



**Draft Terms of Reference for the
Social Impact Assessment Of Aappaluttoq Rubi Projekt
For True North Gems Inc.**
(in compliance with the BMP Guidelines on SIA of November 2009)

March 2011

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1 INTRODUCTION

These Terms of Reference for the Social Impact Assessment, SIA, of the Aappaluttoq Project are the result of the scoping phase for the preparation of the Social Impact Assessment (SIA), which True North Gems Inc. will carry out in relation to the preparation of the necessary permits and licences for exploitation of the Aappaluttoq Project in the area located 30 km southwest of Qeqertarsuatsiaat in West Greenland.

The project includes the development of an open pit mine, a small processing plant and support infrastructure, like camp, workshops, a small helipad, internal roads and barge landings. The project is relatively small, with an expected small environmental footprint.

True North Gems has been performing exploration and test processing activities in Aappaluttoq and Qeqertarsuatsiaat since 2004. There has been interaction with the community in Qeqertarsuatsiaat and service providers in Nuuk, in the form of a few temporary employment, transport and accommodation services, provision of mining and non-mining services and goods, etc. True North Gems also equipped a polishing workshop in Qeqertarsuatsiaat to be run by the municipality, and provided training on equipment operation, polishing, faceting and jewellery design. For security and safety reasons, local residents have experienced some restrictions on accessing specific areas during exploration activities.

A preliminary screening document was presented and accepted by the authorities in July 2009. The screening procedure was eliminated from the Guidelines in the latest version in November 2009, and the screening document updated to a scoping document for internal use and reference for the scoping process. The key findings of the scoping document were presented and discussed with the authorities including the Bureau of Minerals and Petroleum (BMP) and stakeholders in workshops held in Nuuk on February 6th and on February 7th in Qeqertarsuatsiaat. The objective was to verify the list of key stakeholders, scope of the study, basic assumptions and main issues and questions to be addressed by the SIA study for the project as known in February 2011.

The comments and input from the stakeholders, received during the workshop and further meetings, are incorporated into these Terms of Reference (ToR) as an annex.

The ToR are based on the current available information from the following documents:

- Project Brief for the Aappaluttoq Project,
- Expected schedule of activities as known in February 2011.
- Logistics and Execution Plan REP0002 , by MT Højgaard and EBA

Grontmij | Carl Bro A/S has been appointed as consultant for TNG to carry out the SIA. A number of other studies and assessments, like the Environmental Impact Assessment, Feasibility Studies, etc. are being carried out during 2010 and 2011 in order to finalise the design and prepare for the needed permits and licences.

The SIA will be prepared according to the SIA Guidelines from the BMP of November 2009. This document will be referred to as the “Guidelines” in this report.

1.1 Purpose of the SIA

The overall objective of the SIA is to identify and analyse the potential impacts of a proposed mining activity and to recommend initiatives, realize sustainable development opportunities as well as to mitigate the negative impacts.

According to the Guideline, the purpose of the SIA is 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;
- Develop a Benefit and Impact Plan (BIP) for implementation of the Impact Benefit Agreement (IBA).

2 REGULATORY FRAMEWORK

2.1 The political situation in Greenland

Greenland has been under home-rule from Denmark since 1979. On June 21, 2009, the constitution was introduced after the referendum for the Government of Greenland in November 2008 and country status changed as “self rule”. Greenlandic is now the only official language in Greenland. Under the Government of Greenland, Greenland will become a subject under international law in matters that are within its jurisdiction. Greenland can then enter into agreements and establish bilateral and multilateral relationships with other states.

Greenland is member of the Nordic Council and Nordic Council of Ministries. This membership with other Nordic Countries and autonomous regions facilitates parliamentary cooperation among the members, particularly in relation to nature and environmental issues. The current Environmental Action Plan, 2009-2012 focuses on climate change, the use and discharge of hazardous chemicals protection of marine ecosystems and protection and utilization of biological diversity.

