

ToR for Environmental Impact Assessment, Kvanefjeld Multi-Element Project

July 2011



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1 INTRODUCTION

1.1 The EIA Process

On 9 December 2010 Greenland Minerals and Energy (“GME”) Ltd was given permission to conduct feasibility studies into the Kvanefjeld Multi-Element Project (“Kvanefjeld”, “the Project”) by the Bureau of Minerals and Petroleum (“BMP”). The feasibility studies, inclusive of an Environmental Impact Assessment (“EIA”) for Kvanefjeld, are a pre-requisite for obtaining an Exploitation Permit.

In January 2011 the BMP issued updated Guidelines for Preparing an EIA report for Mineral Exploitation in Greenland’ (“Guidelines”). This document has been prepared in accordance with these Guidelines.

An EIA is required to identify and analyse the potential environmental impacts of any proposed mining activities. The EIA to be prepared for the Kvanefjeld project will;

- Identify and analyse environmental impacts in all Project phases from before mine start to beyond closure,
- Help to develop measures to address and mitigate adverse environmental impacts,
- Help to preserve environmental values, and
- Help to realize sustainable development opportunities,

In accordance with the Guidelines the following issues will be covered in the EIA:

- An extended, non-technical summary
- An introduction which describes the mine project, its background and objectives
- A thorough description of the environment before mine start
- A description of the mine project with all phases from exploration to closure and beyond
- An assessment of environmental impacts of the project with an evaluation of alternatives compared to the preferred option
- An Environmental Management Plan (EMP) which describes how the identified impacts are dealt with
- An Environmental Monitoring Plan with a description of e.g. species, stations and parameters to be monitored
- Public consultations
- Conclusions
- References used in the EIA process and Glossary of terms and abbreviations

The EIA will cover the entire region that might be affected by the project. If the Project includes use of areas outside the mining area for e.g. roads, harbours, airstrips and shipping routes, effects of these will also be covered.

The purpose of this document, which has been prepared by Orbicon on behalf of GME, is to provide a detailed plan of the Environmental Impact Assessment (EIA) process for Kvanefjeld for consideration by the BMP.

A number of other studies and assessments, for example a Social Impact Assessment ("SIA") and a Bankable Feasibility Study, will be carried out during 2011 and 2012 in order to finalise the design and prepare applications for the permits and licences that will be required to develop the Project.

1.2 The Project

In 2007, Greenland Minerals and Energy (GME) A/S acquired the licence to explore the Kvanefjeld project area. GME A/S is a subsidiary of Greenland Minerals and Energy Ltd, an Australian company listed on the Australian Securities Exchange. Greenland Minerals and Energy Ltd owns the majority of the shares in GME A/S.

The Project area is located in South Greenland approximately 10 km from Narsaq and approximately 35 Km from Narsarsuaq. The main commodities of interest in the Kvanefjeld ore-body are rare earths elements (REEs). There are also sufficient levels of uranium and zinc in the orebody to produce commercially viable by-products.

The Project includes the development of an open pit mine, a processing plant, a port, mine accommodation, tailings facility and roads connecting the parts of the project.

1.3 Scoping workshops

The first step in the preparation of an EIA is a scoping phase.

As the public should be involved throughout the EIA process and informed continuously as the Project moves through the development phase and into production, stakeholders were consulted as part of the scoping phase.

As a part of the scoping phase for the Social Impact Assessment, four stakeholder workshops were held in Greenland. During these workshops GME took the opportunity to present and discuss planned EIA activities.

The workshops were held as follows:

- on 30 March 2011 in Qaqortoq;
- on 31 March 2011 in Narsaq; and
- on 4 and 5 April 2011 in Nuuk.

The objectives of these workshops were to present the Project to participants and to receive input from the stakeholders on issues to be covered in the SIA, and EIA, processes. A brief project description of the project as well as the Stakeholder Engagement Plan can be found in Annex 1 and 2 respectively.

Prior to the holding the workshops, the methodology for the workshops and the list of stakeholders invited to participate were approved by the BMP. The key findings from the workshops were presented to the BMP in Nuuk on 7 April 2011.

1.4 The Terms of Reference

The Terms of Reference (“ToR”) for the EIA of the Kvanefjeld project incorporate the results of the scoping phase and contain the plan for the preparation of the EIA.

Comments and input from the stakeholders received during the workshops have been incorporated in these ToR.

The ToR also incorporates information from the following documents:

- Project Brief for the Kvanefjeld Multi-Element Project, March 2011;
- Prefeasibility Study, AMEC Minproc, December 2009;
- Infrastructure reports (Harbour Location and Design Study, Accommodation Study and Energy Supply Study), Niras, March 2011;
- “Preliminary Project Strategy – Kvanefjeld Multi-element Project” by Coffey Natural Systems September 2009; and
- “Socio-economic Desktop Study for the Kvanefjeld Multi-element Project” by Grontmij Carl Bro July 2010.

2 REGULATORY FRAMEWORK

2.1 The political situation in Greenland

Greenland is a self-governing country under the Danish Kingdom. On 21 June 2009, Greenland assumed self-determination with responsibility for self-government of judicial affairs, policing, and natural resources. This followed a referendum on greater autonomy, which was approved on 25 November 2008. Previously, Greenland operated under a combined Greenlandic and Danish government, having been granted “home rule” by Denmark in 1979.

With the introduction of “self-rule” Greenlanders were also recognised as a separate people under international law. Denmark maintains control of foreign affairs and defence matters. Two Greenlandic elected representatives take part in the Danish Parliament.

The Greenlandic Parliament, Inatsisartut (the legislative power and assembly), is put together by 31 members elected by Greenlandic people for a four-year term meeting through sessions twice a year. A Premier is elected by Inatsisartut. The Greenlandic Cabinet is put together to form nine ministries by the elected Premier. The ministries, Naalakkersuisut, form departments which are run all year round. Inatsisartut works out laws and appropriations that Naalakkersuisut must conform to and also supervises Naalakkersuisut’s activities (www.nanoq.gl).

In 2009 18 municipalities were merged into 4 large municipalities; Qaasuitsup Kommunia, Qeqqata Kommunia, Kommuneqarfik Sermersooq, and Kommune Kujalleq. The municipalities have these following fields of responsibilities: Culture and education, social and health, economy and taxes, engineering, housing and environment (www.sermersooq.gl and www.kanukoka.gl).

Narsaq is part of Kommune Kujalleq.

Greenland is a member of the Nordic Council and Nordic Council of Ministries. This membership, together with other Nordic Countries and autonomous regions, facilitates parliamentary cooperation among the members particularly in relation to nature and environmental issues.

The Nordic Council has prepared an Environmental Action Plan, 2009-2012 which focuses on climate change, the use and discharge of hazardous chemicals, the protection of marine ecosystems and the protection and utilization of biological diversity.

Greenland is also member of the Inuit Circumpolar Council ("ICC") and has been a member of the Arctic Council since 1996.

2.2 Legislation in Greenland

This section lists the regulations and guidelines relevant for the project, particularly for the issues and areas of interest for the Environmental Impact Assessment.

The main legislation under which this project will be developed and operate will be the Greenland Parliament Act no. 7 of 7 December 2009 (the Mineral Resources Act) which came into force on January 1, 2010. This Act regulates mineral resources and mineral resource activities.

In Greenland nature conservation and environmental regulation are administrated in accordance with the Nature Protection Act (Landsting Act no 29 of 18 December 2003 on Protection of Nature) and the Lov nr. 850 af 21. December 1988 for Grønland om miljøforhold m.v (Act number 850 of 21 December 1988 for Greenland regarding environmental matters). The relevant paragraphs of the new Mineral Resource Act are in general agreement with these two Acts.

In addition, the following international guidelines and standards will be included in the assessment.

UN conventions:

- UN Recommendations on Transport of Dangerous Goods;
- International regulations and Codes of Practice concerning maritime transport of dangerous goods including Conventions (e.g. SOLAS 1974, MARPOL 73/78 and STCW Conventions);
- Convention for the Protection of the World Cultural and National Heritage (UNESCO / World Heritage Convention); and
- United Nations Framework Convention on Climate Change.

International Atomic Energy Agency Safety Standard:

- Occupational radiation protection in the mining and processing of raw materials, IAEA Safety standards series No. RS-G-1.6, Vienna 2004. 95 p. (supersedes IAEA Safety Series No. 26); and
- Establishment of Uranium Mining and Processing Operations in the Context of Sustainable Development, IAEA Nuclear Energy Series No. NF-T-1.1.

