



ToR for Social Impact Assessment, Kvanefjeld Multi-Element Project

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- 3 Report from stakeholder workshops including list of stakeholders invited for the workshop
- 4 Overview of comments from Stakeholder workshops (Scenario East and Scenario West)

1 INTRODUCTION

1.1 The SIA 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 a Social Impact Assessment (“SIA”) for Kvanefjeld, are a pre-requisite for obtaining an Exploitation Permit.

In November 2009 the BMP issued Guidelines for Social Impact Assessments for Mining Projects in Greenland (“Guidelines”). The Kvanefjeld SIA will be prepared according to these Guidelines.

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

- Identify and analyse social impacts;
- Recommend initiatives to build on opportunities;
- Help to mitigate adverse social impacts;
- Help to preserve cultural values and traditions; and
- Help to realize sustainable development opportunities.

According to the Guidelines, the requirements of an SIA are to:

- Engage all relevant stakeholders in consultations and public hearings;
- Provide a detailed description and analysis of the social pre-project baseline situation as a basis for development, mitigation and future monitoring;
- Provide an assessment based on collected baseline data to identify both positive and negative social impacts at both local and national level;
- Optimize positive impacts and mitigate negative impacts from the mining activities throughout the project lifetime; and
- Develop a Benefit and Impact Plan (BIP) for implementation of the Impact Benefit Agreement (IBA).

The purpose of this document, which has been prepared by Grontmij on behalf of GME, is to describe the proposed contents of the Kvanefjeld SIA and to provide the BMP with information about the planned approach for undertaking the SIA process.

A number of other studies and assessments, for example an Environmental Impact Assessment (“EIA”) and a Bankable Feasibility Study, will be carried out during 2011 and 2012 in order to finalise the design and prepare for application 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 SIA is referred to as the scoping phase.

As a part of the scoping phase for the SIA four stakeholder workshops were held in Greenland:

- On 30 March in Qaqortoq;
- On 31 March in Narsaq; and
- On 4 and 5 April 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. Invitations for the workshops can be found in Annex 1. A brief description of the project as well as the EIA and SIA processes which was attached to the invitations can be found in Annex 2. A report from the workshops including list of participants can be found in Annex 3.

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.

1.4 The Terms of Reference

The Terms of Reference (“ToR”) for the SIA of the Kvanefjeld project incorporate the results of the scoping phase and contain the plan for the preparation of the SIA. Comments and input from the stakeholders received during the workshops have been incorporated in these ToR, refer Annex 4.

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 the possibility for 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. On 1 January 2010 the mineral sector became the responsibility of the self-government. 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.

2.2 Legal framework

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

Other relevant Greenlandic legislation includes:

- Conditions for Employment (Act no. 1048 of October 262005 on Labour and working environment in Greenland);
- Orders on Health and Safety relevant to the project;
- Immigration (Regulation no. 150 of February 232001 (Danish regulation)); and
- Safety on Sea – Act No. 882 of August 2008 which rules the implementation under Greenlandic law of the International Convention on safety at Sea (SOLAS, 1974), the international convention for the prevention of pollution from ships, 1973 and the modified protocol (MARPOL), 1978.

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

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). Figure 1 and 2 illustrates the two scenarios (West and East).

