

BMP Guidelines

– for preparing an

**Environmental Impact Assessment (EIA) report
related to stratigraphic drilling offshore Greenland**



Danish National Environmental Research Institute
and Bureau of Minerals and Petroleum
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NAALAKKERSUISUT
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Introduction

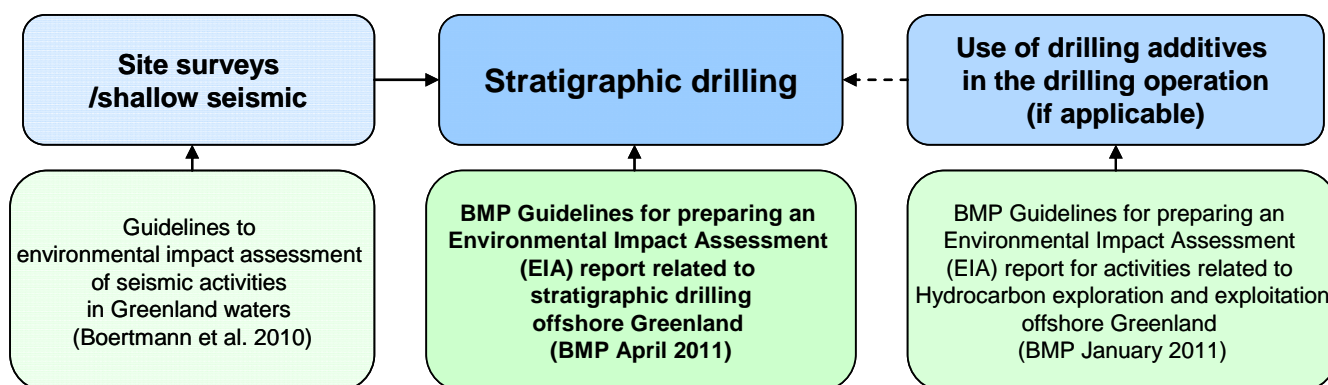
These guidelines are meant as support for companies preparing environmental impact assessment of stratigraphic drilling activities offshore Greenland. These EIA guidelines directed to stratigraphic drilling are considered an Annex to the main BMP EIA guidelines “*BMP Guidelines for preparing an Environmental Impact Assessment (EIA) report for activities related to hydrocarbon exploration and exploitation offshore Greenland, 2011*”. Aspects not specifically addressed in the stratigraphic EIA guidelines should follow the provisions of the main BMP EIA guidelines, with appropriate amendments to adjust to the expected limited scope of stratigraphic drilling activity.

All offshore stratigraphic drilling activities are subject to approval by the Bureau of Minerals and Petroleum (BMP), Government of Greenland, before commencement. The companies shall submit an application for approval of the activity to the BMP and the application shall be accompanied by an EIA. The present guidelines outline the requirements set by the BMP for such EIA reports. Other requirements for approval, execution and reporting are stipulated in BMP’s “Stratigraphic Drilling Guidelines”.

Please note that for potential connected activities, such as seismic surveys, separate guidelines are in place “Guidelines to environmental impact assessment of seismic activities in Greenland waters, 2010” (<http://www2.dmu.dk/Pub/FR785.pdf>).

Use of drilling additives is subject to regulations described in “BMP Guidelines for preparing an Environmental Impact Assessment (EIA) report for activities related to hydrocarbon exploration and exploitation offshore Greenland, 2011” (http://www.bmp.gl/images/stories/petroleum/BMP_EIA_Guidelines_Jan_2011.pdf)

The following sketch shows how the different BMP EIA guidelines relate to different aspects of stratigraphic drilling:



Strategic Environmental Impact Assessments and Databases for Environmental Data

The National Environmental Research Institute, Denmark (NERI) and Greenland Institute of Natural Resources (GINR) prepare regional Strategic Environmental Impact Assessments (SEIA). These SEIAs may cover the area that potentially could be affected by the activities.

The SEIAs are important sources of information when preparing the EIA reports. These SEIAs include a number of maps showing different environmental elements and based on GIS layers (Geographic Information System). The layers will be updated as new data are retrieved and they will be available to licensees preparing EIA reports. A further important source of information may be the “Environmental Oil Spill Sensitivity Atlas for the West and South Greenland Coastal Zone” prepared by NERI (<http://environmental-atlas.dmu.dk>).

Public Hearing Process

The EIA report shall be made in Greenlandic and English. A non-technical summary shall be made in Greenlandic, English and Danish.

The EIA report shall be submitted for public review. The public hearing process shall have a minimum duration of 4 weeks and shall include local authorities, stakeholders and the general public.

The EIA-report shall be submitted to the BMP who makes the electronic versions of the report available on the Greenland government webpage. Alongside the EIA, the licensee shall prepare a cover letter (in English, Danish and Greenlandic) stating the type of exploration activity the EIA relates to, the geographical area in which it is to take place, and the contact person at the licensee to whom comments can be send.

The licensee shall forward the incoming comments to the BMP. Relevant comments shall be discussed and incorporated by the licensee in the final version of the EIA-report, which shall be submitted (together with a list of the changes made) to the BMP for approval. Incoming comments submitted through the public hearing process may be made public, as comments, or extracts hereof, may be incorporated in the final version of the EIA.

The EIA report can only be approved once it has been updated by incorporating relevant comments from the hearing process. When the specific EIA report has been approved by the BMP, the report is final and no further changes can be made. Commencement of the stratigraphic drilling operation is contingent on BMP’s approval of the EIA.

Content of the EIA Report

The EIA report for stratigraphic drilling must include the following:

1. A short non technical summary (approx. 3 pages) briefly outlining the project and the findings of the EIA, including preferred options compared to alternative solutions, important potential environmental effects, mitigation, and uncertainties, as applicable.
2. A description of the proposed activity and emissions. This section must include the following information:

- a) A description of the proposed activities including location of the area subject to the activities and time schedule for the activity
 - b) Energy requirements and emissions to air including estimates of amounts and how emission are minimized,
 - c) Discharges to water including estimates of amounts and how discharges are minimized, and
 - d) Plan for monitoring and reporting emissions and discharges.
3. A description of the probable impacts of the proposed activity on the environment and the measures proposed for mitigating these impacts. This section must include impact analyses and potential mitigating measures on:
- a) noise, in particular underwater noise on marine mammals, and
 - b) emissions and discharges to water and air. If the amount of drill cuttings, produced by the stratigraphic drilling operation, is evaluated to possess a possible significant impact to the environment, video/photo documentation for environmental background settings at the drill sites is required because of potential occurrences of particularly sensitive habitats.

While preparing the EIA report, Annex 1 of the BMP EIA Guidelines (2011) related to hydrocarbon exploration and exploitation offshore Greenland, (http://www.bmp.gl/petroleum/BMP_EIA_Guidelines_Jan_2011.pdf), can be consulted.