

Mineral Licence and Safety Authority Guidelines

for application, execution and reporting of
offshore hydrocarbon exploration activities
(excluding drilling) in Greenland



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The following appendices also form part of these guidelines (the appendices are available in English only):

Appendix A: Template for 3-day activity report

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Appendix C: Template for completion report

Appendix D: Insurance requirements for offshore hydrocarbon exploration activities

Appendix E: Information on the Greenland VMS (Vessel Monitoring System)

Appendix F: Reporting of data

Appendix F: Reporting of data (spreadsheet)

Appendix G: Template for Fishery Liaison Officer log book

Appendix H: Guidelines for health systems and medical emergency preparedness

1. Definitions

1.1. For the purpose of the Guidelines, the following terms shall have the meanings stated below, unless otherwise apparent from the context:

- a) "BAT" means Best Available Technique defined as "the latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste" as adopted by the OSPAR Commission.
- b) "BEP" means Best Environmental Practice defined as "the application of the most appropriate combination of environmental control measures and strategies".
- c) "EAMRA" means Greenland Environment Agency for Mineral Resources Activities.
- d) "EIA" means Environmental Impact Assessment.
- e) "Guidelines" means MLSA Guidelines for application, execution and reporting of offshore hydrocarbon exploration activities (excluding drilling) in Greenland.
- f) "Government of Greenland" means Naalakkersuisut.
- g) "Licensee" means the company or jointly venture of companies that has been granted a licence for exploration, extraction and production of hydrocarbons under the Mineral Resources Act, each company or joint venture of companies that performs the exploration and exploitation of hydrocarbons on behalf of a Licensee as approved by the MRA and designated in the licence granted by the Greenlandic Government and each contracting company or joint venture of contracting companies that is responsible for the day-to-day operation of an offshore facility, vessel or installation.
- h) "Mineral Resources" means all mineral resources covered by the Mineral Resources Act, see section 5 of the Mineral Resources Act, unless otherwise apparent from the text.
- i) "Mineral Resources Act" means Greenland Parliament Act no. 7 of 7 December 2009 on mineral resources and mineral resource activities, as amended by Greenland Parliament Act no. 26 of 18 December 2012 and Greenland Parliament Act no. 6 of 8 June 2014, as amended by subsequent Acts from time to time¹.
- j) "MLSA" means Mineral Licence and Safety Authority.
- k) "MRA" means the Mineral Resource Authority which is the overall administrative authority for mineral resources and which comprises the Greenland Government, the ministry with responsibility for the mineral resources area, the Mineral Licence and Safety Authority and the Environmental Agency for the Mineral Resources Area as well as any persons and organizations, which the MRA appoints to conduct inspection and auditing of the Licensee's activities under a licence.
- l) "NORSOK G-001" means NORSOK G-001 "Marine Soil Investigations" (Rev. 2, October 2004) as amended from time to time.

¹ In Danish: "Inatsisartutlov nr. 7 af 7. december 2009 om mineralske råstoffer og aktiviteter af betydning herfor, som ændret ved inatsisartutlov nr. 26 af 18. december 2012 og inatsisartutlov nr. 6 af 8. juni 2014 med senere ændringer (Råstofloven)"

2. Introduction

This document is prepared by the Mineral Licence and Safety Authority (MLSA) to provide guidelines for application, execution and reporting of offshore hydrocarbon exploration activities (excluding drilling) in Greenland. The guidelines are made with reference to § 84 of the Mineral Resources Act. The guidelines replace the “BMP Guidelines for application, execution and reporting of offshore hydrocarbon exploration activities (excluding drilling) in Greenland” (December 2011).

In these guidelines "offshore hydrocarbon exploration activities" denotes activities carried out from a ship/vessel in an offshore area of Greenland under a prospecting licence, an exclusive licence for exploration and exploitation of hydrocarbons or a scientific survey licence, except for drilling activities. Exploration activities conducted from offshore installations are not covered by these guidelines. In these guidelines the boundary between “offshore” areas and the adjoining onshore areas is determined at the mean sea level.