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

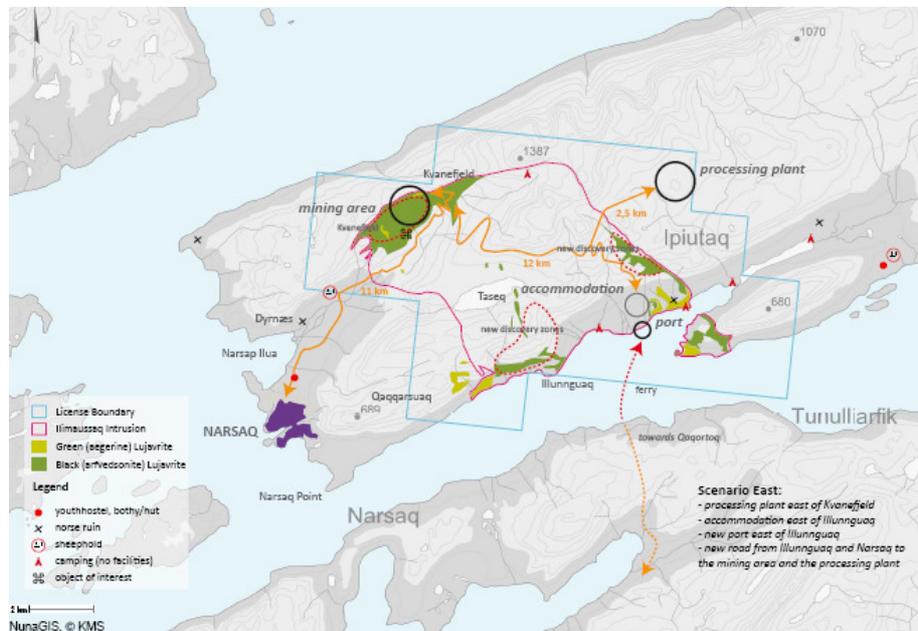


Figure 1 Scenario East

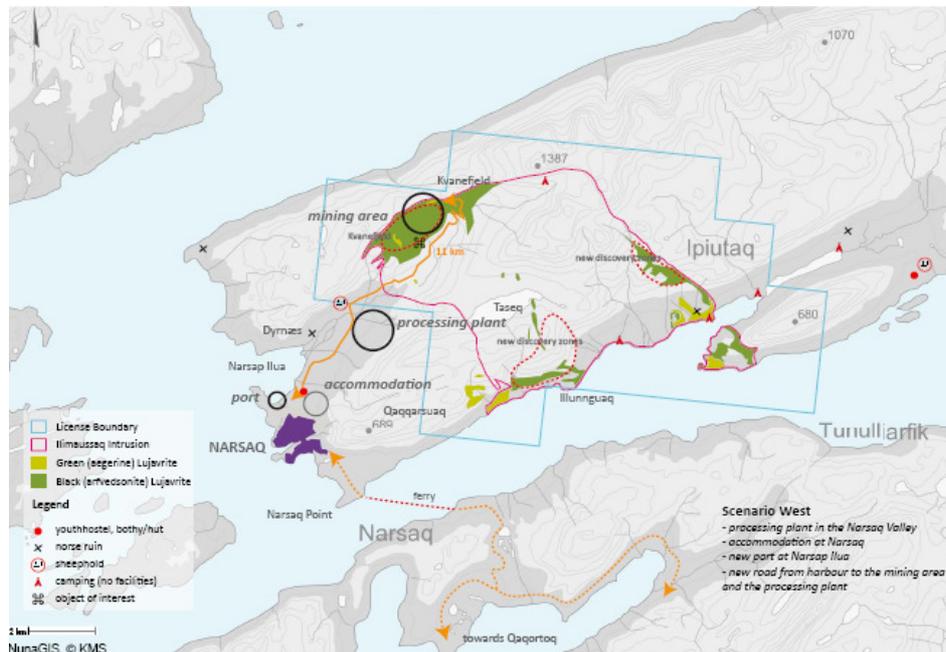


Figure 2 Scenarios West

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 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.

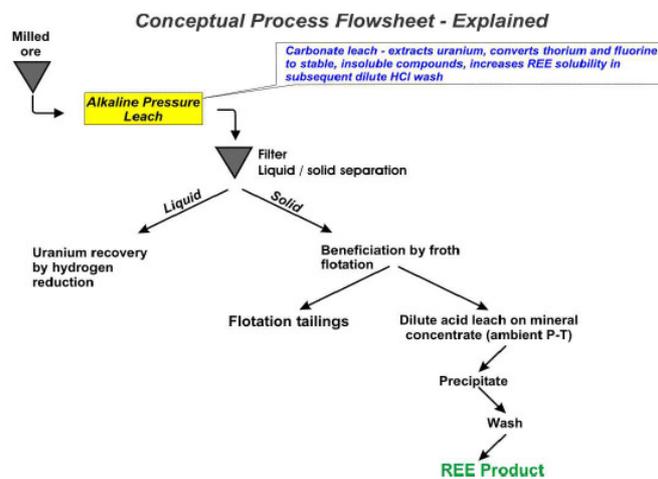


Figure 3 Flow Diagram

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.