Greenland is also member of the Environmental Arctic Council since 1996 and the Inuit Circumpolar Council ICC.

2.2 Legislation in Greenland

The main legislation for this project will be Act no. 7 of December 7 2009 on Minerals and Resources “The Mineral Resources Law” which came into force on January 1, 2010.

Other relevant Greenlandic legislation which will be considered during the SIA will be:

Conditions for employment (Act no. 1048 of October 26 2005 on Labour and working environment in Greenland).

Immigration (Regulation no. 150 of February 23 2001 (Danish regulation)).

The Greenlandic Working Environment Act no. 1048 of October 26 2005.

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.

United Nations Framework Convention on Climate Change

2.3 International Labour Organization Conventions

The following International Labour Organizations Conventions of relevance for this project will be:

International Labour Organization (ILO) Convention No 155 and 176 concerning occupational safety and health in mines.

ILO Convention No. 87 and 98 concerning the right to organize and collective bargaining convention.

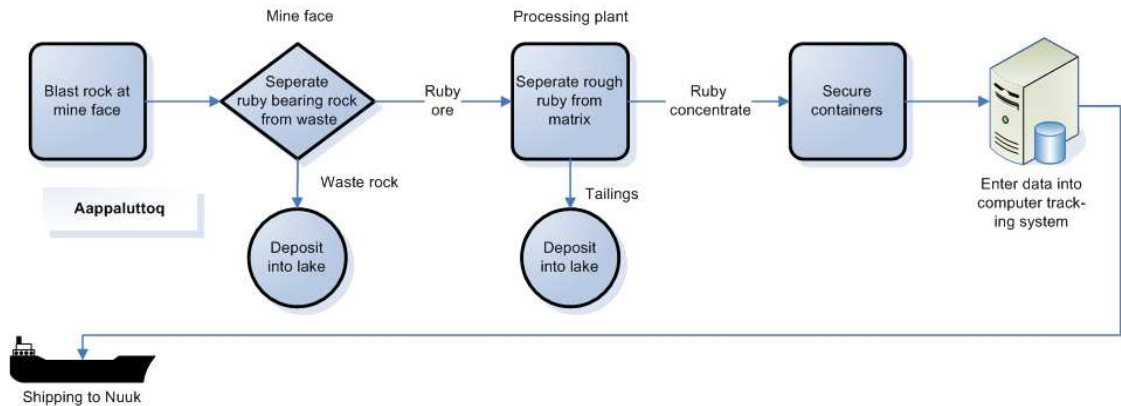
ILO Convention No. 45, 100 and 105 concerning discrimination and equal remuneration.

ILO Convention No. 169 Which calls for prior consultation with indigenous peoples or ethnic groups when seeking to undertake any activities or project in the territories.

3 BRIEF DESCRIPTION OF THE APPALLUTTOQQ RUBI PROJECT

The Aappaluttoq Project will consist in mining operations and processing of ruby ore to ruby concentrate in the mine site in Aappaluttoq, and processing, sorting and cleaning of ruby concentrate to rough classified ruby and pink sapphire in Nuuk.

The activities and planned facilities and processing will be described below.



Mining and processing of ruby and pink sapphires in Aappaluttoq

3.1 Infrastructure and mining activities in Aappaluttoq

The mine will consist of:

- A small open pit from which the ruby bearing rock will be extracted
- A processing plant at which the ruby and pink sapphire will be separated from the matrix
- Infrastructure, such as a camp, maintenance shop, explosive storage, roads, barge landings, and power plants

Two barge landings will be built: an outer landing that will accommodate larger ships, and an inner landing close to the camp that will only be accessible by smaller craft. Supplies and equipment will be delivered from Nuuk either to Qeqertarsuaat or to the outer landing before being transferred to a smaller boat for delivery to the inner landing. Road building will be kept to a minimum and will initially only run from the inner landing to the camp and connecting the camp to the processing plant and the pit. At a later stage of development, a road may be built to connect the inner and outer landings.