Offshore hydrocarbon exploration activities covered by these guidelines include:

- Marine 2D seismic acquisition
- Marine 3D seismic acquisition
- Marine controlled source electromagnetic surveys
- Marine gravity surveys
- Marine magnetic surveys
- Marine geophysical/geotechnical and environmental site surveys
- Metocean surveys
- Ice studies
- Seabed sampling surveys

The above list is not exhaustive. Please note that requirements for approval and execution of drilling activities are put forward in the BMP Stratigraphic Drilling Guidelines, amended from time to time, and the Greenland Bureau of Minerals and Petroleum Drilling Guidelines (Guidelines for Exploration Drilling), amended from time to time. Specifications regarding design of site surveys are also included in Mineral Resource Authority Guidelines for Exploration Drilling, amended from time to time.

Offshore hydrocarbon exploration activities can only be performed under a prospecting licence, an exclusive licence for exploration and exploitation of hydrocarbons or a licence for scientific surveys, see however the Mineral Resources Act § 2, section 3 and 4.

Offshore hydrocarbon exploration activities in Greenland are subject to approval by the Government of Greenland or the MLSA, cf. the Mineral Resources Act § 86. Activities may not commence before an approval is obtained.

To obtain an approval to conduct offshore exploration activities, the licensee shall comply with the provisions of the Mineral Resources Act and related legislation, the provisions of the licence under which the activity is applied for, the provisions of these guidelines and provisions contained in the approval letter.

Deviation from these guidelines will only be permitted if the licensee can demonstrate to the MLSA that the deviation in an equal or better way complies with the legislation and licensing conditions.

The MLSA may, when approving the specific activity, outline specific provisions for the execution of the activity and may approve possible deviations from these guidelines.

There shall be a copy of the approval letter on board the vessel, and the approval shall, upon request be made available to relevant authorities.

The MLSA kindly refers to:

- Guidelines for submission of scope of project for offshore hydrocarbon exploration activities,
- Guidelines to Best Environmental Practices,
- Environmental Impact Assessments and Environmental Mitigation Assessments 2015, and
- Manual for Seabird and Marine Mammal Survey on Seismic Vessels in Greenland 4th revised edition, April 2015.

Abovementioned guidelines and manuals can be found [here](#).

2.1. Legislation and Licence Terms

Offshore activities shall follow the rules of law from time to time in force in Greenland. Attention should be made to the following legislation, rules, licence terms and standards that are of particular relevance to offshore hydrocarbon exploration activities in Greenland:

- Greenland Parliament Act No. 7 of 7 December 2009 on mineral resources and mineral resources activities, as amended by Greenland Parliament Act no. 26 of 18 December 2012, and Greenland Parliament Act no. 6 of 8 June 2014 (The Mineral Resources Act)
- Consolidated Act No. 929 of 24 September 2009 on protection of the marine environment cf. Order in Council No. 1035 of 22 October 2004 for provisions brought into force in Greenland
- Act on maritime safety (Consolidated Act No 903 of 12 July 2007)
- Order no. 417 of 28 May 2009: "Order on technical regulation on safety of navigation in Greenland waters"
- Order no. 170 of 17 March 2003 on ship reporting systems in the waters off Greenland
- Technical Regulation no. 169 of 4 March 2009: "Technical Regulation on the use of ice searchlights during navigation in Greenland waters"
- Greenland Parliament Act No. 4 of 4 June 2012 on Greenland Oil Spill Response A/S

Offshore hydrocarbon exploration activities shall be carried out according to acknowledged best international standards, such as:

- NORSOK standard G-001, amended from time to time.
 - Some of the following sections of these guidelines refer to specific chapters or sections of dated NORSOK standards. If the NORSOK standards have been updated the licensee shall follow the provisions of the latest edition of similar specific chapters or sections.

2.2. Publication of Information on Exploration Activities

The MLSA may publish general issues related to exploration activities conducted under a Licence issued under the Mineral Resources Act, in accordance with the Licence terms. The MLSA may for instance regularly inform stakeholders of ongoing exploration activities in order to enable planning and coordination of the different types of activities taking place in Greenland waters.