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. The GME is considering alternative locations for the port as indicated in figure 1 and 2.

3.5 The accommodation

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

4.1 Approach to the SIA

Grontmij has 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 SIA once the ToR have been approved. External international and local experts will be involved in the analysis of specific matters such as health and economics.

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

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

- The International Council on Minerals and Metals (ICMM);
- The International Atomic Energy Agency (IAEA);
- The International Reporting Initiative for Extractive Industries; and
- The International Finance Corporation (“The Equator Principles”).

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

The SIA 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.

4.2 What are Social Impacts?

A convenient way of conceptualising social impacts is as changes to one or more of the following:

- People’s way of life – that is, how they live, work, play and interact with one another on a day-to-day basis;
- Their culture – that is, their shared beliefs, customs, values and language or dialect;
- Their community – its cohesion, stability, character, services and facilities;
- Their political systems – the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose;
- Their environment – the quality of the air and water people use; the availability and quality of the food they eat; the level of hazard or risk, dust and noise they are exposed to; the adequacy of sanitation, their physical safety, and their access to and control over resources;
- Their health and wellbeing – health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity;
- Their level of education and the opportunity to develop competences and capacities even further, both within general skills as well as within the mining sector.
- Their personal and property rights – particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties; and
- Their fears and aspirations – their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

4.3 Scoping phase

The initial assessment of the social, and environmental, issues likely to arise from the implementation of the Kvanfjeld Project was first discussed and reported in the “Preliminary Project Strategy – Kvanfjeld 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 social issues (both positive and negative) identified for the project were summarised as follows:

- Effects of land alienation from existing uses that will be required by the project components and ancillary infrastructure;
- Effects on the amenity of Narsaq and surrounding settlements resulting from dust, noise and light emissions from the project area;
- Effects of the project on the water supply for Narsaq township and surrounding settlements;
- Effects on subsistence, artisanal and commercial fishing and hunting (including fish spawning and nursery areas and seal pupping areas);
- Effects on cultural heritage and archaeological sites (including sacred and spiritual places, traditional fishing or hunting campsites, traditional trails and burial grounds);
- Effects on transportation infrastructure and incremental traffic flows (air, land and sea) and transportation risks;
- Effects of the project on local infrastructure, health, education and other government services;
- Opportunities for training, employment and business development during construction and operations;
- Monetary (such as taxes and royalties) and other benefits (such as improved sanitation and health services) associated with the project;
- Economic multipliers associated with the project, as well as backward and forward economic linkages within Greenland economic sectors that drive economic growth; and
- Improvements in the nation’s balance of trade, infrastructure development, and commercial, employment and educational opportunities.

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:

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

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 the Project Brief. 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 SIA consultants during the workshops. The invitations and the Project Brief can be found in the Annexes 1 and 2 respectively.

Currently, GME is working with two generic development scenarios (a West scenario and an East scenario). The scoping phase took these two scenarios as its starting point. 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);
- 'Socio-Economic Impact Assessment Guidelines' (Mackenzie Valley); and
- 'Addressing the Social Dimensions of Private Sector Projects' (International Finance Corporation - World Bank Group).

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

4.4 Study area and temporal boundaries

The study will cover the area directly impacted by the mining operations and ancillary facilities and the towns and settlements where the impacts and benefits of employment, business opportunities and developments directly and indirectly created by the project are expected to be more noticeable.

For the baseline study, the information will be processed and analysed at three levels: National, Regional (Kommune Kujalleq) and Local (Narsaq and Qaqortoq).

For the areas of special interest and/or concern within Narsaq, a fourth level baseline study will be conducted with information specific only to Narsaq.

The SIA will cover the following phases of the project:

- Construction phase
- Operations phase
- Closure and rehabilitation phase

5 KEY SOCIAL ISSUES TO BE ADDRESSED

Arising from the scoping exercise, corresponding consultations and feedback, the main issues and concerns have been identified as:

- Integration of workforce from outside Greenland;
- Infrastructure (opportunities for the public and a need to coordinate with public infrastructure plans);
- Sheep farmers (potential conflicts and synergies with existing sheep farmers);
- Access to natural areas of cultural importance use for recreational and livelihood purposes; and
- Concern for pollution created by dust and fluoride.