Personnel will generally travel from Nuuk and Qeqertarsuatsiaat by boat. Some personnel and supplies will be transported to and from Nuuk by helicopter.

Pending on exploitation permit TNG intends to begin construction in 2012 with the extraction of the ruby ore beginning in late 2012 or 2013. The initial pit will grow to be approximately 200 meters long by 100 meters wide and 70 meters deep. Mining will be done mostly with low-intensity blasting techniques that are common in the diamond mining industry. Most of this rock will not contain ruby or pink sapphire but will be waste rock which has to be moved to access the rock containing the ruby and pink sapphire. The level of the lake will be lowered at least 10 metres to allow access to the ore body.

To minimize the environmental impact, waste rock will be placed in a lake adjacent to the mine. TNG's environmental consultants Rambøll have been determined this lake to have no fish or other aquatic life. When mining is finished the lake will be allowed to re-fill to its natural level, the pit will be allowed to fill with water as an extension of the lake, buildings and process facilities will be removed and little evidence of mining will remain.

A processing plant will be set up near the mine site to crush, wash, screen and concentrate the ruby and pink sapphire material. This will be accomplished without the use of chemicals. Water flowing from the mining and processing area will be monitored closely and treated if necessary. Priority will be given to environmental protection in the design of facilities such as containment systems around fuel storage areas.

The concentrate produced by the processing plant at Aappaluttoq will still consist of approximately 35% matrix and will be transported to TNG's secure facility in Nuuk in locked containers.

3.2 Project activities in Nuuk

At TNG's secure facility in Nuuk, the dirty rough concentrate will undergo a preliminary sort. The concentrate will then be sent to an independent facility (likely in Nuuk) for cleaning to remove the remaining matrix, and the clean rough concentrate will then be delivered back to TNG's facility. The final location of the sorting facility has not yet being determined, but it will be selected among the available areas authorised by the municipality for the industrial and business activities.

The clean rough concentrate will be sorted into categories by size, color (pink to red) and by clarity (gem to non gem) according to standard criteria so that the sorting can be done consistently over time. The sorting will be done by TNG personnel both by hand and using automated equipment and subject to verification by a representative from the Greenlandic authorities.

The sorted and categorized rough concentrate will then be divided into appropriately sized parcels, given an identification number and entered into a computer tracking system. TNG will provide representatives from the Greenlandic authorities with access to the tracking system for audit purposes.

TNG will sell both rough and polished ruby and pink sapphire, with the majority of sales expected to be small (under 5mm) rough rubies. Sales information will be entered into the tracking system and will be used to determine the corporate tax to be paid by TNG. TNG will sell rough rubies to companies with existing polishing facilities and sales networks. TNG will also sell polished rubies to specific customers and the information on the polishing process (retention) and sales will be entered the tracking system.

The sales information will be open to audits by the Greenlandic authorities to ensure that the prices are reasonable. The tracking system will also form the basis for the issuing of export licenses for Greenlandic rubies.

3.3 Expected work force and working conditions

3.3.1 Construction phase

During the construction phase, TNG expects to utilize a local based lead contractor such as MT Højgaard to manage local contractors. The construction period is expected to last approximately 6 months, starting in May 2012.

TNG anticipates that approximately 40 people will be employed for road construction, facility construction, assembly of the processing plant and preparation of the mine itself. 75% of the workers are expected to be local, 25% Danish or foreinger. The workdays are planned to be 12 hours per day, 7 days a week, with a rotation scheme of 2:1 week for local workers, 4:2 for workers that are not based in Greenland. Workers from Qeqertarsuatsiaat will have first priority for employment as long as qualifications are met.

3.3.2 Operation Phase

During operations, TNG estimates a seasonal workforce of 2 shifts of approximately 25 people each at Aappaluttoq and 8 in Nuuk. After a period of training, TNG expects that all positions can be occupied by Greenlanders with few exceptions. For Aappaluttoq operations, a rotation of one week at the site and one week off (7 shifts of 12 hours each) has been discussed. 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.