3 BRIEF DESCRIPTION OF THE PROJECT

The Project will consist of an open pit mine, a processing plant, a port, mine accommodation, a tailings facility and roads connecting the parts of the project.

GME is considering two potential scenarios with locations for the accommodation facility, processing plant and port. One scenario is construction of the processing facilities within the Narsaq valley and a new port immediately to the north of Narsaq in Narsap Ilua (West). The other scenario is construction of processing facilities approximately 15 to 20 km northeast of Narsaq and a new port to the east of Illunguaq opposite Nunarsarnaq (East). Figures 1 and 2 illustrate the two scenarios (East and West).

Significant further investigation and community consultation and engagement will be required before the preferred location of these facilities can be identified.

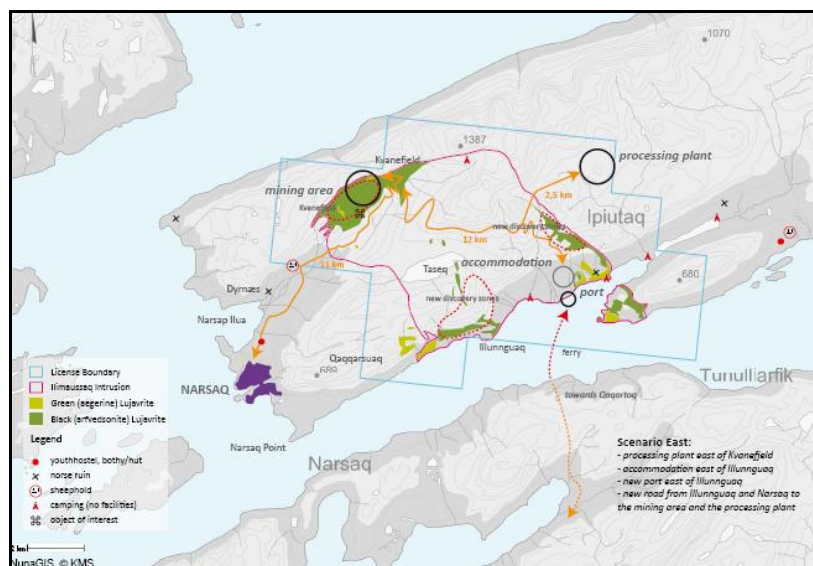


Figure 1: Scenario East

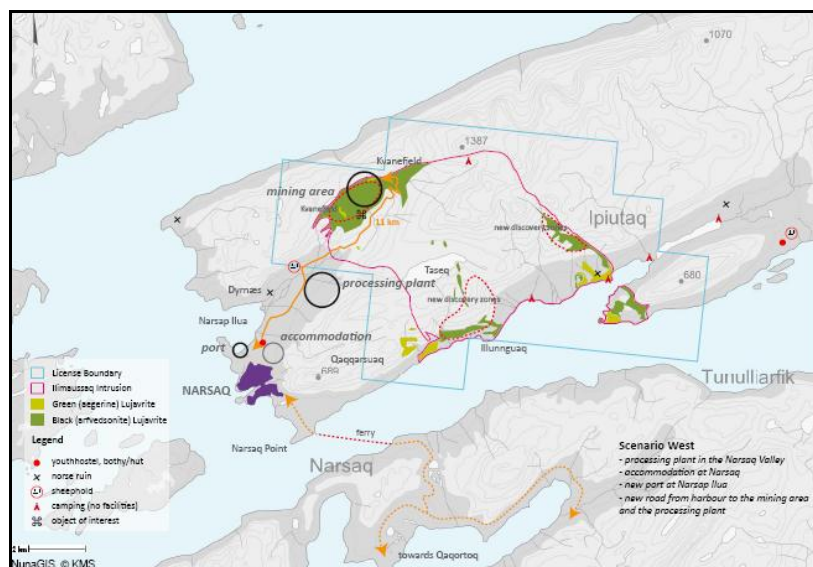


Figure 2: Scenario West

The main components of the project are:

- **The mine**
 - An open pit mine, from which the ore is extracted
- **The processing plant**
 - Where metals are extracted from the ore using hydrometallurgical techniques to produce saleable products
- **The tailings facility**
 - Where residues from the processing plant are securely stored
- **The port**
 - For ships delivering supplies to the mine and transporting products from Greenland to the Company's customers
- **The accommodation**
 - For mine workers when working at the mine
- **Associated infrastructure**
 - To ensure power supplies, effective communications and safe access to the mine

3.1 The mine

The plan is to locate the mine at Kvanefjeld on the Ilimaussaq Intrusive Complex approximately 10km from the town of Narsaq and approximately 35 km from Narsarsuaq in southern Greenland.

3.2 The processing plant

The company is considering alternative locations for the processing plant. It is currently expected that the plant will operate for 365 days per year and it is proposed that the plant will be designed to treat 7.2 to 10.8 million tonnes per year of ore.

The main mineral within the ore contains all of the potentially saleable products and the purpose of the processing plant is to extract these products from this mineral. The feasibility of various metallurgical processing options for extraction of saleable products is being assessed. Test work has identified that a process of leaching, performed under pressure, effectively removes uranium from the ore and allows for the subsequent concentration, separation and recovery of REEs in a form that can be sold.

It is currently proposed that the processing plant will consist of sections for crushing, grinding, leaching, filtration, flotation, uranium extraction and for the concentration of REEs.

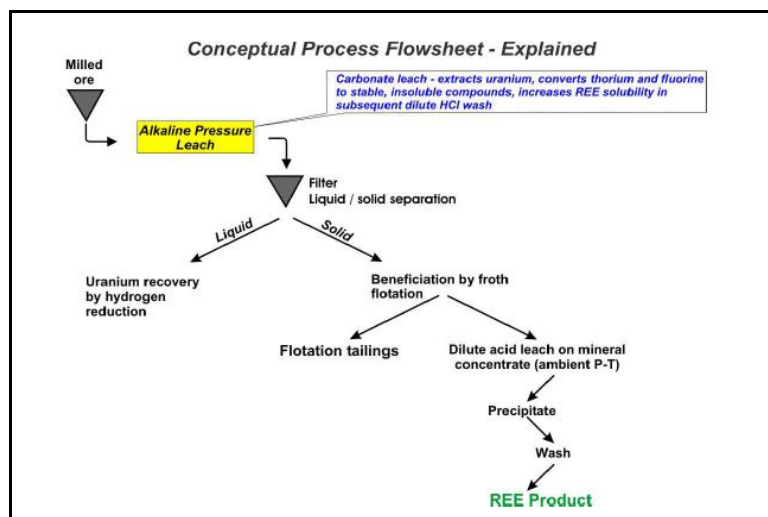


Figure 3: Flow Diagram

Water will be used in the processing plant and after it has passed through the plant it will be treated before either being recycled back to the plant or returned to the environment.

It is planned to place the saleable products in drums and containerise them at the processing plant and to transport the containers of drummed product from the processing plant to the port on trucks. The plan will then be to ship them to customers around the world.

In addition to the processing plant tailings, other waste streams may be generated and these will need to be recovered, treated and recycled if practical to do so. Otherwise they can be diverted to the tailings storage facility. While these potential waste streams have yet to be identified, they may include, for example:

- Flotation tailings prior to the Carbon Pressure Leaching;
- Residues from REE acid extraction and precipitation circuit;
- Drainage from the mine and waste rock stockpile.

3.3 The tailings storage facility

The material left over once it has passed through the processing plant is called tailings (a mixture of fine crushed rocks and water). The majority of the sulphides, the uranium, the thorium, the fluorine and the rare earth elements will all have been removed or stabilised by this stage in the process.

The tailings storage facility will store the wet tailings from the processing plant. A number of alternative locations for the tailings storage facility, e.g. valley deposition, lake deposition and deposition in the fjord system/deep sea, are being evaluated. The location of the tailings storage facility will be influenced by environmental considerations and by the chemistry of the tailings.

3.4 The port

The port facilities will consist of a wharf for ships up to 32,000 DWT (Dead Weight Tonnes) and a service wharf for receiving equipment and products with a smaller capacity. The port will also have storage facilities for saleable products and ship loading facilities. GME is considering alternative locations for the port as indicated in Figures 1 and 2.

3.5 The accommodation

The accommodation will include a canteen, a laundry and opportunities for leisure and spare time activities. GME is considering alternative locations for accommodation as indicated in Figures 1 and 2.