2.3. Environmental Impact Assessment (EIA) or Environmental Mitigation Assessment (EMA)

For EIA and EMA issues the MLSA kindly refers to:

- Guidelines for submission of scope of project for offshore hydrocarbon exploration activities (excluding drilling),
- Guidelines to Best Environmental Practices, Environmental Impact Assessments and Environmental Mitigation Assessments (2015), and
- Manual for Seabird and Marine Mammal Survey on Seismic Vessels in Greenland 4th revised edition, April 2015.

Abovementioned guidelines and manuals can be found [here](#).

3. Application Procedure

3.1. Submitting address

Application materials for conducting offshore exploration activities shall be submitted to the MLSA in one paper copy or an electronic copy. The Application can be submitted in English.

Application materials shall be submitted to:

Mineral Licence and Safety Authority

Imaneq 1A, 201

P.O. Box 930

3900 Nuuk

Greenland

mlsa@nanoq.gl

3.3 Submitting a description and Scope of Project

A scope of project shall be submitted in accordance with Guidelines for submission of scope of project for offshore hydrocarbon exploration activities (excluding drilling). Abovementioned guideline can be found [here](#).

3.4 Submission of application for approval

An application shall be submitted to the MLSA, containing the following:

- Operation programme (see section 3.2)
- Documentation of Health, Safety and Security Management System and bridging documents (see sections 4.1 and 4.2)
- Description of the safety management system and bridging documents for the involved parties' health, safety and contingency systems (see section 4)
- Documentation for compliance with the requirements to ensure safe navigation (see section 4.5)
- If applicable, description of any deviations from the IMO 2010 Polar guidelines, including description of compensatory measures (see section 4.6.3)
- For each vessel incorporated in the operation programme; documentation from an independent third party stating that the vessel's certificates are clean and without annotations (see section 4.6.4)
- Documentation of insurance (see section 5)
- Account/statement of the health systems / medical emergency preparedness (see section 4.2)
- CVs for Marine Mammal and Seabird Observers (MMSOs) and PAM operators

3.5 Application

The MLSA require a minimum of 40 days processing time from the day the MLSA has approved the application as being complete. If the application contains defects and/or shortcomings (viewed against the components listed in these guidelines), a decision on the application can be expected 40 days from the date where the application is considered completed.

3.6 Applications not submitted in accordance with the deadlines and requirements

Applications not submitted in accordance with the above mentioned deadlines and requirements will not be processed by the MLSA. Deviation from the above mentioned deadlines and requirements will only be allowed if the applicant has proven just cause to do so.

3.7 Modification of approved activities

Modification of the approved activities is contingent upon submission of an application hereof and MLSA approval of the modification. The application shall be submitted well in advance of the expected effectuation of the modifications. The processing time of assessing such an application will depend on the extent of the change and the licensee must be aware that a new public consultation process may be necessary cf.

- Guidelines for submission of scope of project for offshore hydrocarbon exploration activities (excluding drilling),
- Guidelines to Best Environmental Practices, Environmental Impact Assessments and Environmental Mitigation Assessments 2015, and

- Manual for Seabird and Marine Mammal Survey on Seismic Vessels in Greenland 4th revised edition, April 2015.

Abovementioned guidelines and manuals can be found [here](#).

4 Operational requirements and operations programme

4.1. General Operational Requirements

- 4.1.1. The licensee shall ensure that the activity is performed in accordance with the approved plans and the specific provisions stipulated in the approval, regardless of whether the activity is performed by the licensee or by a contracted third party.
- 4.1.2. In order to comply with the Mineral Resources Act the operation shall, amongst others be conducted with due regard to the following:
- Activities shall be conducted in a safe and responsible manner and with due regard to the actual conditions
 - Risk of pollution and other harmful impacts on the environment shall be identified, assessed and reduced as is reasonable practicable
- 4.1.3. Activities shall to the largest possible extent be coordinated with other activities in the area to ensure that neither the requested exploration activity nor other parties' activities in the area are unnecessarily impeded. General requirements to execution of work follows NORSOK standard G-001, Chapter 5 "General Requirements to execution of work", amended from time to time.

Work and equipment not included by the above mentioned standards should at equal level be described and adhere to best international standards and practice.

- 4.1.4. The acquisition of data shall be coordinated with other activities in the area, which will induce disruption to any of these. The coordination shall ensure that neither the offshore exploration activities, nor other offshore activities, are unnecessarily disrupted.