Amongst other important social issues and key questions that will be addressed during the SIA processes are:

- Changes in demography, production systems and livelihood in Narsaq and Qaqortoq;
- Public health;
- Potential business opportunities and direct benefits of the project (impact/spin off on tourism);
- Employment opportunities at the project both in short and long term for locals as well as non-locals;
- Education demands and opportunities (knowledge transfer and training);
- Potential conflicts with other economic activities;
- Potential impacts on public services and infrastructures;
- Potential social conflicts (competition for jobs, vulnerable groups and lifestyle and culture); and
- Cumulative effects of several issues.

Annex 4 contains a list of all comments from the workshops organised by reference to the social issues identified in the Guidelines.

6 SIA METHODOLOGIES

6.1 Baseline studies

Baseline studies will be conducted during 2011 and 2012.

These studies will provide information on demographic, economic conditions and trends, education, political structures, local organisations, cultural traits, living conditions and other factors that may influence the way in which affected communities respond to anticipated changes brought about by the Project.

Establishing the baselines and the identification of the impacts are interrelated and work on each aspect will be conducted simultaneously.

Four separate baseline studies have been identified based on feedback received during the stakeholder workshops (see 6.3).

If other critical issues are subsequently identified they will be incorporated into the final SIA.

The baseline study will also incorporate a review of reference information and material available in the public domain.

6.2 Data collection and research from primary sources

Data collection and research from primary sources will incorporate both qualitative and quantitative methods.

6.2.1 Qualitative

Qualitative methods have to do with people's perceptions, how they view themselves and the world around them.

For larger groups, group meetings and group interviews will be used to develop qualitative information. Focus group meetings and group interviews will be used for smaller groups participating as representatives of larger groups. For these focus group discussions, interview guides and participatory techniques will be used for the collection of information, opinion and perceptions.

Individual interviews with knowledgeable key informants will also be used to collect information and get a better understanding of complex issues and past events.

Information to be collected from focus groups by qualitative methods:

- Land and natural resources use
- Livelihood and cultural change
- Public health and vulnerable groups
- Business opportunities
- Family budget and consumption/expenditure patterns

6.2.2 Quantitative

Where information cannot be found or calculated from secondary sources, or the available data need to be updated, quantitative methods will be used to generate data, mostly at household level, for selected arctic living conditions indicators.

Existing high quality secondary data from recent research studies like the SLiCA (Survey of Living Conditions in the Arctic), the study Mobility Study in Greenland, 2010, will be used as main references. Quantitative collection of data will be compatible with such studies.

6.3 Specific studies

Arising from the scoping exercise, four specific studies have been identified as being required to obtain information to assess the potential impact and support the identification of mitigation measures and selection of monitoring indicators.

These four studies cover:

- Traditional living conditions in South Greenland;
- Mapping of the infrastructure;
- A Local Use Study focusing on recreational use of the area; and
- A health study based on secondary sources.

6.3.1 Traditional living conditions in South Greenland

The integration of the workforce from outside the local region, in particular from outside of Greenland, was raised as a key issue. Therefore it is proposed to use data collected for the SLiCA survey as the basis for generating the information required to assess impacts and propose mitigation measures.

SLiCA contains data from a survey (by interview) of a representative sample of 1200 Greenlandic people. Data was collected from Qaqortoq, Nanortalik and five settlements in the area. This is considered to be representative for the living conditions in South Greenland.

Any review of the requirement to collect any further data will be based on the information contained in the SLiCA survey.

The areas which will be covered in the study on traditional living conditions are:

- Social networks;
- The use and importance of the Greenlandic language;
- Health;
- Housing and living conditions;
- Traditional food;
- Engagement in society;
- Social problems; and
- Safety and security.

6.3.2 Infrastructure requirements

Both the opportunities provided by the project and the need for coordination of planned infrastructure in the area were identified as key issues.