3.6 Other infrastructures

The main elements of infrastructure to be provided by the project will be:

- Roads from the port to the mine, processing plant and other items of infrastructure
- A source of power, fossil fuel fired initially and then hydro-power
- Water supply and storage for the processing plant, potable water and fire protection
- Buildings and support facilities including accommodation
- A helipad for staff and emergency medical evacuation
- Heating and heat recovery
- An IT and telecommunication system
- Sewage and waste management

3.7 Expected workforce

During the construction phase, GME expects a workforce up to 2000 people at the maximum. The construction period is expected to run for approximately 2 years.

During operations, GME estimates a total workforce of 700 people and approximately a third to be recruited locally from within Narsaq (PFS, 2009). The optimal rotation scheme(s) will be discussed and agreed during the SIA process and further if needed in order to maximise the amount of local workforce.

4 THE EIA PROCESS

4.1 Approach to the EIA

Orbicon have produced this document at the request of GME. GME will continue to engage suitably experienced and competent advisors to assist in the completion of the EIA once the ToR have been approved. External international and local experts will be involved in the analysis of specific matters such as radiation effects, ecology, hydrology and geochemistry.

The Guidelines set out the framework for, the contents of, and the minimum level of baseline information required for an EIA.

During the planning and development of the EIA process, a number of references and sources will be considered in order to achieve international mining industry best practices for the EIA. These sources will include, amongst others;

- International Finance Corporation and World Bank Guidelines including the Equator Principles
- European Commission – Reference Documents on Best Available Techniques
- Arctic Council – Arctic Environmental Protection Strategy [EIA Guidelines 1997]
- Relevant Danish institutions such as NERI, GEUS and the DEA
- Arctic Council - Working groups
- United Nations – for example the Framework Convention on Climate Change
- SLiCA
- The International Council on Minerals and Metals (ICMM),
- The International Atomic Energy Agency (IAEA), and
- The International Reporting Initiative for Extractive Industries

In addition, knowledge and experience developed in Greenland will be utilised when evaluating and assessing the local environment and the impact of project activities.

The EIA will be based on a participative approach, involving the stakeholders as much and effectively as possible at all stages of the process. A high degree of communication will be a significant feature of the entire process.

Reference will be made to the Greenland Water Quality Guidelines for freshwater and seawater, developed in 2011. As Greenland has not yet developed guidelines that describe standards for environmental contaminants, dust and noise guidelines from sources outside Greenland will be considered in the process of establishing standards for environmental contaminants, dust and noise. Approval will be sought from the BMP prior to using guidelines from outside of Greenland.

4.2 Scoping phase

The initial assessment of the environmental, and social, issues likely to arise from the implementation of the Kvanefjeld Project was first discussed and reported in the “Preliminary Project Strategy – Kvanefjeld Multi-element Project” by Coffey Natural Systems in September 2009.

A second study, the “Socio-economic Desktop Study for the Kvanefjeld Multi-element Project” was carried out by Grontmij Carl Bro in July 2010.

The main environmental issues identified by the above studies for the project can be summarised as follows:

- Effects of discharges to water (surface waters, fjords and groundwater) including stormwater runoff from disturbed areas (such as the waste rock dump) and discharges from the open pits, process plant and the TSF.
- Potential for contaminants to enter the food chain (eg fluorine, heavy metals and radionuclides of concern such as radium).

- Management of biodiversity issues (terrestrial and aquatic), including the presence/absence of rare and/or threatened species.
- Effects of atmospheric emissions such as radon gas, dust, combustion products and other gaseous emissions.
- Effects of radiation from radioactive sources within the project area.
- General waste management.
- Where to safely deposit the tailings in a short and long term perspective.
- The possibility of alkaline drainage, that has to be neutralised.
- Rehabilitation of areas disturbed by the project and decommissioning of the tailings management system.

The significance of these will vary between construction and operational stages of the project. For example, downstream sedimentation is likely to be of more concern during construction, although it will remain an issue throughout the life of the project. Destruction of any significant habitat or sites of archaeological/cultural significance, if present, would be associated primarily with initial clearing works during construction. In contrast, potential impacts on downstream water quality due to poor quality water discharges would continue beyond construction and may encompass both the entire operational life of the mine and a considerable period after closure.

In March 2011, a Strategic Environmental Assessment workshop was held in Perth, Western Australia. The workshop was attended by representatives of Grontmij and Orbicon and the social and environmental aspects of the project were assessed. The outcome of the workshop formed the basis of a "Project Brief", which described the project in lay or non-scientific terms.

The next step was to commence the Stakeholder Engagement process. Four stakeholder workshops were conducted as part of the Social Impact Assessment;

- on 30 March 2011 in Qaqortoq,
- on 31 March 2011 in Narsaq, and
- on 4 and 5 April 2011 in Nuuk

During these workshops GME took the opportunity to present and discuss planned EIA activities.

Prior to holding the workshops, the approach to the workshops and the list of identified stakeholders were both approved by the BMP.

Invitations to attend the stakeholder meetings were sent to all agreed stakeholders together with a Project Brief describing the project in lay or non-scientific terms. This was done with the objective of promoting more informed participation in the workshops themselves and to provide opportunities for stakeholders to ask clarifying questions of, and to express concerns to, company representatives and both the SIA and EIA consultants during the workshops. The Project Brief can be found in Annex 1.

Currently, GME is working with two generic development scenarios (a West scenario and an East scenario). The scoping phase took as its starting point these two scenarios. Stakeholders were invited to discuss opportunities and concerns that they may have had for each.

Based on responses from the workshops, common concerns and opportunities were identified. The ToR set out in this document have been developed in part from the responses from the workshops. This feedback has been supplemented from a number of sources including;

- the Guidelines (BMP),
- Kvanefjeld Multi-Element Project – Preliminary Project Strategy – Coffey Natural Systems, September 2008
- Previous baseline sampling – refer Section 5.1
- Preliminary environmental impact statement for the Kvanefjeld Uranium Mine, 1990.

Furthermore, Greenlandic research documents and studies such as SLiCA (Survey of Living Conditions in the Arctic) were used.

4.3 Environmental Study Program

The environmental study program will include a number of additional baseline studies as well as project related studies. All these studies will be carried out in 2011 and 2012.

Detailed proposals of each Environmental Study Program will be submitted to BMP for approval. These submissions will include details such as maps indicating sampling stations and study scope, description of timing of studies, parameters for measurement, methodology and equipment.

If needed, the environmental study programs will be updated in consultation with the BMP.

Data obtained from these studies will be submitted to NERI and will be stored so that it is available to the BMP and NERI.

Annual baseline sampling in the Kvanefjeld – Narsaq area has been carried out since 2007. The sampling has followed a protocol developed by the Danish National Environmental Research Institute (NERI), and has been approved by the BMP.

A summary of environmental baseline studies carried out from 2007 to present is provided in 5.1.

A summary of the additional studies required to complete the Environmental Study Program is provided in Table 1, Section 5.2, along with details of these studies.

4.4 Assessment and modelling

The background and project specific environmental studies will be assessed to conclude

- A comprehensive description of the environment and local use values
- Potential environmental impacts of the project
- Any areas of knowledge that are lacking and need ongoing study or further research.

4.5 Environmental Management Plan and Environmental Monitoring Program

An environmental management system (EMS) consistent with the internationally recognised continuous improvement model ISO14001:2004 will be developed.

The environmental management plan will be developed on the foundation of knowledge of the environment, local use values and potential environmental impacts.

The plan will propose mitigating measures developed to reduce or eliminate potential environmental impacts. A description will be provided of the anticipated effectiveness of these mitigating measures and where residual effects exist, these will be described. Residual effects will be supported by necessary monitoring methods and compensatory measures.

Monitoring will be described in terms of assessing the performance of mitigating measures, and quantifying project outputs to the environment including greenhouse gases.

This plan will describe in detail how the mitigating measures will be organised and who is responsible for carrying out mitigating and monitoring measures.

A plan for acquiring data will be included within the Environmental Monitoring Program.

The Environmental Management and Monitoring plans will be finalised in 2012, however they will be developed during the project lifetime, in consultation with the community and BMP.

4.6 Public consultation

Public consultation is essential throughout the EIA process so that community concerns can be integrated. A series of public consultation meetings will be held to present and discuss relevant information about the EIA process. Objections and comments will be considered by GME and feedback provided to the public.

Community consultation will be addressed within the EIA document and extensively discussed in a document complementing the EIA, the 'White Paper'. The White Paper will document public consultation comments, and explain how public comments have been incorporated into the EIA and subsequent management plans.