4.1.5. Best Available Technology ("BAT")

The licensee shall ensure that BAT is applied.

The definition of the concept BAT follows the OSPAR Commission's definition, see OSPAR Commission home page.

4.2. Operation Programme

When submitting an application for conducting offshore exploration activities the licensee shall include an operation programme that outlines the planned exploration activity. The operation programme shall include the following:

- 4.2.1. Information on the operator of the exploration activity including possible contracted operator. Contact details of the contacts at the contracted operator, including phone number and email address.
- 4.2.2. List of used vessels and ship owner/shipping company including Vessels' IMO numbers, call sign and ship's email/MMSI number.
- 4.2.3. Purpose of the operation, including:
- Type of exploration activity
 - Acquisition methodology
 - Description of employed equipment
 - Use of equipment and their operating procedures
- 4.2.4. Description and information regarding seabed sampling shall follow NORSOK standard G-001, Annex B "Sampling", sections B.1 – B.4, amended from time to time.
- 4.2.5. Plan for the data acquisition and expected quantity of data collected.
- 4.2.5.1. Map of the expected data acquisition shall be included, with indication of coordinates, licence area and shorelines with WGS 84 as the geographical reference system. If data is planned to be acquired in sub-areas of licence area, maps and coordinates for sub-areas shall be included with precise specifications of where the different types of data is planned to be acquired.
- 4.2.5.2. Shape files over the planned data acquisition (e.g. seismic acquisition lines) shall be included, with WGS 84 as the geographical reference system.
- 4.2.5.3. When applying for sampling the expected sample size, depth in the seabed from which the samples are expected to be retrieved and sample density shall be included.
- 4.2.5.4. When applying for sampling, a description of how the collected samples will be treated on board the acquisition vessel, and description of the analysis programmes to be conducted on-board the vessel and subsequent analysis programme shall be included, see also NORSOK standard G-001, Annex B "Sampling", section B.5 "Sample handling and storage", amended from time to time.
- 4.2.6. Operation period, including timing of planned entry into Greenland waters, planned commencement of data acquisition and planned completion of the operation. Any operation period to be approved by the MLSA is dependent on the operation period approved in the EIA/EMA.

4.2.6.1. When applying for placement of constructions/equipment on the seabed, for example for measuring currents or tidal conditions, the licensee shall set out the time period for the proposed placements and submit a plan for their retrieval.

4.2.7. Logistics of the operation.

4.2.8. Information regarding planned crew rotation (if applicable).

The licensee shall have rotation schedules for working time and time off approved by the MLSA. As a general principle a 4 weeks on/4 weeks off schedule shall apply.

4.2.9. Description of any special conditions regarding the specific type of operation (where applicable).

5. Health, Safety and Security Systems

5.1. Documentation of Safety Management Systems

The licensee shall demonstrate they have a Safety Management System and describe how safety management, including the co-ordination of the safety management systems of the major contractors, fits within the overall management of the programme. The licensee shall demonstrate evidence of the links between the health and safety management systems including emergency response of the different vessels taking part in the operation; this includes all vessels that are a part of the licensee's emergency response, and the licensee (bridging documents) for approval by the MLSA.

5.2. Health Systems/Medical Emergency Preparedness

5.2.1. During the operation, a person with medical training and specific prerequisites for handling and stabilizing patients with acute conditions shall be on board the vessel.

5.2.2. The licensee shall insure that

- a) a qualified doctor is available at all times for consultation (e.g. through Radio Medical, or similar) or is able to be brought aboard the vessel, and
- b) an injured person can be transported from the vessel to a hospital

5.2.3. In the application the licensee shall include an account/statement of the health systems / medical emergency preparedness resources available during the operation. A guideline for health systems and medical emergency preparedness can be found in Appendix H.

5.3. HSE plans

The licensee shall ensure that all employees are instructed in health-, safety- and emergency plans relevant for their respective areas of work.

5.4. Fishery Liaison Officer

5.4.1. The licensee shall, upon MLSA request, include one or more Fishery Liaison Officers (FLO) in the operation. The FLO shall be approved by the MLSA and shall serve as an advisory observer and communicator in matters related to fishery. The MLSA may impose specific requirements on the

FLO's qualifications, including, for example that they shall be speaking Greenlandic in order to communicate with local fishery actors.