It is proposed that the SIA contain a detailed assessment of:

- Existing infrastructure in the local area;
- Infrastructure planned in the local area (including the proposal from the Transportation Commission Report, April 2011);
- Infrastructure potentially to be provided by the project (harbour, roads, power supply, water supply etc); and
- Infrastructure needs in the region.

6.3.3 Detailed Local Use Study of the impact area

Access to natural areas of cultural importance for use for recreational and livelihood purposes and the potential impact of the Project on local sheep farmers have been identified as key issues

It is proposed to carry out interviews of the community who use the area for recreational use, the two sheep farmers in the area (illustrated at the maps in figure 1 and 2) as well as Narsaq Museum and the tourist organisations. The study will be conducted in accordance with established scientific methods.

The data collected will be cross-checked and completed with information from secondary sources.

An EIA will also be prepared as part of the studies required for the Project. As part of the EIA, a Local Use Study will be prepared with special focus on the use of the area for hunting, fishing and tourism. The special focus in the SIA on sheep farmers and the use of the area for recreation by the community will require close co-operation between the teams completing the two studies.

6.3.4 A health study

The potential impact on health has been identified as a key issue, both with regard to the occupational health and the general health in the community. Specific concerns about the impact of dust and fluoride have been raised.

First step will be to prepare a health and well being profile with the use of existing data (national and local demographic, social, economic, environmental and health data). The national data will be assessed to determine, where it can be used to identify mitigation measures. Based on the quality of information available, the need to carry out further base line surveys will be assessed.

The community profile to be developed will generally include:

- Prevalence and rates of infectious and chronic diseases;
- Trends in existing health problems;
- Health knowledge, practices and attitudes;
- Health and social care services;
- Nutrition pattern;
- Existing levels of environmental pollution and natural level of radiation;
- Housing conditions;
- Social problems such as drug use and suicide;
- Literacy rates and levels of education;
- Employment and unemployment rates; and
- Existing community concerns and aspirations.

The information collected in the preparation of Strategic Environmental Assessment for the Alcoa aluminium project (www.smv.gl) may, if relevant, be used in order to avoid duplication of work.

6.3.5 Strategic Impact Analysis

Synergies and conflicts with other projects in the area will be evaluated:

- Competition for human resources;
- Competition for use of existing services and infrastructure;
- Access to natural resources and business opportunities.

Synergies and conflicts with other mining projects in Greenland, particularly in terms of education and development of human resources will be also included in the analysis.

6.4 Impact analysis methodologies

The potential social impacts, both positive and negative, of the various phase of the Project will be assessed and quantified as far as possible using an Impact Matrix.

The significance of the impacts identified will be evaluated according to the following significance factors:

- **Certainty of impacts:** likelihood of occurrence, level of certainty of its occurrence
- **Extension of the impacts:** geographical range of the impacts, regional “winners” and “losers”?
- **Duration and frequency of impacts:** temporary occurrence of the impacts, (short lasting or permanent?), wide fluctuations that could disrupt the community over time (boom-and bust periods)
- **Period of Manifestation:** the impacts could be noticed immediately or over time by the community

Public concern will also be considered when assessing the significance of the impacts.

An impact matrix will be developed to identify the social impact of the Project and what mitigation measures may need to be implemented to reduce the impact.

Mitigation measures will be determined based on the likelihood and the severity of the impact.

7 REPORTING FORMAT OF THE SIA REPORT

The draft SIA report has to be submitted to BMP in Greenlandic, English and Danish, as stated in the BMP Guidelines, unless otherwise agreed between GME and BMP.

The Table of Contents for the draft SIA Report for the Kvanefjeld Multi-Element Project will be elaborated as per Guidelines, unless otherwise agreed between GME and BMP:

1. Front page
2. Executive summary
3. Definitions and abbreviations
4. Introduction
5. Policy, legal and administrative framework
6. Project description
7. Methodologies
8. Description of the social baseline conditions
9. Potential impacts
10. Benefit and Impact Plan
11. Monitoring and Evaluation Plan
12. Public Participation
13. Appendices

8 STAKEHOLDERS IDENTIFIED FOR THE KVANEFJELD MULTI-ELEMENT PROJECT

For this project, the list of stakeholders identified and further completed during the consultations for the scoping phase is the following:

Table 2 List of stakeholders for the Kvanefjeld Multi-Element Project

English Description	Greenlandic names
AUTHORITIES	
BMP	Aatsitassanut Ikummatissanullu Pisortaqaqfik
Ministries in Greenland :	Naalakkersuisut
<ul style="list-style-type: none"> - Finances - Health - Fishing, hunting, Agriculture - Industry and labour - Domestic affair, Nature and Environment - Housing, infrastructure and traffic - Family, culture, church and gender - Education, research and Nordic Cooperation 	<ul style="list-style-type: none"> - Aningaasaqarnermut Naalakkersuisoqarfik (AN) - Peqqissutsimut Naalakkersuisoqarfik (PN) - Aalisarnermut, Piniarnermut Nunalerinermullu Naalakkersuisoqarfik (APNN) - Inuussutissarsionermut Suliffeqarnermullu Naalakkersuisoqarfik (ISN) - Nunamut namminermut, Pinngortitamut Avatangiisinullu Naalakkersuisoqarfik (NNPAN) - Ineqarnermut, Attaveqarnermut Angallannermullu Naalakkersuisoqarfik (IAAN) - Ilaqutariinnermut, Kultureqarnermut, Ilageeqarnermut Naligiissitaanermullu Naalakkersuisoqarfik (IKINN) - Ilinniartitaanermut, Ilisimatusarnermullu Naalakkersuisoqarfik (IIN)
<ul style="list-style-type: none"> - Municipality – Kommune Kujalleq - The Mayor's department (Qaqortoq) - Industry and labour market, (Narsaq) - Culture, leisure and prevention (Narsaq) - Prevention consultant (Narsaq) - Housing and Environment (Qaqortoq) - Social Services (Qaqortoq) - School and pre-school (Nanortalik) - Finances (Qaqortoq) 	<ul style="list-style-type: none"> - Kommune Kujalleq - Borgmesterip allaffia - Inuussutissarsionermut Suliffeqarnermullu Ingerlatsivik - Kulturi, Sunngiffik Pitsaaliuinerlu - Pitsaaliuinermi Siunnersorti - Teknikkeqarnermut, Ineqarnermut & Avatangiisinullu Ingerlatsivik - Isumaginninnermut Ingerlatsivik - Atuarfeqarfinnut ulluinnarnilu paaqqinnittarfinnik ingerlatsivik - Aningaasaqarnermik Ingerlatsineq

GOVERNMENT ORGANISATIONS	
The Greenland Nature Institute	Pinngortitaleriffik
National Museum	Kalaallit Nunaata Katersugaasivia
Narsaq Museum	Narsap Katersugaasivia
Working Environment Authority	Sullivinnik Nakkutilliisoqarfik
National Association of Municipalities	KANUKOKA
WORKERS AND EMPLOYERS ORGANIZATIONS	
Workers Union	Sulinerimik Inuussutissarsiateqartut Kattuffiat SIK Sulinerimik Inuussutissarsiateqartut Peqatigiiffik SIP
Greenland's Employers' Association	GA
Greenlandic Employers' Association	Nunaqavisissut Suliffiutillit Kattuffiat (NUSUKA)
ORGANIZATIONS RELATED TO BUSINESS AND DEVELOPMENT	
Greenland Tourism and Business Council GTE	Inussuk Sulisitsisut
Local Trade Forum	(Erhvervsforum Kujalleq)
Private rock and gemstone gatherers	
ORGANIZATIONS RELATED TO FISHING, HUNTING AND FARMING	
Fisherman and Hunters Association KNAPK	Kalaallit Nunaanni Aalisartut Piniartullu Kattuffiat KNAPK, Aalisartut Piniartullu Peqatigiiffiat (APP)
Locally representatives (APP)	
Sheep Farmers' Association	Savaatillit Peqatigiiffiat
ORGANIZATIONS RELATED TO EDUCATION AND TRAINING	
School of minerals and petroleum (Råstofskolen) (School of Metal and Mechanics (from Jan 11 associated to School of Mining)	Sanaartormik Ilinniarfik or Sanilin (Sisimiut)
Cooking School	INUILI
The workers' school	Sulisartut Højskoliat
OTHER ORGANISATIONS	
Narsaq Earth Charter	
Against uranium in Narsaq	
AVATAQ	AVATAQ – Pinngortitaq avatangiisunullu peqatigiiffik
ICC – Inuit Circumpolar Conference	
Women's Association (local representative in Narsaq)	Arnat Peqatigiiffiat
Elders Association/Council (local representative in Narsaq)	Utoqqaat Peqatigiiffiat

The stakeholders invited to the stakeholder workshops in the scoping phase is found in Annex 3 Report from the workshops.