All data collected in connection with the EIA including baseline and monitoring studies are made available to the public.

Following review by the BMP, the final EIA report will be made available for public consultation for a minimum of 6 weeks.

4.7 Study area and temporal boundaries

The environmental studies cover the areas directly impacted by project, including options to the west and east. This will include ancillary facilities and will include downstream environments and the towns and settlements where the impacts and benefits are expected to be more noticeable.

The environmental studies will assess the following phases of the project:

- Construction phase;
- Operations phase, and
- Closure and rehabilitation phase.

Maps will be provided describing environmental study areas in detail within each Environmental Study Program proposal document. These proposals will be approved by BMP before commencement.

5 THE ENVIRONMENTAL STUDY PLAN

This Environmental Study Plan is drafted in accordance with the new EIA guidelines (January 2011) issued by the BMP and provides information about the planned contents of the EIA report and the approach to be taken when preparing the report. In addition to that, the plan provides a description of the environmental studies that have been carried out and the studies planned for the coming years which will form the basis for the environmental assessment of the mine project.

The Environmental Study Plan consists of three parts:

- Summary of environmental baseline studies previously commissioned by GME and approved by the BMP (from 2007 to date) (section 5.1)
- Summary of the additional studies to be implemented or sourced in order to complete the EIA (Environmental Study Program) (section 5.2)
- The proposed Table of Contents for the EIA report. (section 5.3)

Public consultation is essential throughout the EIA process so that community concerns can be integrated. Community consultation will be addressed within the EIA document and extensively discussed in a document complementing the EIA, the 'White Paper'.

5.1 Previous baseline sampling

Annual baseline sampling in the Kvanefjeld – Narsaq area has been carried out since 2007, to study and document the natural levels of heavy metals, radioactivity and other elements. The sampling has followed a protocol developed by the Danish National Environmental Research Institute (NERI), and has been approved by the BMP and has included fresh and saltwater, sediment, lichens, soil, leaves, grass, fish and mussels.

The baseline sampling in 2007 – 2010 mainly took place in the Narsaq Valley and the adjacent areas because this was where it was believed that the mine facilities would be constructed with the processing plant situated in the Narsaq Valley, accommodation at Narsaq, a new port constructed at Narsaq Ilua (Narsaq Bay) and new roads connecting the harbour, the mining area and the processing plant. This overall mine layout has subsequently been named 'Scenario West'.

The number and position of sampling stations, which have also been approved by NERI, covers the entire coastline as well as rivers, lakes and terrestrial area within the area of the Scenario West plus a reference station further away (Figure 3). All the collected water samples have subsequently been analyzed by NERI and Risø National Laboratories while the other samples are stored in a freezer at NERI. The results of the sampling have been documented in a number of reports and notes listed below.

List of environmental baseline studies already undertaken in Kvanefjeld – Narsaq area

2007

Kvanefjeld project, Greenland. Report on the environmental baseline sampling, September 2007. Orbicon October 2007. 33 pp

Polonium-210 in environmental samples collected in 2007 from the Kvanefjeld area in Greenland. Risø National Laboratory. January 2008. 2 pp.

Kvanefjeld water 2007. National Environmental Research Institute. Test Report No. 236. February 2008.

2008

The Kvanefjeld Multi-element Project, SW Greenland. Report on the environmental baseline sampling. August 2008. Orbicon March 2009.

Polonium-210 in environmental samples collected in 2008 from the Kvanefjeld area in Greenland Radiation Research Division. Risø DTU. March 2009. 2pp

Kvanefjeld water 2008, Test report no. 289. National Environmental Research Institute January 2009. 3 pp.

2009

The Kvanefjeld Multi-element Project, SW Greenland Report on the environmental baseline sampling, August 2009, Orbicon, October 2009. 15 pp

Radioactivity in water sampled in 2009 from Narsaq area, Greenland. Risø national Laboratories. 3 pp.

Kvanefjeld water 2009. Test report no. 344. National Environmental Research Institute. 9 pp

2010

Analyses of radon-222 and radium-226 in samples of Taseq lake water collected August 2010. Risø National Laboratories. 1 pp

Kvanefjeldet baseline 2010, Greenland. Report environmental baseline sampling, August 2010. August 2010

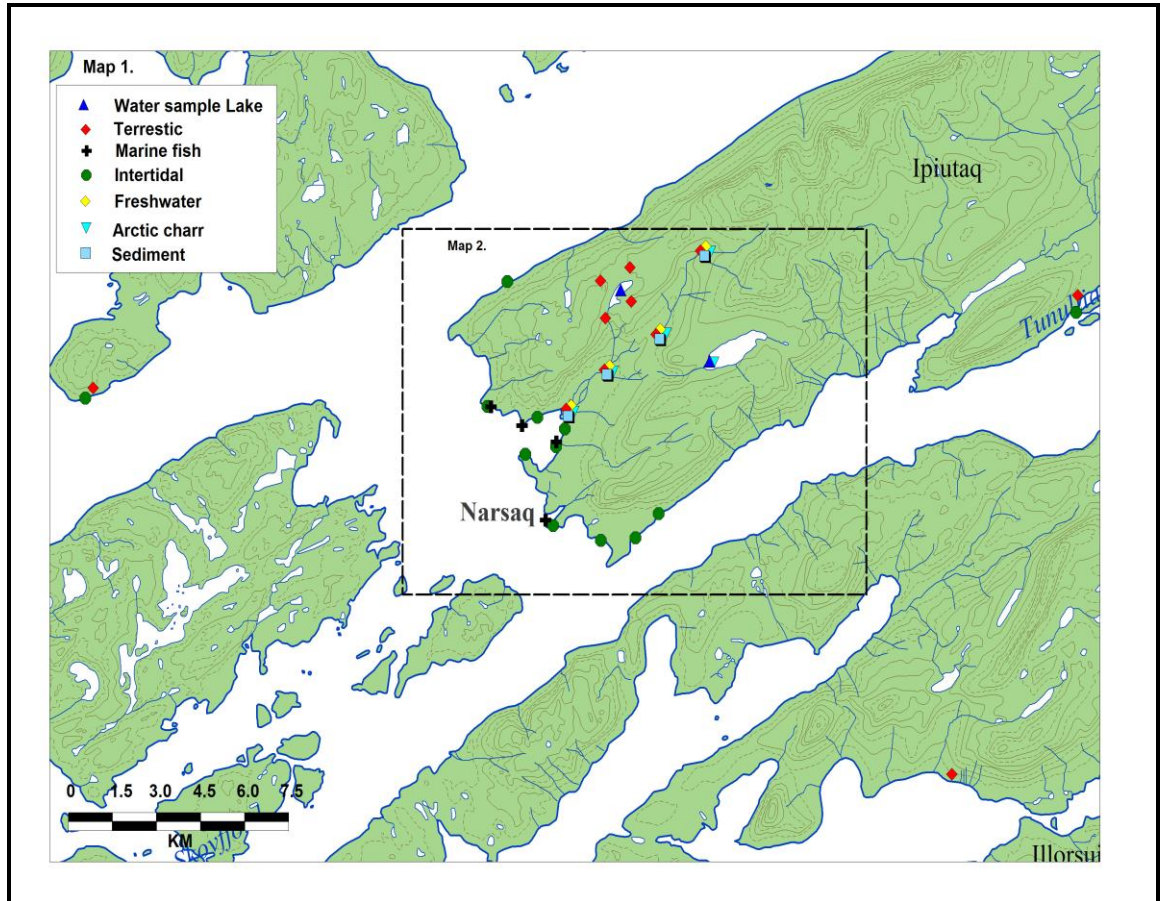


Figure 4: Sampling stations for the 2007 – 2010 baseline studies

5.2 Additional studies to be implemented

Table 1 provides a summary of the additional studies that are proposed for the EIA. This includes a number of additional baseline as well as project related studies. All these studies will be carried out in 2011 and 2012 so that the results can feed into the EIA report.

Each study is summarised with an objective, approach, schedule and final outcome.

Detailed proposals of each Environmental Study Program will be submitted to BMP for approval. Detail will include maps indicating sampling stations and study scope, description of timing of studies, parameters for measurement, methodology and equipment.

If needed, the environmental study programs will be updated in consultation with the BMP.

