



Bureau of Minerals and Petroleum

NOTAT

Regarding TGS' project scope for three seismic surveys in Greenland summer 2012

The Bureau of Minerals and Petroleum has asked DCE and GINR to evaluate the project scopes from TGS and assess whether

- the activities proposed by TGS requires that TGS delivers an EIA or an EMA by 1st of March 2012
- gives rise to other remarks by DCE and GINR

Notat til Råstofdirektoratet
angående seismiske project
scopes

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DCE and GINR have evaluated the activities proposed by TGS regarding acquisition of 2D seismic data in three areas: off Northeast Greenland, off Southeast Greenland and off Southwest Greenland.

Dato: 15. februar 2012

Side 1/2

The three surveys are:

Northeast: Aug. 15 to Oct 15

Southeast: May 1 to Aug. 1

Southwest: May 1 to Aug. 1

EMA is recommended

EIA is recommended

EMA is recommended

The scopes for the Northeast and the Southwest surveys indicate that also seabed sampling will take place.

DCE and GINR have asked (e-mail of Feb. 1, 2012) for supplementary information, as this was missing in the scopes.

In the supplementary information received, it is stated that the plan is to use the same acquisition ship for all three surveys, but a second acquisition vessel may be brought in. It is moreover stated that the survey period is from 15 June to 15 October for all three surveys, in order to make the survey period for the individual surveys flexible.

The proposed airgun arrays for all three areas has a source level of 264 dB re 1 μ Pa (peak-peak), which is very high and which is much higher than any biologically produced sound.

The surveys are proposed in areas with a rich biological life, especially marine mammals, and DCE and GINR therefore recommend that TGS reduces the source level and that they in their EMA/EIAs gives an account of the need for



the choice of source level as well as the target depth they wish to obtain data from.

The proposed 2D survey in Southwest Greenland takes place in an area where seismic surveys have taken place before. DCE and GINR recommend that TGS justify why it is necessary to collect seismic data in that same area again.

Finally, DCE and GINR note that TGS will carry out their survey in the Southwest-area close to (and perhaps overlapping with) a planned 2D survey by Cairn (in block ODA2). DCE and GINR recommend that TGS include the noise from the Cairn survey in their noise modelling, or that the two companies work out a common noise propagation model. The time period for the Cairn survey is not yet settled. It is essential that TGS and Cairn plan their survey periods in order to minimise cumulative impacts.

The available knowledge on the abundance of marine mammals in the Southeast Greenland survey area is very limited. There are concentrations areas especially for fin- and humpback whales and the endangered northern right whale still have a summer feeding ground somewhere in the region. Due to this lack of knowledge, DCE and GINR recommend that TGS prepare an EIA for the survey here. It is moreover recommended that, collection of background data on marine mammal abundance in the region is initiated, in order to be prepared to future regulation of increased hydrocarbon activities and for the preparation of a strategic environmental impact assessment.

In the waters off Northeast Greenland, TGS plan to collect 2D-data from an area where they also sampled in 2011. Then they got a permission to enter the protection area for narwhal and bowhead whale on the condition that they kept a distance of 40 km to the usually well defined ice edge between Hovgaard Ø and Île de France. In the EMA of the 2012 activities it shall be described how this safety distance will be recorded and kept.

Furthermore TGS wants to deploy an icebreaker for the survey, in order to sample data in ice covered waters. The EMA shall include a section of how this icebreaker is used, and into how dense ice they plan to work.

Finally shall the EMAs and the EIA be more elaborate and detailed than the present scope was.