Most of the mining jobs will be seasonal, and the length of the operating season will depend on factors such as the weather and ruby production. Personnel will work on various different aspects of the operation so that, for example, road maintenance can be undertaken during periods when persons and equipment are available from process or mining operations.

3.4 *Project Development Schedule

Table 1: Expected Project Development Schedule			
	Start Date	Item	Duration
1	May 2011	Submission SIA, EIA and Mine Plan	6 months
2	June 2011	Public Consultation period	1-2 months

3	Oct 2011	BMP grants exploitation license	-
4	Oct 2011	Marketing and sale of existing stones	ongoing
5	Nov 2011	Development of Impact and Benefit Agreement	2 months
6	Nov 2011	Start of detailed engineering for construction	3 months
7	Nov 2011	Construction of Nuuk process facility	3 months
8	May 2012	Procure mine and process equipment and staff hiring	6 months
9	July 2012	Start of construction, roads, earthworks, camp and port.	3 months
10	September 2012	Commission of Plant	1 month
11	October 2012	Winter shutdown	9 months
12	May 2013	Summer mobilisation, re-supply and equipment commissioning	1 month
13	June 2013	Commence production	10 years

4 THE SIA PROCES

4.1 Study team

True North Gems Inc. has commissioned Grontmij | Carl Bro to prepare the SIA for the project. The core project team will consist of experts with knowledge of Social Impact assessment from mining activities, detailed knowledge of Greenland (language and culture), mining activities, communication and facilitation of processes. Grontmij | Carl Bro will act as an independent consultant to conduct the SIA and facilitate stakeholder (including the public) involvement in the SIA process.

External international and local experts will be involved for the analysis of especially significant topics and issues.

Name	Role
Ana Gabriela Factor	Team Leader, SIA/EIA Mining Expert. Main responsibilities: Scoping Phase, Development of methodology, impact analysis and preparation of SIA report.
Tanja Nielsen	Arctic Mining and SIA/EIA Expert. Main responsibilities: Baseline and field studies, communication with stakeholders. Inputs to impact analysis and impact and benefit plan.
Rikke Carlsen	SIA Expert. Main responsibilities: Coordination with technical and construction teams, Communication and press. Quality assurance of the SIA documents and main report.
Heidi Hjorth	SIA Expert specialised in Corporate Social Responsibility and sustainability reporting. Main responsibility: Impact and benefit plan, monitoring and evaluation plans.

Anders Jelstrup	Communication expert. Technical translations to Danish. Elaboration of non-technical documents and communication material.
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4.2 Approach to SIA

The BMP SIA Guidelines of November 2009 is our basic reference to establish the minimum level of information, contents, and general structure of the SIA.

During the planning and development of the SIA process, other references will be used as best practices for SIA for the mining industry (International Council on Minerals and Metals, International Reporting Initiative for Extractive Industries) as well as knowledge and experience developed in Greenland to evaluate and assess the social conditions and impacts.

The SIA will be based on a participatory approach, involving the stakeholders as much and effectively as possible at all stages of the SIA process. A high degree of communication will be promoted and implemented along the whole process.

Based on the experience during the scoping phase, personal consultations with some of the non-governmental stakeholders will integrate scoping, baseline and impact aspects, which can be further investigated via mail or telephone as required.

The selection of socio-economic parameters for the baseline study will be based on the specific characteristics of the arctic living conditions and aspects of public concerns identified during the scoping consultations. Raw data from primary sources collected in Qeqertarsuatsiaat during the Survey Living conditions in the Arctic, before the start of exploration activities on 2004, will be processed and analysed to better understand the baseline livelihood and culture aspects.

4.2.1 Approach to the scoping phase

The first step was to develop a checklist of relevant questions to be addressed in the SIA. This list was based on a number of documents, as the Guideline (BMP), 'Socio-Economic Impact Assessment Guideline' (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.