Table 1: Summary of additional studies required

	Study	Schedule
1	Additional Environmental baseline sampling	2011 and 2012
2	Baseline dust and ambient air emission monitoring	2011 and 2012
3	Assessment of Arctic char populations in project area	2011, in connection with the environmental baseline sampling
4	Dust and ambient air emission dispersal modelling	2012.
5	Mine Waste Geochemical Characterisation and ecotoxicological testing of leachate waters from tailings	A detailed testing protocol will be forwarded to the BMP in 2011
6	Hydrology and water balance	2011 and 2012.
7	Drinking water study	2011.
8	Noise study	2012.
9	Impact of hydrocarbon spills	2012
10	Local use	2011.
11	Archaeology	2011

The details of each study is presented in the following study plans.

1. Additional Environmental Baseline Sampling

Objective:

To compile further data to characterise the soil, water and lake bottom sediment chemistry of all potential sites for project related infrastructure such as tailings (lake, marine & terrestrial), and to collect environmental baseline sampling from locations at 'newly proposed' Scenario East.

Approach:

Sampling of specific biological specimens as well as soil, water and sediment according to NERI sampling protocol.

Collect data of the chemical characteristics of soil, rock, water and sediments including the natural background radiation (direct radiation and radon gas fluxes).

This proposal will also include further data collection from Taseq as well as initial data collection at one or two sites which could candidate for marine tailings disposal.

The sampling program will include the following types and number of stations:

- Terrestrial: 18 stations
- Freshwater: 6 stations
- Marine: 3 stations
- Inter-tidal: 6 stations

Outcome/ deliverables:

Report summarising baseline results from 2007 to completion. Collection of samples stored at NERI for later analysis if required.

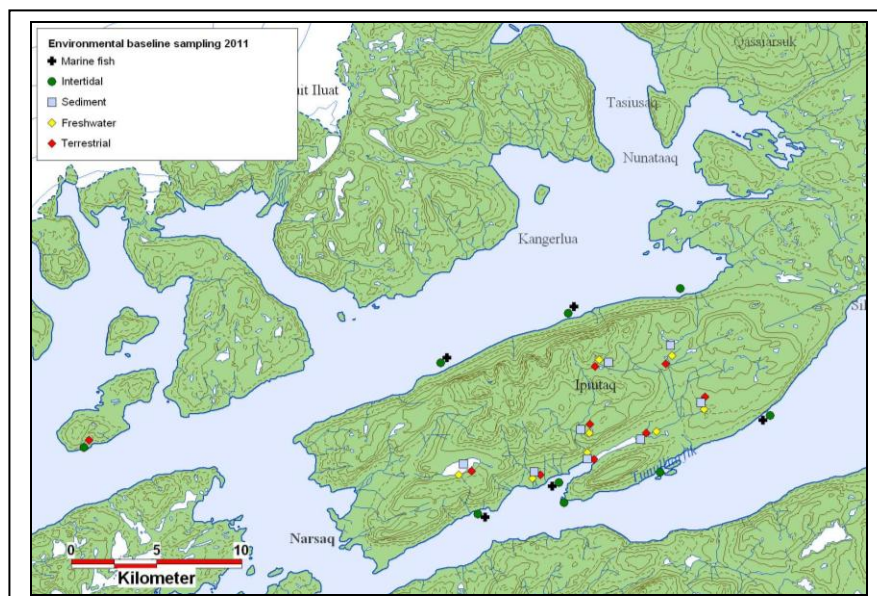
Study report will be a key reference in providing a comprehensive description of the environment before mining, which is essential to assessing potential environmental impacts and designing methods of mitigation.

Schedule:

A detailed proposal including maps with the position of sampling stations and lists of items to be collected will be forwarded to the BMP shortly.

Sampling will commence in 2011 and conclude in 2012.

*Baseline studies have been completed from 2007 to present in scenario east.



2. Baseline Dust and Ambient Air Emission Monitoring

Objective:

To compile background data of ambient concentrations of air pollutants, including particulate matter (PM).

Approach:

A permanent monitoring station for PM₁₀ will be established at Narsaq town, with filter and real-time measurements continuing after the baseline period.

The following data will be collected:

- PM₁₀ filter samples (24-hour and 14-day)
- PM₁₀ continuous monitoring (hourly)
- NO₂, SO₂, O₃, NH₃ passive samplers (monthly)
- Dust deposition (monthly)
- Element composition of PM₁₀ and dust deposition samples by PIXE (Proton Induced X-ray Emission)
- Radionuclides in dust and radon in air.

Monitoring station locations during baseline monitoring period

- Narsaq town
- Climate station Kvanefjeld
- Sheep Farm
- Regional background location, to be selected
- Additional locations for passive samplers.

Outcome/ deliverables:

Report summarising baseline results.

Study report will be a key reference in providing a comprehensive description of the ambient environment before mining.

Ambient conditions during various weather conditions will assist in air emission modelling. Information will be an essential reference assessing potential environmental impacts and designing methods of mitigation.

Schedule:

A detailed proposal including maps with the position of sampling stations and lists of items to be collected will be forwarded to the BMP shortly.

Baseline measurement will continue for 3 months during summer of 2011 and 2012.



3. Assessment of Arctic Char Populations in Project Area

Objective:

To compile data on distribution and population sizes of Arctic char populations from all relevant unstudied rivers and lakes within the area covered by the various project layout options.

Approach:

Information on distribution of chars in lakes and rivers within the mine footprints of Scenario East will be collected through visual observation and fishing in rivers and lakes with fishing rods and through electro fishing.

Outcome/ deliverables:

Report summarising population distribution, and assessment of population sizes, supported by maps. The study will complement the arctic char study covering the mine footprint of Scenario West which was done in 2009.

Schedule:

The assessment will be carried out in 2011 in connection with the environmental baseline sampling.



4. Dust and Ambient Air Emission Dispersal Modelling

Objective:

To predict impacts on ambient air quality in areas surrounding the project, in particular work areas and residential areas.

Approach:

Modelling analyses most likely using the CALPUFF system will be carried out. The modelling will include all major emission sources. Deposition rates will be predicted based upon available hourly meteorological data. The modelling results will further be based on receptor locations.

Climate monitoring and studies conducted by GGL from 2010 to 2012 will be incorporated into models.

Study of background ambient air quality will be relevant to selection of standards and emission rates. Study conclusions will establish parameters for emission quality and monitoring methods.

Outcome/ deliverables:

Report including several scenarios including estimates of emission factors and rates. Supporting maps showing spatial distribution of predicted air quality will also be developed.

Predicted air quality will meet ambient air quality standards. These standards must be supported by BMP.

Schedule:

Final project layout and meteorological and topographic studies must be complete before the design of the modeling study can be finalised. A detailed proposal will be forwarded to the BMP for consideration.

Modelling will take place during 2012.



5. Mine Waste Geochemical Characterisation and Ecotoxicological Testing of Leachate Waters from Tailings

Objective:

To develop an understanding and assess any potential acid rock drainage and/ or metals leaching associated with waste rock/ lean ore and tailings from the Project.

To determine if water from the tailings pond is toxic to aquatic organisms (such as trout).

To assess the long term stability and rehabilitation capability of waste rock, tailings and regolith.

Approach:

The following test types are proposed:

- Acid-base accounting
- Shake-flask test
- Sequential extraction
- Toxicity test
- Total trace element content
- Full metal screening
- Radon release
- Humidity cells testing.

Outcome/ deliverables:

Report presenting and discussing results, suggesting management considerations if required.

Information will form a foundation of knowledge that will enable GME to assess potential environmental impacts and designing methods of mitigation such as tailings, waste rock dump design, monitoring and environmental management.

Schedule:

A detailed testing protocol will be forwarded shortly to the BMP.



6. Hydrology and Water Balance

Objective:

To characterise the hydrology of the Project area. This includes developing a conceptual understanding of the hydro-geological features of the project area and the pathways of potential contamination of aquifers and risk of transport of contaminants.

Approach:

A hydrological model will be developed for the Project area based on the ongoing stream flow measurements, historical data and physico-chemical measurements.

The model will be based on data collected from hydrological stations at major rivers and streams throughout Scenario East and West including Narsaq River.

Outcome/ deliverables:

Report discussing the hydrogeological features of the Project area, seasonal fluctuations and potential contamination risks from contaminant transport.

Schedule:

A detailed proposal including maps will be forwarded to the BMP shortly.

Measurements of water flow data will continue in 2011 and in early 2012.



7. Drinking Water Study

Objective:

To assess any risks the project may pose to the catchment area of Narsaq drinking water.