5.4.2. The licensee shall bear all costs associated with the FLO's participation in the operation. The licensee shall agree with the fisheries expert on working hours, wages, insurance, etc.

5.4.3. The FLO shall keep a logbook of his observations during the operation. A template for such logbook can be found in Appendix G. The logbook shall be submitted to the MLSA, with a copy to the licensee within 2 weeks of the termination of the exploration activity.

5.5. Safety of Navigation

5.5.1. The licensee shall ensure that all national and international laws/rules/regulations on ships, equipment, crew, and navigation are followed, including:

- The ship's master is responsible for the vessel being seaworthy, sufficiently manned with the proper expertise and adequately equipped and having sufficient provisions to carry out a safe voyage in the period and area.
- The ship's master is responsible for the vessel being navigated and handled in accordance with good seamanship.
- The ship's master shall be familiar with all rules and regulations relevant to navigation and operations within the Greenlandic EEZ (Exclusive Economic Zone), and shall plan the voyage taking into account all available sources of information necessary to ensure safe navigation, such as weather, wave and ice prognosis, bathymetry, local geography, currents and tides, navigational hazards, operational limits, the ship's design/construction, means of communication and navigation etc.

5.6. Vessel Reporting Systems

5.6.1. The vessel shall use the Greenland VMS (Vessel Monitoring System) and have a monitoring device installed for this purpose (see Appendix E for more information on VMS). Vessels shall be equipped with LRIT (Long Range Identification and Tracking System).

5.6.2. If the VMS or LRIT is not operative, and on voyage to and from Greenland waters before VMS is installed, the reporting system GREENPOS shall be used.

5.6.3. The latest revision of the IMO guidelines *Guidelines for Ships Operating in Polar Waters* Resolution A.1024 (26) shall be followed. In case of deviations from the guidelines, the reasons and what compensatory measures will be undertaken to ensure the safety of the operation shall be explained.

5.6.4. Before the ship is put into operation in Greenland waters, the licensee shall submit documentation prepared by an independent third party stating that the vessel's certificates are clean and without annotations. If sailing in icy waters is included in the ship's planned voyage, the submitted documentation prepared by an independent third party should also contain documentation regarding the vessel's construction in relation to the intended navigation in the given ice conditions.

“Certificates” means the vessels classification certificates and national certificates, as well as all other certificates.

“Clean certificates” means that the vessel’s certificates are valid and un-extended with condition/recommendation by Class or the relevant authorities at the time it is navigating in Greenland's EEZ.

The ship shall meet all the requirements for navigating in Arctic Waters of the classification society, which has classed the vessel.

5.6.5. If ships taking part in the operation are required to have a safety management system according to the International Safety Management (ISM) Code, the ships shall have procedures and contingency plans that take the special conditions related to navigation in Arctic waters into consideration, including the existing search and rescue emergency preparedness. Upon request from the MLSA the licensee shall submit documentation regarding the safety management systems.

5.7. Greenland Oil Spill Response A/S (GOSR)

The licensee shall have a valid agreement with GOSR covering the licence under which the activities take place before any activities can be approved.

6. Insurance

6.1. The licensee’s activities shall be covered by insurance which at all times comply with the provisions of the Licence and Appendix D to these guidelines.

6.2. Upon submission of an application for offshore exploration activities, the licensee shall notify the MLSA on existing insurance policies and their main terms. The licensee shall submit all insurance policies and terms to the MLSA regarding the activity upon MLSA’s request.

6.3. The MLSA may demand that the licensee establishes and maintains additional insurance. Furthermore, the licensee shall follow provisions on insurance given by MLSA, and decisions on insurance made by the MLSA.

7. Support Systems and Notification

JOINT ARCTIC COMMAND / ARKTISK KOMMANDO

MRCC NUUK

Aalisartut Aqquaat 47

3900 Nuuk

Grønland

Tel.: +299 364000 (24h)

Fax: +299 364099 (24h)

Email: ako@mil.dk (Official mail, only monitored during normal working hours)

ako-commcen@mil.dk (24h)

Danish Maritime Authority

Aqqusinersuaq 24

P.O. Box 245

DK-3900 Nuuk, Greenland.

