refinery.

Optimised Cost Estimation

GML will provide further updates on the capital and operating costs of an optimised version of the 2016 Feasibility study in Q2. The optimised update will incorporate the positive outputs from the technical collaboration with Shenghe Resources.

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ABOUT GREENLAND MINERALS LTD.

Greenland Minerals Ltd (ASX: GGG) is an exploration and development company focused on developing high-quality mineral projects in Greenland. The Company's flagship project is the Kvanefjeld Rare Earth Project (rare earth elements, uranium, zinc). A pre-feasibility study was finalised in 2012, and a comprehensive feasibility study was completed in 2015 and updated following pilot plant operations in 2016. The studies highlight the potential to develop Kvanefjeld as a long-life, low cost, and large-scale producer of rare earth elements; key enablers to the electrification of transport systems.

GML is working closely with major shareholder and strategic partner Shenghe Resources Holding Co Ltd to develop Kvanefjeld as a cornerstone of future rare earth supply. An exploitation (mining) license application for the initial development strategy was reviewed by the Greenland Government through 2016 -17 and was updated in 2018 following additional supporting studies.

In 2017-18, GML undertook technical work programs with Shenghe Resources Holding Co Ltd that improved the metallurgical performance and simplified the development strategy and infrastructure footprint in Greenland. This will enhance the project cost-structure and ensure that Kvanefjeld is aligned with downstream processing. In addition, the Company continues its focus on working closely with Greenland's regulatory bodies on the processing of the mining license application and maintaining regular stakeholder updates.

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Greenland Minerals Ltd will continue to advance the Kvanefjeld project in a manner that is in accord with both Greenlandic Government and local community expectations and looks forward to being part of continued stakeholder discussions on the social and economic benefits associated with the development of the Kvanefjeld Project.

Competent Person Statement – Mineral Resources Ore Reserves and Metallurgy

The information in this report that relates to Mineral Resources is based on information compiled by Mr Robin Simpson, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Simpson is employed by SRK Consulting (UK) Ltd ("SRK") and was engaged by Greenland Minerals Ltd on the basis of SRK's normal professional daily rates. SRK has no beneficial interest in the outcome of the technical assessment being capable of affecting its independence. Mr Simpson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Robin Simpson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in the statement that relates to the Ore Reserves Estimate is based on work completed or accepted by Mr Damien Krebs of Greenland Minerals Ltd and Mr Scott McEwing of SRK Consulting (Australasia) Pty Ltd. The information in this report that relates to metallurgy is based on information compiled by Damien Krebs.

Damien Krebs is a Member of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the type of metallurgy and scale of project under consideration, and to the activity he is undertaking, to qualify as Competent Persons in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 edition). The Competent Persons consent to the inclusion of such information in this report in the form and context in which it appears.

Scott McEwing is a Fellow and Chartered Professional of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Persons in terms of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 edition). The Competent Persons consent to the inclusion of such information in this report in the form and context in which it appears.

The mineral resource estimate for the Kvanefjeld Project was updated and released in a Company Announcement on February 12th, 2015. The ore reserve estimate was released in a Company Announcement on June 3rd, 2015. There have been no material changes to the resource estimate, or ore reserve since the release of these announcements.