The next step was to present this list and the preliminary results to the authorities and selected stakeholders at a workshop, which was held on February 6th, 2011 in Nuuk. At the workshops the preliminary results and questions were discussed in groups. All stakeholders were invited to send further comments. For the consultations that started in Qeqertarsuatsiaat (February 8 to 10), the project was presented followed by an open discussion and questions-answers session. The main concerns from local residents and authorities were identified and systematised based on the questions and issues raised during the public meeting and focus groups consultations.

Invitations to all stakeholders were sent together with a project brief describing the project in lay terms, as well as a background document on ruby and pink sapphire explaining what these stones are, how will they be polished, valued, sold and branded as Greenlandic rubies. This was intended in order to ensure a more informed participation, and provide opportunities for clarifying questions and doubts during the workshops with company representatives and SIA consultants. The Project Brief and Background document can be found in the Annex.

4.3 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.

The primary area of influence will be Nuuk, Qeqertsuasiaat and the surrounding areas.

The secondary area of influence will be Kommuneqarfik Sermersooq in general, including Paamiut and other towns where workers may come from and there is small scale mining, jewellery production or tourism activities that can potentially benefit or be affected by the project.

For the baseline study the information will be processed and analysed at three levels: National, Municipal (Sermersooq), and town/settlement (Nuuk, Qeqertarsuatsiaat).

The SIA will cover the following stages in the project:

- The construction stage
- The operational stage
- Closure

5 KEY SOCIAL ISSUES TO BE ADDRESSED IN RELATION TO THE IMPACTS OF THE PROJECT

As a result of the scoping exercise and corresponding consultations and feedback, the main issues and key questions identified as critical are the following:

- Employment and human resources development
- Potential conflicts with other economic activities
- Business opportunities and direct benefits of the project
- Changes in demography, production systems and livelihood in Qeqertarsuatsiaat.
- Impact/spin off effects on tourism, small scale mining, and local industry related to gem and non-gem stones
- Training and transfer of technology (polishing, gemmology, transfer of know-how related to gemstones mining and processing).
- Seasonality of work at the mine and production plant, as well as optimal rotation schemes

Other social issues and key questions to be addressed during the SIA process are structured within the following themes:

- Potential changes in business life/structure
- Cultural and natural values related to natural resources (fishing, hunting and tourism)
- Potential impacts of the project on public services
- Potential social conflicts (competition for jobs, small scale miners, vulnerable groups, lifestyle and culture)
- Public health

The presented list of issues/questions and the priorities established were identified during the scoping exercise and further commented and completed by input by stakeholders and authorities. This draft ToR are mainly based on the result of the initial scoping phase, complemented with the inputs and discussions with the teams responsible for EIA, logistics and execution plan for the project.

6 STAKEHOLDERS IDENTIFIED FOR THE APPALUTTOQ PROJECT

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

Table 3 List of stakeholders for the Aappaluttoq Project

English Description	Greenlandic names
AUTHORITIES	
BMP	Aatsitassanut Ikummatissanullu Pisortaqaarfik
Departments in Greenland Home Rule:	Naalakkersuisut
<ul style="list-style-type: none"> - Health - Fisheries, Agriculture - Domestic issues, Nature and Environment - Housing, infrastructure and traffic (Property and The Danish Emergency Management Agency) - Department for Finances - Family, Culture, Church and Gender - Education and Research 	<ul style="list-style-type: none"> - Peqqissutsimut Naalakkersuisoqarfik (PN) - Aalisarnermut, Piniarnermut Nunalerinermullu Naalakkersuisoqarfik (APNN) - Nunamut namminermut, Pinngortitamut Avatangiisinullu Naalakkersuisoqarfik (NNPAN) - Ineqarnermut, Attaveqarnermut Angallanermullu Naalakkersuisoqarfik (IAAN) - Aningaasaqarnermut Naalakkersuisoqarfik (AN) -Aningaasaqarnermut Sulisoqarnermullu Aqutsisoqarfik - Isumaginninnermut, Kultureqarnermut, Ilageeqarnermut Naligiissitaanermullu Naalakkersuisoqarfik - Ilinniartitaanermut Ilisimatusarnermullu Naalakkersuisoqarfik