Tel.: +299325444

Fax: +299325199

Web site: www.dma.dk

Email: nuuk@dma.dk

Greenland Fisheries Licence Control (GFLK)

P.O. Box 501

Indaleeqqap Aqq. 3

3900 Nuuk

Tel: (+299) 34 50 00

Fax. (+299) 64 63 60

E-mail: gflk@nanoq.gl

After approval has been granted by the MLSA, the licensee shall notify the abovementioned authorities on the exploration activities. The notification shall occur before the activity begins. The authorities shall also be informed upon termination of the activities.

The notification shall contain a list of used vessels with specification of vessels' IMO number, call sign and email / MMSI number, which they will operate during the period.

The licensee shall furthermore notify Joint Arctic Command / Arktisk Kommando when the vessels enter into Greenland waters and connect the vessel to a Greenland Vessel Reporting System while the vessel is in Greenlandic waters, see Section 4.6.1.

8. Environmental and Physical Conditions and Measures

8.1. Best Environmental Practice (“BEP”)

The licensee shall ensure that exploration activities are planned and executed so that environmental risks are identified, assessed and reduced as much as is reasonably practicable. BAT and BEP shall be applied and used in order to minimize environmental impacts, c.f. Mineral Resources Act § 53.

The definition of the concepts BAT and BEP follows the OSPAR Commission’s definition

8.2. Meteorological, Oceanographic and Ice Observations

The licensee shall, upon MLSA’s request, keep a logbook of meteorological, oceanographic and ice observations made during exploration activities. Reporting shall be done in accordance with Chapter 8 of these guidelines and any other specific requirements on format, as defined by the MLSA.

8.3. Other Environmental Conditions

- 8.3.1. All non-degradable materials and structures shall be removed upon termination of the operation, unless MLSA approves otherwise.
- 8.3.2. Discharge of waste water and kitchen waste shall be in compliance with the provisions of Annex IV and Annex V of the MARPOL Convention.
- 8.3.3. Hunting and fishing is not permitted in connection with exploration activities, unless specific permission is given by the Greenland Government.
- 8.3.4. MLSA may when approving specific exploration activities require the licensee to perform further impact studies and / or limit the operation to certain periods or from certain areas.
- 8.3.5. As per the MARPOL 73/78 requirement under Annex I, all ships with 400 GT and above must carry an oil prevention plan as per the norms and guidelines laid down by International Maritime Organization under MEPC (Marine Environmental Protection Committee). If ships taking part of the operation is covered by these requirements, the licensee shall submit a Ship Oil Pollution Emergency Plan (SOPEP) to the MLSA as part of the activity application.

9. Social Sustainability

- 9.1. Pursuant to section 18, subsection 1 and 2 of the Mineral Resources Act the licensees shall use Greenlandic manpower, contractors and subcontractors, suppliers and service providers when carrying out activities under a licence, if such are available.

9.2. If licensees use foreign manpower and companies the licensees shall be able to document to the MLSA that neither Greenlandic manpower nor Greenlandic companies were available or qualified to perform the activities or parts thereof.

9.3. Pursuant to Section 18 of the Mineral Resources Act contracts and tender material shall apply Greenlandic law and Greenlandic principles of contract law. Tender material etc., aimed at Greenlandic companies should be drafted in Greenlandic and/or Danish.

The licensee will be asked to report on the below mentioned in Greenlandic and Danish and cannot only be submitted in English:

- which actions the licensee has undertaken to meet the requirements for use of labour from Greenland and Greenlandic enterprises for contracts, supplies and services in the execution of the approved activity; and
- the results of the actions, including documentation and an explanation – if so – why Greenlandic labour and Greenlandic enterprises were not chosen.

10. Reporting of data

10.1. Data Submission

10.1.1. All material and data shall be submitted to the MLSA within 14 days of it being available, but no later than April 1st, the year after the data was acquired (however, see above for requirements for submission of MMSO-observations and logbook from FLO). Dispensation from this deadline must be applied for at, and approved by, the MLSA.