9 STAKEHOLDER ENGAGEMENT PLAN FOR THE KVANEFJELD MULTI-ELEMENT PROJECT

SIA Phases	Stakeholder	Objective of the involvement	Proposed time
Scoping and ToRs	List of participants for the meetings in Narsaq, Qaqortoq and Nuuk	The objective of the stakeholder workshops: <ul style="list-style-type: none"> - Inform about the project and answer questions; - Present the EIA and SIA process; - Present the two main scenarios of the project and receive input to the scope of the SIA process (what are the opportunities? what are the concerns? which questions and answers are requested for the SIA process) - Establish a forum with involved stakeholders and start bilateral dialogues; 	From 29 March to 7 April 2011
Baseline study	Authorities and key- informants	The objective of the involvement of the authorities and key-informant in the baseline study is partly to <ul style="list-style-type: none"> - collect information which is not available from the secondary sources or confirmed/up-dated information collect from secondary sources. (Quantitative methods) And partly to <ul style="list-style-type: none"> - collect primary information from key informants and authorities (Qualitative methods) 	Late summer/autumn 2011
	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. Identification of vulnerable groups. Description of the involved organizations and understanding of their role in relation of the project. (Qualitative methods)	Autumn 2011
Baseline (Quantitative methods:	Communities of Narsaq (and Qaqortoq)	The objective of involvement of the communities of Narsaq is to generate data at household level for the baseline study.	Autumn 2011
Development of draft Benefit and Impact Plan	Selected groups of interest related to the implementation of benefit and impact areas	The objective of the involvement of selected groups is a participatory identification of potential main areas of impact and benefit, and participatory development, design and implementation of plans and programme for the draft Benefit and Impact Plan.	Early 2012
Development of draft monitoring¹ and	BMP, selected partner(s) for each specific	The objective of the involvement is to define how to monitor and evaluate the benefit and impact plans, to define the role of the	Mid 2012

¹ **Monitoring:** ongoing, methodical collection and analysis of data on development activities, which provides program managers and stakeholders with early indications of progress and achievements of goals. Monitoring often measures output and is undertaken more often than evaluation. Often done by people involved in the program.

draft evaluation² plans	program (area)	stakeholders and design tools and programs for monitoring and evaluation.	
Draft SIA Report and Public Hearing	List of 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 Benefit and Impact Plan as well as the draft Monitoring and Evaluation Plan.	October 2012
Impact and Benefit Agreement	BMP, Municipality (Kommune Kujalleq)	The objective is to develop the Impact and Benefit Agreement in close cooperation with the BMP and the municipality. The Impact and benefit Agreement will contain the final benefit and impact plan as well the final monitoring and evaluation plans.	Early 2013

10 EXPECTED IMPLEMENTATION OF THE SIA SCHEDULE

SIA Phases	Time period
Scoping (ToR)	February - June 2011
Baseline study (Baseline Report)	August 2011 – March 2012
Impact analysis and mitigations measures (input to draft SIA)	March – June 2012
Draft Benefit, Impact and Monitoring Plan (input to draft SIA)	August – October 2012
Draft Monitoring and evaluation Plan (input to draft SIA)	August – October 2012
Public hearing (draft SIA)	Tba
Final SIA	Tba
Impact and Benefit Agreement	Tba

Tba: to be agreed

² **Evaluation:** Primarily concerned with longer-term results of development activities, or the measurement of outcomes/impacts. It aims to identify how and why activities succeeded, failed or where changed to improve effectiveness. Evaluations can be done periodically by independent, external advisors, but self-evaluation can be very useful.

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