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Municipality - Sermersooq Kommune - Finances and Trade Administration - Construction and Environment Adm. - Development Administration - Welfare Administration - Infrastructure & Environment Administration	Kommuneqarfik Sermersooq - Aningaasaqarneq Inuussutissarsiornermullu Pisortaqaarfik - Sanarfinermut Avatangiisinullu Ingerlatsivik - Piorsaanermut Ingerlatsivik -Piorsaanermut Ingerlatsivik - Tuniuermut Ingerlatsivik - Sanarfinermut Avatangiisinullu ingerlatsivik - Allattoqaarfik
National Association of Municipalities	KANUKOKA
WORKERS AND EMPLOYERS ORGANIZATIONS	
Workers Union	Sulinermik Inuussutissarsiuteqartut Kattuffiat SIK
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
Greenland Mining Service	Greenland Mining Service
Local jewellers and designers	
ORGANIZATIONS RELATED WITH SMALL SCALE MINERS AND STONE COLLECTORS	
Mineralogical Society of Greenland	Kalaallit Nunaanni Ujaqperitoqatigit
August 16 Association	
Small scale licence holder (individuals)	
ORGANIZATIONS RELATED TO EDUCATION AND TRAINING	
School of Minerals and Petroleum	Sanaartornermik Ilinniarfik or Sanilin (Sisimiut)
School of Metal and Mechanics (from Jan 11 associated to School of Mining)	
University of Greenland	Ilimmarfik
The Greenland Nature Institute	Pinngortitaleriffik
Centre of Arctic Technology (DTU and Maniitsoq)	
COMMUNITY IN QEQERTARSUATSIAAT	
Municipal authorities, including staff	

related to health, child and elderly care and education	
Community in general	
Fisherman and hunters	
Stone polishers and carvers and users of the polishing workshop	
Local providers of services and goods	

7 SIA METHODOLOGIES

7.1 Baseline study

The baseline study will provide information on demographic, economic conditions and trends, political structures, local organisations, cultural traits, and other factors that can influence the way in which affected communities will respond to anticipated changes brought about by the projects. The baseline also helps to predict in which way the project will be affected by these factors. The development of the baseline and the identification of the impacts are an interrelated and parallel process.

When the critical issues have been identified it is possible to design detailed studies on specific groups (focus groups) affected by the project.

The baseline study will be based on review of secondary resources and information obtained through qualitative, quantitative, and participatory methods.

7.2 Data collection and research from primary sources

The data collection and research from primary sources will contain both qualitative and quantitative methods.

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. Focus group meetings and group interviews will be used for smaller groups which represent a larger group. Focus group discussions will be used providing information on key issues from stakeholder representatives. 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 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

The quantitative methods will be used to generate data, mostly at household level and for selected arctic living conditions indicators, when such information can not be found or calculated from secondary sources, or needs to be updated.

Existing high quality, 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.

The need of specific quantitative studies will be further evaluated after completing the first draft of the baseline study.

7.2.1 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, 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.

7.3 Impact Analysis Methodologies

The positive and negative impacts of the project activities on valued socio-economic components, both during the construction and operation phases, will be predicted and its magnitude 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

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

Mitigation measures will be identified for all impacts likely to occur, adverse in nature and significant enough to require mitigation (medium and high-level (negative) impacts) in order to mitigate or eliminate such impacts.

8 REPORTING FORMAT OF THE SIA REPORT

According to the Guidelines, the final SIA report has to be submitted to BMP in Greenlandic, English and Danish.

