

Company Announcement, September 3<sup>rd</sup>, 2018

## **Environmental Impact Assessment Report Lodged with Greenland Government**

### **HIGHLIGHTS**

- **Updated Environmental Impact Assessment report for the Kvanefjeld Project completed, and lodged with Greenland Government**
- **Follows extensive reviews by Greenland's Environmental Agency for Mineral Resource Activities (EAMRA) and their advisory bodies since draft EIA was submitted in late 2015**
- **Consistent and constructive dialogue with EAMRA and their advisory groups has provided guidance to effectively address reviews and recommendations**
- **EIA draws on contributions from many international, independent specialist consultancies to ensure a rigorous, thorough and objective evaluation of the Kvanefjeld Project**
- **Translations of EIA to Greenlandic and Danish commenced to prepare for public consultation phase**

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Greenland Minerals Ltd ('GML' or 'the Company') advises that the Environmental Impact Assessment for the Kvanefjeld Project has been lodged with Greenland's Environmental Agency for Mineral Resource Activities (EAMRA). The EIA is a thorough and comprehensive document with many contributing studies by internationally-renowned independent expert consultants.

The document has been prepared by GHD Consulting in conjunction with Orbicon. GHD brings in-depth, extensive experience mining industry experience, and Orbicon brings a deep understanding of Greenland environmental conditions and considerations.

The EIA will be reviewed in parallel to undergoing translation to Greenlandic and Danish in preparation for a public consultation period. There is strong familiarity with the EIA content and supporting studies within EAMRA and their advisory groups owing to a consistent and constructive dialogue since the draft EIA was lodged in late 2015. This interchange has guided additional technical studies and the expansion of datasets which have been incorporated into the EIA.

Senior company representatives will be in Greenland in early September to meet with government representatives to map out the timing of the public consultation period and follow-up steps.

## Background

Greenland's Mineral Resources Act requires that mining companies prepare an EIA assessment in connection with the development of any proposed mineral project. The aim of the EIA is to identify, predict and communicate the potential impacts of the planned mining project in all of its phases – construction, operations, closure and pos-closure. The assessment should identify mitigation measure designed to eliminate or minimize negative environmental effects.

The EIA for the Kvanefjeld Project has been prepared in accordance with *Guidelines for preparing and Environmental Impact Assessment (EIA) report for mineral exploitations in Greenland*. The terms of reference for the Kvanefjeld Project were approved by the Greenland Government in 2015, following a public consultation period, with comments from the consultation period consolidated in a subsequent White Paper. All stages of the EIA process have been developed with the involvement of stakeholders as much and as effectively as possible.

The draft EIA and Social Impact Assessment (SIA) were submitted to the Greenland Government in late 2015. Reviews of the EIA by the Greenland's Environmental Agency for Mineral Resource Activities and their advisory groups were then undertaken. A close dialogue between the GML and the advisory groups has since taken place in order to satisfactorily address recommendations that have seen additional studies undertaken and datasets expanded.

A visit to the Kvanefjeld Project area by representatives of Greenland's EAMRA and the Danish Centre for the Environment, along with key company consultants took place in 2017, as part of the review process.

The updated EIA has been collated and drafted by multinational independent consulting group GHD, drawing on significant contributions from Greenland specialist consultants Orbicon. The EIA has been drafted in parallel to the Project's SIA to ensure that the interplay between the environmental and social impacts of the Project are properly captured. The SIA was prepared by independent specialist consultants Shared Resources.

The Company will immediately commence translations of the EIA into Greenlandic and Danish in preparation for public consultation. Reviews by the Greenland Government of the updated EIA will occur in parallel with the translations to compress the schedule to public consultation. Additional environmental test work and monitoring is also on-going to ensure that the understanding of the impacts and baseline are continuously being improved.

## Contributing Specialist Consultants

There are many rigorous technical studies which serve as references to the EIA. These have been conducted by carefully selected, specialist independent consultants. Greenland Minerals is appreciative of the efforts of the following independent consultants who prepared and contributed to the EIA.



**GHD Pty Ltd** is a multinational technical professional services firm providing engineering, architecture, environmental and construction consulting and management services. GHD has extensive experience in performing environmental impact assessments for mining projects including rare earth elements projects. GHD played the lead role in the compilation of the EIA. In addition, GHD performed specific technical studies to assess site hydrology and hydrogeology.

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**Orbicon** is a well-respected Danish Consulting group with extensive experience in preparing Environmental Impact Assessments for Greenlandic mining projects. They are experts in gathering baseline environmental data in Greenland and understanding the natural environment. Orbicon has been working on the Kvanefjeld Project Since 2008. Orbicon performed numerous independent studies to determine the environmental impact of the project.

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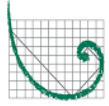
**Arcadis** is a specialist radiation, environmental and civil engineering consultant who provided technical reporting for the radiation aspects of the project. Arcadis is based in Canada with extensive experience in providing technical support to rare earth and uranium mining projects.

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The **Danish Hydraulic Institute** is a global leader in water science and engineering. They are headquartered in Denmark, and solve water problems around the world. DHI performed an evaluation of the impact of the project on the local fjords.

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**ERM** *The business of sustainability*

**Environmental Resource Management** (Pacific Environment) are an internationally-recognised consultancy with specific scientific expertise in environmental assessments. They provided predictive impact assessments for air quality for the project.

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**WOOD GROUP**

**The Wood Group** (formally AMEC Foster Wheeler) are a large independent consulting group with a wide international presence. They provide engineering services to mining and energy projects which includes the design of tailings facilities.

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**DTU** Technical University of Denmark

The **Technical University of Denmark** evaluated the impact of radiation on plant workers and reviewed radiation baseline studies. They are well recognised as Danish leaders in radiation assessments and technical consulting.

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**SRK Consulting** are an independent consulting company which provides services to the mining, oil/gas and water industries. The resource estimation competency was used by GML to provide the composition of waste rock stockpiles and local geology for the EIA. SRK was also retained to provide mine design services to add further detail to the Feasibility Study design.

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**BLUE  
WATER  
SHIPPING**

**Blue Water Shipping** is a Danish-based shipping company with extensive experience in providing shipping services within Danish and Greenlandic waters. Their experience and practical knowledge were applied to the Maritime Safety Study where they acted as lead independent consultants. Blue

Water Shipping also performed the logistics study to determine the most effective cargo transport method.

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**Tetra Tech Proteus** were the main contributing independent consultant for the Feasibility Study. Tetra Tech are a global engineering company based in North America. They have extensive experience in developing mining and infrastructure projects in cold climate environments. Tetra Tech performed the civil and process plant design for the Feasibility Study (2015, 2016 update).

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**Ramboll** are the largest consulting company in Denmark with extensive experience in a variety of infrastructure projects. They were engaged to perform the Feasibility Study design of the port facilities. The construction of the new port facilities is an area where Danish industry can competitively supply construction & design services.

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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 has been undergoing review by the Greenland Government through the latter part of 2016 and through 2017.

In 2017-18, GML continues to undertake technical work programs with Shenghe Resources Holding Co Ltd that aim to improve the metallurgical performance, simplify the development strategy and infrastructure footprint in Greenland, enhance the 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.

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### **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 12<sup>th</sup>, 2015. The ore reserve estimate was released in a Company Announcement on June 3<sup>rd</sup>, 2015. There have been no material changes to the resource estimate, or ore reserve since the release of these announcements.