Approach:

A detailed description of Narsaq drinking water system and the hydro-geological features of the catchment area will be given.

It will be assessed if project activities, such as if tailings is deposited in Tasaq, could have an impact on the drinking water.

Outcome/ deliverables:

A report summarizing the hydro-geological features of the catchment area, and the risk of contaminant transport through the catchment.

Schedule:

A detailed proposal will be forwarded shortly to the BMP.

The study will be carried out in 2011.



8. Noise Study

Objective:

To characterise impact of the Projects major generators of noise.

Approach:

Model spatial distribution, intensity and frequency of noise from major sources such as blasting at mine site, the crusher and air traffic (helicopters and fixed winged aircraft) using the SoundPLAN program.

Outcome/ deliverables:

Noise model predicting the magnitude and extent of noise produced by the Project.

Schedule:

A detailed proposal will be forwarded to the BMP shortly.

The study will be carried out in 2012.



9. Impact of hydrocarbon spills

Objective:

To understand the impact oil spills may have on terrestrial, freshwater and marine ecosystems.

Approach:

Desktop study that compiles the existing knowledge in the field of impact of oil spills on Arctic ecosystems with special reference to the Narsaq area. A key source of information will be the NERI *Environmental Oil Spill Sensitivity Atlas for the South Greenland Coastal System*.

Outcome/ deliverables:

To understand the impact oil spills may have on terrestrial, freshwater and marine ecosystems and determine the most effective actions to minimise any impact or manage an incident.

Schedule:

The study will be carried out in 2012.



10. Local Use

Objective:

Documentation of local use of the Project area. The study will provide data that will facilitate resolving any conflicts between the Project and the present utilisation of the area.

Approach:

Interviews with relevant stakeholders, including fishermen, hunters and sheep farmers. The study will be carried out in close liaison and cooperation with the SIA team.

Outcome/ deliverables:

A report will be prepared that summarises the findings. Important fishing and hunting areas will be shown in maps.

Schedule:

The survey will be carried out in 2011.



11. Archaeology

Objective:

To document the presence of Inuit and Norse settlements within the area covered by Scenario East.

Approach:

Survey on relevant areas by staff from the Greenland Museum in Nuuk.

Outcome/ deliverables:

A report will be prepared that documents results of the field work. The position of Inuit and Norse settlements will be shown on maps and described in the text in relation to the Project area.

The importance of each settlement will be discussed. This report will supplement a similar study carried out in 2010 of the area covered by Scenario West.

Schedule:

A detailed testing protocol will be forwarded shortly to the BMP.



5.3 Proposal for a Table of Contents for the EIA report

The main report will commence with an Extended, non-technical summary (“the Executive Summary”. The Executive Summary will describe in short the project and a conclusion including preferred options compared to alternative solutions, important potential environmental effects, mitigating actions, decommissioning and remediation, uncertainties and public concerns. The Executive Summary will be presented in Greenlandic, Danish and English.

The structure of the rest of the report will follow the format proposed below:

1. INTRODUCTION
 - 1.1 Description of the Company
 - 1.2 Project setting (*regional environmental setting, including geography, geology, climate, local population, etc*)
 - 1.3 Background and objectives
 - 1.4 Timetable for construction, mine start and operation
 - 1.5 Legal and Regulatory Framework
2. EIA METHODOLOGY
 - 2.1 EIA aims and objectives
 - 2.2 EIA process
 - Environmental Study Plan
 - Baseline studies
 - Other sources of information
 - Impact assessment
 - 2.3 Public involvement
 - Public hearing
3. EXISTING ENVIRONMENT
 - 3.1 Physical Setting
 - Climate
 - Arctic
 - Wind direction and wind speed
 - Air quality including background Radon concentrations at different wind speeds and directions
 - Terrestrial
 - Geology
 - Topography
 - Soils
 - Geochemistry
 - Aquatic
 - Hydrology
 - Bathymetry
 - Water resources, including freshwater and seawater quality
 - Sea Ice
 - Radiation
 - Background radiation, radon levels

- 3.2 Living environment
 - Terrestrial flora and fauna
 - Aquatic ecology
 - Marine ecology
 - Biodiversity and protected areas
- 3.3 Land use, conservation and heritage
 - Mining
 - Tourism
 - Local inhabitants and their use of the area
 - Archaeology and cultural heritage
- 4. PROJECT DESCRIPTION
- 4.1 Objective of the project
 - Objectives
 - Project history
 - Mineral exploration
 - Research and engineering studies
- 4.2 Mining operations
 - Mining methodology
 - Mine design and plans
 - Mine blasting and explosives
 - Mine waste management
 - Water use and disposal
 - Mine Waste Water including potential alkaline drainage, and potential dissolution of fluoride and radionuclides

Processing operations

 - Mineralogy and metallurgy
 - Processing plant design
 - Residue disposal and storage facilities including potential alkaline drainage, and potential dissolution of fluoride and radionuclides
 - Product storage and handling
- 4.3 Supporting infrastructure and services
 - Port facility and shipping
 - Aeroplanes and airstrip
 - Helicopters and helipads
 - Mine vehicles and access roads
 - Gas and dust collectors and scrubbers including radon control
 - Energy demand and power supply
 - Water supply
 - Accommodation
 - Domestic waste disposal facility
 - Wastewater treatment facility
 - Workshops and stores
- 4.4 Post mining closure
 - Decommissioning of mine
 - Rehabilitation
 - Monitoring – i.e. Radon, radionuclides, fluoride

4.5 Construction and Start up

4.6 Project Timing

5. IMPACT ASSESSMENT AND IDENTIFICATION OF MITIGATION MEASURES

5.1 Impacts to the physical environment

Area impacted and possible landscape disturbed

Erosion

Hydrological changes of rivers, lakes and fjord

Qualitative and quantitative - impacts on freshwater and sea water including alkaline drainage, dissolved radionuclide and fluoride concentrations and any other chemicals from sources including mining, processing or tailings

Dust

Noise and vibrations

Light, heat and radiation

Gas emissions including greenhouse gases and Radon emissions

Fluoride (estimation of amount that will be dissolved from the mine, tailings and from waste rock deposits, demonstration of how excess fluoride can be removed from drainage water)

Radionuclides (estimation of amount that will dissolve from the mine, tailings and waste rock and demonstration of how radionuclides can be removed from the drainage)

Radon (estimation of the amount of radon that will evaporate from the mine, tailings and from the waste rock deposit; calculation of concentrations in the air in Narsaq and other places dependent on wind direction and speed)

Possible release of chemicals and radionuclides to the environment and the impacts hereof

Alkaline drainage (testing if there are any problems with that and if this is the case, give methods to mitigate any problems)

5.2 Impacts to the living environment

Impacts from ore, tailings and waste rock including evaporation of radon and potential impacts from alkaline drainage, and potential pollution from dissolved radionuclide and fluoride concentrations and any other chemicals

Removal or damage of vegetation and effects on possible carbon sinks

Disturbances of wildlife

Loss of habitats

Loss of biodiversity

Introduction of non-native species of flora and fauna

General impact on ecosystems

Creation of new habitats

5.3 Impacts to the land use, conservation and heritage

Hindrance of other land use

Increased demand on existing resources

Open up the area for other land use through major changes in infrastructure

5.4 Cumulative impacts

6. ALTERNATIVES CONSIDERED FOR THE PROJECT

6.1 Implications for preferred option

7. ENVIRONMENTAL MANAGEMENT SYSTEM

7.1 Company Environmental Policy

7.2 Environmental Management Plan (EMP) (to manage impacts for construction, operation, closure and post-closure) including risk assessment

- Implementation
- Management plans
- Procedures
- Responsibilities
- Training
- Incidents

7.3 Decommissioning and closure process

7.4 Compliance assessment, auditing, review, continuous improvement

7.4 Reporting on effectiveness of mitigation/ management

8. ENVIRONMENTAL MONITORING

8.1 Results of baseline studies

8.2 Parameters and species monitored

8.3 Calculations of greenhouse gas emissions

9. PUBLIC CONSULTATION

10. CONCLUSION

10.1 Summary of Proposed Project

10.2 Potential Significant Environmental Impacts

10.3 Mitigation/ management including mitigation of alkaline drainage, potential environmental contaminants including fluoride, radionuclides, and other chemicals

10.4 Decommissioning and rehabilitation

10.5 Uncertainties/ Public Concerns

11. GLOSSARY

12. REFERENCES/ AUTHORS

Appendices

#. Public consultation – White paper

Appendix 1: Project Brief

Introduction

This project brief describes the KVANEFJELD multi-element mining project. The proposed location of the project is in the south of Greenland near the town of Narsaq.