Data, including processed data and reports shall be submitted to:

Mineral License and Safety Authority (MLSA)

Imaneq 1A, 201

P.O. Box 930

3900 Nuuk

Greenland

and to the address below:

Schlumberger Software Integrated Solutions

F.A.O. GNDPR Service Team

Kirkhill House

Dyce Avenue

Aberdeen

AB21 0LQ

United Kingdom

Cores and samples shall be submitted to the MLSA Core Storage facility at the following address:

Greenland Services Partners A/S

P.O. Box 1020

3910 Kangerlussuaq

Greenland

The MLSA shall be contacted prior to forwarding any kind of material to the MLSA Core Storage Facility.

MMSO-data shall be submitted to the MLSA (on the above mentioned address in Nuuk).

- 10.1.2. All data and reports shall be submitted in two (2) separate copies, which allows for onward forwarding of one copy without media copying. With regards to seismic data the two copies shall be delivered digitally either on USB3-disks or DVD/CD - as specified in Appendix F section 1 and 2.
- 10.1.3. All reports shall be submitted in one printed copy as well as digitally in PDF-format.
- 10.1.4. All submissions must be followed by a complete list of material forwarded. If the submitted data and reports are to replace any earlier forwarded versions, this must be stated. Descriptions of the changes made to the new versions must also be documented.
- 10.1.5. MLSA may at any time demand the licensee to submit information as to whom any data including reports have been sold to.

- 10.1.6. Besides the general reporting requirements stipulated in this chapter 10 and the specific reporting requirements stipulated in Appendix F, MLSA may in the approval letter specify further requirements for reporting or deviations from the requirements listed mentioned here.
- 10.1.7. For types of data not included in Appendix F, MLSA will set out reporting requirements in the approval letter.
- 10.1.8. The MLSA may at any time request further information and reporting as available to the licensee.
- 10.1.9. For all activities and data acquisitions MLSA asks for a list of products and deliverables produced in relation to the acquisition, processing and analysis of data. The list shall be submitted to MLSA no later than 1st April the year after the data was acquired. If items are added or the list is otherwise amended, an updated list shall be submitted to the MLSA.
- 10.1.10. Further to the requirements listed in Appendix F, after the activity has ended, navigational data for all types of data acquisitions (seismic lines, sample sites etc.) shall also be supplied in a shape file format with WGS-84 as reference system, the UTM zone should be informed and the correct EPSG projection reference should additionally be supplied.
- 10.1.11. For all types of original geophysical field data, the licensee is obligated to keep a copy for at least 1 year after the expiry of the licence. If the licensee after this period should decide to discard the original field data, MLSA shall be offered the data free of charge before destruction of data. The MLSA may at any time request access to the original field data.
- 10.1.12. All data shall after 1st January 2015 be shipped to MLSA and Schlumberger (addresses stated under section 10.1.1) and upload fees to the Greenland database will apply depending on the amount of data uploaded. Data should not be supplied to GEUS (the Geological Survey of Denmark and Greenland) anymore after the 1st January 2015.

10.2. Continuous Reporting

10.2.1. Reporting of significant events

The licensee shall promptly notify the MLSA of any significant situation or event, including loss of life, missing person, serious injury, fire and imminent threat to personnel, vessel safety or the environment on the MLSA emergency telephone. The above list is not exhaustive.

As soon as practicable after the immediate notification, the licensee shall submit a complete written report to the MLSA on the occurred situation or incident.

10.2.2. 3-day activity reports

Three times a week the licensee shall submit a 3-day activity report. The 3-day activity report is used to inform stakeholders of ongoing exploration activities in order to allow for the planning and coordination of various offshore activities. It summarizes the activities performed since the last 3-day activity report and

describes the planned activities for the next 3 days. The content and format for such 3-day activity reports shall follow the template in Appendix A unless otherwise determined by the MLSA.

10.2.3. Weekly reports

Every Monday, the licensee shall submit a weekly report to the MLSA to mlsa@nanoq.gl. The report shall follow the format and contain the information shown in Appendix B.

10.2.4. Completion Report

Immediately after the end of the operation the licensee shall submit a summary completion report. The report shall follow the format and contain the information shown in Appendix C.