The Table of Contents for the SIA Report for the Aappaluttoq project will be elaborated as per Guidelines, unless otherwise agreed between the consultants and BMP:

Table 4 Proposed Table of Contents for the SIA Report, Aappaluttoq Project	
PROPOSED SECTIONS	COMMENTS
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	Baseline conditions will be analysed at community level for Greenland, Komunnegarfik Sermersoq, Nuuk and Qeqertarsuatsiaat. For Qeqertarsuatsiaat information at household level, particularly livelihood and production systems, identity and cultural aspects and nutrition will also be described.
9. Project interactions with the community during exploration phase	Description of project activities, community relations, community development initiatives, employment and business Qeqertarsuatsiaat during the exploration phase. Lessons learned.
10. Potential impacts	Identification and characterization of potential impacts of the project on valued socio economic components during construction and operation. Proposed mitigation actions for adverse impacts likely to occur and valued as significant.
11. Analysis of alternatives	Analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) for accommodation alternatives and no-project. Analysis of rotation schemes.
12. Benefit and Impact Plan	Based on the impact analysis, proposed high level initiatives to avoid or mitigate negative impacts, recruitment and training strategy, community development initiatives that can improve spin off effect and synergy with other projects and sectors.
13. Monitoring and Evaluation Plan	Indicators and evaluation procedures
14. Public participation activities	Description of public participation events and participants.
15. Appendices	To be further defined.

9 SIA TIME SCHEDULE PROPOSED STAKEHOLDER INVOLVEMENT DURING THE SIA PROCESS

The time table below is tentative and based on the currently available information.

Phase	Activities	Place and date
Scoping	Update scoping document (intern)	November-February 2011
	Elaboration of project brief and background documents Translation into Danish and Greenlandic	October 2010 – January 2011
	Consultation and coordination with BMP	By Phone January '11 2011 Meeting in Nuuk February 4 2011
	Consultation with stakeholders in Nuuk and authorities in Kommunegarfik Sermersook	February 7 2011 KI 13 Hotel Hans Egede
	Consultation with community in Qeqertarsuatsiaat	February 8 2011- KI 19 -
	Consultations with 16 of August, small scale mine licence holders , Stenklubben (Nuuk)	04 to 11 February
	Draft ToRs sent to BMP	March 4 2011
Base line	Preliminary collection and systematization of information from secondary sources (community level)	November-December 2010
	Systematization and analysis of information on living conditions in Qeqertarsuatsiaat, based on Slica investigation (household level)	January 2011
	Interviews with focal groups in Qeqertarsuatsiaat	February 2011
	Interviews with key informants and key stakeholders in Nuuk (personally, by phone or mail)	February./March 2011
	First draft of Baseline	End of February
Impact Analysis	Desk top work, in dialog with key stakeholders, responsables from project design, construction plan, and Environmental impact analysis.	March 2011
Impact and Benefit Plan	Desk top work based on the inputs from stakeholders and in dialog with the company.	April 2011
	Preliminary round of consultations with BMP and municipal authorities	April 2011
Monitoring and	Desk top work, using as a reference	April –May 2011

Evaluation plan	international standards (international reporting initiative, ICMM, Ethical Jewellery etc)	
First Draft send to BMP		End of May 2011
Public Consultation	Posting of full SIA document and executive non technical summary in English, Danish and Greenlandic on BMP and TNG web sites. Organization of events for presentation and discussion of results of SIA in Nuuk and Qeqertarsuatsiaat. Participatory events with authorities and focus groups to discuss and improve the Impact and Benefit Plan before proceeding with Impact and Benefit Agreement.	Estimated June-August 2011

10 RECOMMENDATIONS

10.1 Recommendations for project design

Based on the scoping exercise and the feedback from the stakeholders True North Gems is preliminarily recommended to evaluate the following proposals:

- Consider the establishment of an office in Qeqertarsuatsiaat to handle community relations and local human resources development initiatives.
- Efforts must be made for a regular, clear and formal communication with the community and authorities in Qeqertarsuatsiaat on the status of the project and the activities planned at all times, starting as soon as possible and before the commencement of any other activity of the project.
- It is highly recommended to list the activities to be performed on the concession area during the spring and summer, including information on approximate location and duration, and communicate this to fisherman and hunters.
- Consider the participatory development and implementation of a grievance mechanism, mainly for Qeqertarsuatsiaat
- The short mining season has been raised as an issue in Qeqertarsuatsiaat, as it is also the season for fishing, hunting, etc. and it is predicted that retention of workers at the mine site (not processing plant) can be a significant challenge. Possibility of dedicating a number of mining positions as internship for students from the mining and mechanical school should be studied.
- Transport of staff from and to Qeqertarsuatsiaat can be challenging due to weather and navigation conditions. Rotation periods longer than a week should be considered.

