
Dear Cairn

After having attended local hearings in Greenland and read the EIAs for the planned Greenland exploration drilling program this summer, including the oil spill models conducted by Applied Science Associates for ERM, I am still uncertain about the background for your choice of spill rates in the oil spill model.

ERM told us that the spill rates as well as the type of oil and number of days were given as external factors from Cairn to the model team. These factors are of course critical for the later distribution of a potential spill and volumes of oil to be recovered - which again are critical for both the environmental and social impact (considered 'major'), as well as the needed response capacity.

The modeled spill is based on a rate set to 5000 bbl/day (=800m³/day), and only for 37 days with 'medium crude' as modeled oil type. This corresponds to only 208 barrels per hour, which is a very low-producing well to most industry standards.

I would therefore like to see a justification of these parameters, as they seem low to other comparable situations and spill scenarios from other places.

The DWH spill was 8000 m³/day for 90 days. When the Norwegian Govt did their DWH modeling for Lofoten areas this fall, their experts used 4500 m³/day for 50 days as maximum rates, because of lower pressure and expected flow rates in those layers than in the Gulf of Mexico. See report in Norwegian here: http://www.regjeringen.no/upload/MD/Vedlegg/hav_vannforvaltning/Forvaltningsplanen_Barentshavet/rapporter/Ulykken_i_Mexicogolfen_Risikogrupperens_vurdering

These rates and durations are however still several times more than the current Cairn Greenland approach. In general, use of flow rates below 4000m³/days are considered 'not conservative' by the Norwegian Pollution Authority, which also always request detailed justification for spill models, in particular if lower rates are used, in spill models for Norwegian activities.

Based on the commitment from Cairn to follow Norwegian standards, and in the interest of transparency, we will therefore request a full justification of the choice of spill rates for the proposed drillings off Greenland this summer, including, but not limited to the following details:

- Several of your wells are relatively deep. What are your estimated well pressures and flow-rates in the planned wells, and which parameters are these considerations based on? How does this translate to the chosen spill rates?
- Why is 37 days considered sufficient for plugging each well? Please include rig travel time from South to North, as well as the relief well action plans. Last year you had problems with unexpected granite intrusions. How likely is that this summer?
- Why is moderate crude expected, and what will the consequences be of a different oil type?
- Is your scenario based on a worst-case approach or a more moderate scenario, and in case why?

As mentioned before, we will also again urge Cairn to release your Oilspill Contingency plan for the proposed Greenland activities. Also this will be in line with commitment to follow Norwegian standards.

Truls Gulowsen, Greenpeace