The main commodities of interest in the Kvanefjeld ore-body are rare earths elements (REE). Rare earths elements are speciality metals used in high technology applications such as mobile phones, rechargeable batteries, hybrid and electric cars, and wind turbines. There are also sufficient levels of uranium and zinc in the orebody to produce commercially viable by-products.

In 2007, Greenland Minerals and Energy (GME) A/S acquired the licence to explore the Kvanefjeld project area. GME A/S is a subsidiary of Greenland Minerals and Energy Pty Ltd, an Australian company listed on the Australian Securities Exchange. Greenland Minerals and Energy Pty Ltd owns the majority of the shares in GME A/S. In 2010 GME A/S' license to explore the Kvanefjeld project area was expanded to incorporate radioactive materials for the purposes of evaluating a multi-element mining operation.

Information gathered during the completion of these assessments and the development of the design for the project may lead to changes in the project brief.

Input from the various stakeholders including the local municipality and the Government of Greenland will be received during conducting of the SIA and EIA as well at the final hearing process and some aspects of the proposed Feasibility Study may be varied as a result of these comments. Subject to the necessary government approvals, a favourable result from the Feasibility Study and the various assessment processes and raising funds for project development, the construction phase of the project is expected to commence in 2013 and be completed in 2015.

The Project

The Kvanefjeld project will consist of an open pit mine, a processing plant, a port, a mine accommodation, a tailings facility and roads connecting the parts of the project.

GME A/S is considering two potential locations for the processing plant and port. The first option is the construction of processing facilities within the Narsaq valley and a new port immediately to the north of Narsaq on Narsap Ilua. The second option is the construction of processing facilities approximately 15 to 20 km northeast of Narsaq and a new port to the east of Illunnguaq opposite Nunarsarnaq. Significant further investigation and community consultation and engagement will be required before the preferred location of these facilities can be identified. Maps showing these two potential locations are below.

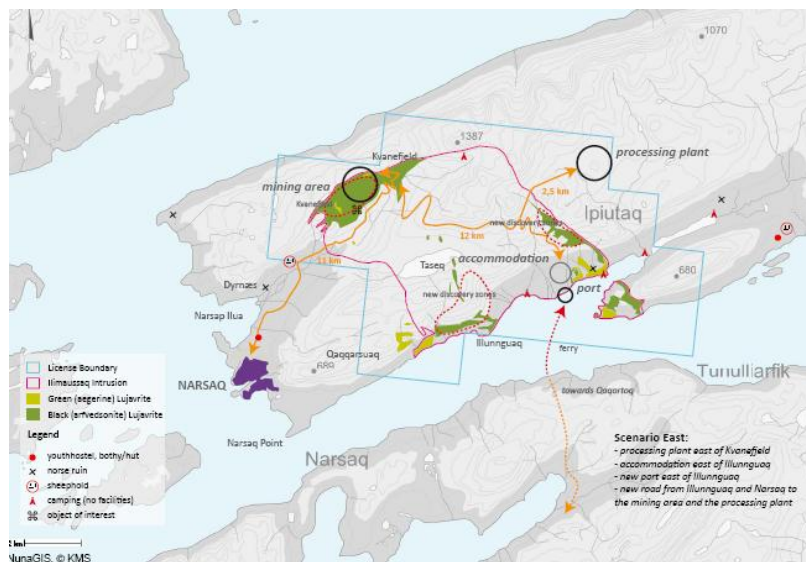


Figure 1 Scenario East

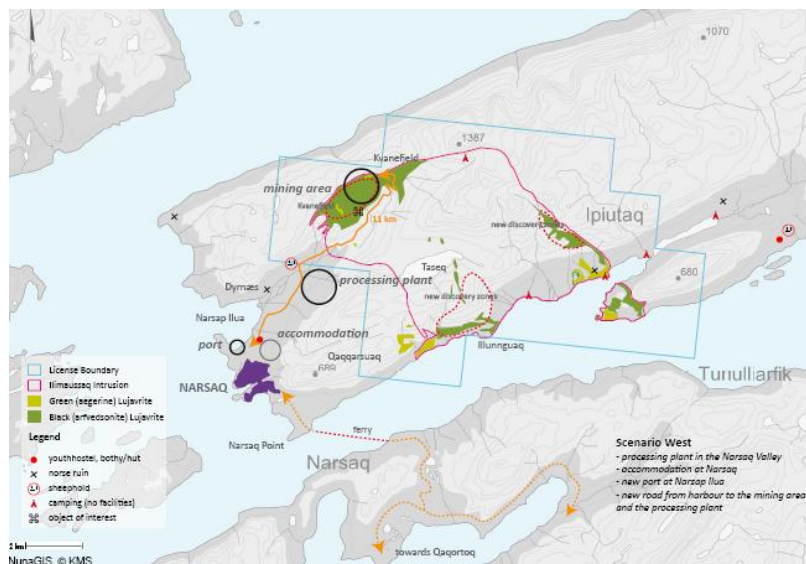


Figure 2 Scenarios West

It is planned to treat the Kvanefjeld ore by using an innovative carbonate pressure leach process which will generate products which can be sold to international customers. These saleable products are concentrates rich in valuable metals. It is expected that the concentrates will be drummed, containerised and transported to the port for shipping to customers around the world.

The proposed components of the Kvanefjeld project are:

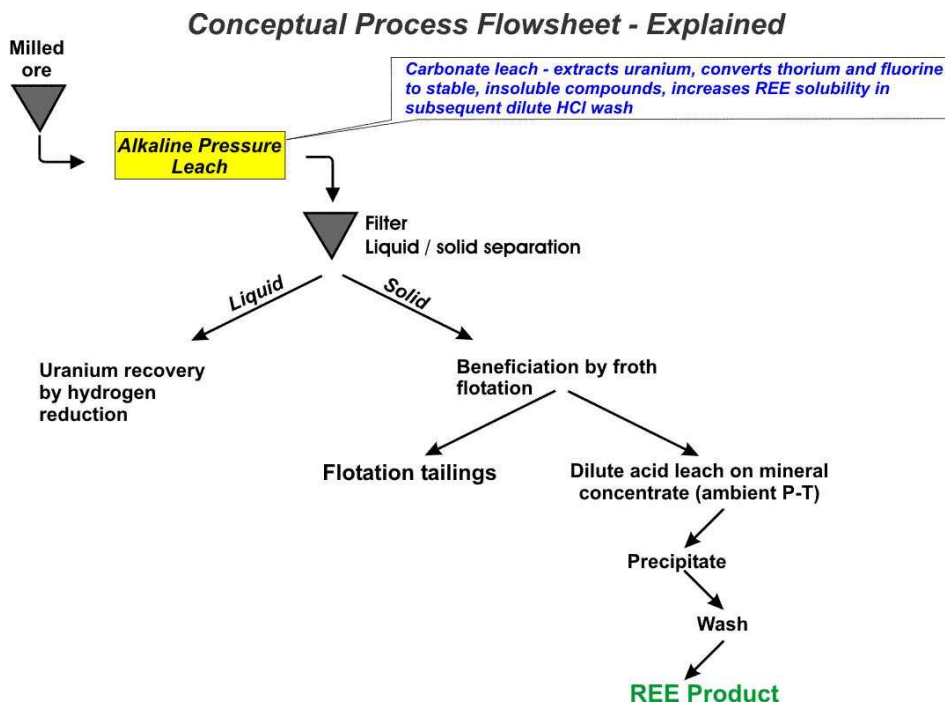
- The **mine** An open pit mine, from which the ore is extracted
- The **processing plant** Where metals are extracted from the ore to produce saleable products
- The **tailings facility** Where residues from the processing plant are securely stored
- The **port** For ships delivering supplies to the mine and transporting products from Greenland to the Company's customers
- The **accommodation** For mine workers when working at the mine
- **Associated infrastructure** To ensure power supplies, effective communications and safe access to the mine

The plan is to locate **the mine** at Kvanefjeld on the Ilimaussaq Intrusive Complex approximately 10km from the town of Narsaq and approximately 35km from Narsassuaq in southern Greenland.

The company is considering alternative locations for **the processing plant**. It is currently expected that the plant will operate for 365 days per year and it is proposed that the plant will be designed to treat 7.2 to 10.8 million tonnes per year of ore.