10.2 Preliminary recommendation for Impact and Benefit Plan and other implementation arrangements

Based on the scoping exercise and the feedback from the stakeholders, it is recommended evaluating the following proposals:

- It is recommended giving a priority for employment and business to residents in Qeqertarsuatsiaat.
- It is unlikely that all work positions during construction and operation will be filled by workers from Qeqertarsuatsiaat. Recruitment efforts should also be directed to Paamiut and Nuuk
- The community in Qeqertarsuatsiaat has doubts and questions regarding the regulations for the mining sector (large and small scale), permitting procedures, scope of exploration rights, valuation of the rubies, etc. Information meetings by BMP and information/explanations about rubies by a neutral third part, preferably Greenlandic geologist have been proposed by the community
- Training on precious and semiprecious stones classification, cutting and polishing has been repeatedly mentioned as a desired benefit for the community, both in Nuuk and. Lessons learned from previous initiatives show a significant positive impact and potential for replication and creation of income generating opportunities.
- Strategic alliance with Kommuneqarfik Sermersooq for the support of such training courses should be considered.
- Strategic alliance with the Greenland Stone Club should be considered for information, education and capacity building related to gemmology.
- Mechanisms to ensure that business opportunities will be available to local businesses – room for “not so big” contractors leaving some parts “un-bulked”

References

A procedure for evaluating environmental impact. Leopold, L. B., Clarke, F. E., Hanshaw, B. B. and Balsley, J. R. (1971) Geological Survey Circular 645, Government Printing Office, Washington, D.C. 13 pp.

Addressing the Social Dimension of Private Projects – Good practice Note, International Finance Corporation (IFC), December 2003
[http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_SocialGPN/\\$FILE/SocialGPN.pdf](http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_SocialGPN/$FILE/SocialGPN.pdf)

SIA Guidelines for Mining Projects, BMP Greenland, November 2009
http://www.bmp.gl/minerals/SIA_guidelines.pdf

Socio-Economic Impact Assessment Guidelines, Mackenzie Valley
http://www.reviewboard.ca/reference_lib/index.php?section=18

International Principles for Social Impact Assessment. IAIA Special Publication Series No. 2. May 2003.
<http://www.iaia.org/publicdocuments/special-publications/SP2.pdf>

Survey of Living Conditions in the Arctic (SLiCA): Inuit, Saami and the Indigenous Peoples of Chukotka. <http://www.arcticlivingconditions.org/>

ICMM – International Council on Mining and Metals – Good Practice Guidance for Mining – www.goodpracticemining.com

Mobilitet i Grønland, Mobilitetsstyregruppen, Nuuk, January 2010

Logistic and Execution Plan REP===” Aappaluttoq Ruby Project. February 2011

Exploitation in Greenland. Bureau of Mineral and Petroleum, March 2007
- Online: www.bmp.gl (minerals)

Social Analysis Guidelines in Natural Resource Management. The World Bank.
- Online:
http://info.worldbank.org/etools/library/view_p.asp?lprogram=107&objectid=238462

Principles and guidelines for social impact assessment in the USA. The Interorganizational Committee
on Principles and Guidelines for Social Impact Assessment, 2003- Online:
<http://www.iaia.org/modx/assets/files/US%20principles%20final%20IAPA%20version.pdf>

Additional relevant literature is described in the following publication (p. 100-103):

Project Brief and “Introduction to Ruby and Pink Sapphire” produced by TNG, January 2011.