The main mineral within the ore contains all of the potentially saleable products and the purpose of the processing plant is to extract these products from this mineral. The feasibility of various metallurgical processing options for extraction of saleable products is being assessed. Test work has identified that a process of leaching, performed under pressure, effectively removes uranium from the ore and allows for the subsequent concentration, separation and recovery of rare earth elements in a form that can be sold.

It is currently proposed that the processing plant will consist of sections for crushing, grinding, leaching, filtration, flotation, uranium extraction and for the concentration of rare earth elements (**see flow diagram**).



Water will be used in the processing plant and after it has passed through the plant it will be treated before either being recycled back to the plant or returned to the environment.

It is planned to place the saleable products in drums and containerise them at the processing plant and to transport the containers of drummed product from the processing plant to the port on trucks. The plan will then be to ship them to customers around the world.

The tailings storage facility. The material left over once it has passed through the processing plant is called tailings (a mixture of fine crushed rocks and water). The majority of the sulphides, the uranium, the thorium, the fluorine and the rare earth elements will all have been removed or stabilised by this stage in the process.

The tailings storage facility will store the wet tailings from the processing plant. A number of alternative locations for the tailings storage facility, e.g. valley deposition, Lake deposition and deposition in the fiord system/deep sea, are being evaluated. The location of the tailings storage facility will be influenced by environmental considerations and by the chemistry of the tailings.

The port facilities will consist of a wharf for ships up to 32,000 DWT (Dead Weight Tonnes) and a service wharf for receiving equipment and products with a smaller capacity. The port will also have storage facilities for saleable products and ship loading facilities.

The accommodation will include canteen, laundry and opportunities for leisure and spare time activities.

The **main elements of infrastructure** to be provided by the project will be:

- Roads from the port to the mine, processing plant and other items of infrastructure
- A source of power, fossil fuel fired initially and then hydro-electricity
- Water supply and storage for the processing plant, potable water and fire protection
- Buildings and support facilities including accommodation
- A helipad for staff and emergency medical evacuation
- Heating and heat recovery
- An IT and telecommunication system;
- Sewage and waste management.

Benefits and impacts from the project

The project will contribute to the local and national Greenlandic economy mainly through the employment and by the payment of taxes.

The construction of the project and operating the mine and the processing plant will require a significant number of workers. Initial studies have indicated that approximately 700 employees will be required while the project is operating. Once the SIA and the Feasibility Study are completed a more accurate estimate of the number of employment opportunities will be available together with more information about the types of jobs and required skill levels. When employing people for these jobs priority will be given to residents from Greenland

One of the major benefits from the project is expected to be capacity building and knowledge transfer through training and education. Recruitment and training plans will be designed and implemented in close co-operation with the local authorities and interested groups.

In addition, the project is expected to create a number of business opportunities, for example the provision of goods and services in the form of local food (lamb and fish), laundry and cleaning services, rental of houses/rooms/hotel, IT support, support from local craftsmen, spare parts, boat chartering etc.

The development of infrastructure as well as the construction and operation of the mine may affect local hunting and fishing areas. The impact on the people using these areas and resources as well as other social issues related to the project (change of life style, migration, etc.), will be further studied and analysed in the process of the Social Impact Assessment.

GME A/S is committed to ensuring that the development of the Kvanefjeld project makes a sustainable contribution to the Greenlandic economy and to the well-being of its residents.

Environmental and Social Impact

The Environmental Impact Assessment (EIA) and the Social Impact Assessment (SIA) are a part of the project documentation that is required before consideration can be given by the Government of Greenland to the grant of permits for construction and operation of a new mine.

1 The Environmental Impact Assessment process

According to Greenlandic legislation several comprehensive environmental baseline studies have to be carried out before a company can obtain an exploitation licence to start mining. For the Kvanefjeld project, some baseline studies have commenced in the fjord, the rivers, the lakes and area around the planned mining area. These studies have been running in some cases for 4 years. As part of the EIA process the number of studies may be increased. The baseline studies will establish a detailed understanding of the environment prior to any disturbance related to mining. This information will be used in the process of designing the mine and the processing plant and for environmental monitoring when the mine is operating.

In addition, a comprehensive assessment of the impact of mining activity on the environment will be required. For this assessment, studies will be carried out on flora, fauna, the local climate, and water flow in the rivers.

All of this information will be compiled in a draft EIA Report, which will be made available for the public during a public hearing process. The EIA report will be finalised after the feedback received during the public hearing process has been considered and evaluated.

GME A/S has engaged the company Orbicon to assist in the preparation of the EIA. The EIA, once the comments from the public have been incorporated, will be an important document for the Greenlandic authorities to consider in the project approval process.

2 The Social Impact Assessment process

The SIA process includes identifying, analysing, monitoring and managing the social change process that will be initiated by the development of the project. Therefore, the SIA will be characterised by a high level of involvement of the local community and other stakeholders during the process of completing the assessment.

In order to have a proper understanding of the situation before development of the project and to help to manage the impact of the project and maximise the benefits of the project for the local community, it is very important that all stakeholders (e.g. the local community local interest groups, experts, fishermen, hunters, sheep farmers, the Greenlandic authorities and institutions) actively participate in the SIA process.

GME A/S has engaged the company Grontmij Carl Bro A/S to assist in the preparation of the SIA.

Between March and April 2011 initial consultation activities will take place. More consultation activities will take place along the SIA process and GME/AS will invite you to help us with your knowledge and insight to:

- Identify early in the process the main issues and concerns that need to be addressed in the SIA
- Participate in individual and group interviews to establish a social baseline study
- Optimize the opportunities created by the mining project development and minimize the negative impacts that may evolve (Impact and Benefit Plan)
- Participate in public hearing to discuss the data collected for the final SIA report
- Provide input to the development of the Impact and Benefit Agreement

Details about time and place for the consultations will be communicated to you in a timely manner.

The SIA, incorporating stakeholder feedback, will be an important document for the Greenlandic authorities to consider in the project approval process.

Do you need more information?

Please contact Ib laursen representing GME A/S if you have any additional questions

+299 49 71 71 (phone) or il@gme.gl (e-mail) or visit our website at www.ggg.gl

Appendix 2: Stakeholder Consultation

STAKEHOLDER ENGAGEMENT PLAN FOR THE KVANEFJELD MULTI-ELEMENT PROJECT

<i>EIA Phases</i>	<i>Stakeholder</i>	<i>Objective of the involvement</i>	<i>Proposed time</i>
Scoping and ToRs	List of Key Stakeholder participants for the meetings in Narsaq, Qaqortoq and Nuuk	Held stakeholder workshops with the objective of: <ul style="list-style-type: none"> - Informing about the project and answering questions; - Presenting the EIA and SIA process; - Identifying key informants and sources of information; - Presenting the two main scenarios of the project and receive input to the EIA and SIA process (what are the opportunities? what are the concerns?) - Establishing a forum with involved stakeholders and start bilateral dialogues; 	From 29 March to 7 April 2011
Baseline studies from 2007-2010	BMP, and other relevant Authorities	The objective of the involvement of the authorities and key informants in the baseline study was partly to: <ul style="list-style-type: none"> - collect information which is not available from secondary sources; - to confirmed the standards and data capture methods required; - to gain approval prior to initiating field work. 	2007-2010
Additional Baseline studies	BMP, and other relevant Authorities as well as Focus groups and key informants (focus groups to be appointed later)	The objective of the involvement of the focus groups the baseline study is to collect information and perceptions (fears, expectations, etc), from specific groups of stakeholders that are relevant for the project.	Summer 2011
Baseline Studies	Municipality (Kommune Kujalleq)	The objective is to involve the communities of the Municipality (Kommune Kujalleq) and to collect information and perceptions (fears, expectations, etc) for input into the EIA.	Summer 2011

Development of Impact Analysis and Mitigation Measures	BMP, and other relevant Authorities as well as focus groups and key informants (focus groups to be appointed later)	The objective of the involvement of selected groups is to assist with the identification of the potential main areas of impact and the possible mitigation measures.	Early 2012
Development of draft EMP	BMP, and other relevant Authorities	The objective of the involvement is to define and agree on the extent of the EMP and the standards to be adopted with the regulatory authorities, and the requirement for programs for monitoring and evaluation.	Mid 2012
Draft EIA Report and Public Hearing	List of Key stakeholders General Public	The objective of the involvement is to present, clarify, validate and receive feedback on the findings of the impact analysis, recommendations and draft Environmental Management Plan.	Late 2012