

To  
Environment Agency for Mineral Resources Activities  
Nuuk - Greenland

### Tanbreez project 2006/04 EIA report

Regarding the EIA report from the Tanbreez project that is in public hearing with deadline for comments December 2 2013.  
DCE and GN have had the possibility to comment on earlier versions of the EIA report including the attachments. During this process the versions of the report have been revised according to the needs for changes as expressed by DCE and GN.

DCE/GN find that the report as it is on the hearing portal is satisfactory and describes the environmental consequences of a mine as the one described in the report

However DCE/GN shall draw the attention to two aspects: One about fluorine and one about further chemical processing

#### Fluorine.

DCE/GN has recently become aware that there are several fluorine containing minerals in the area where mining is planned. Until now we did not place sufficient focus on the existence of these fluorine minerals. There are two reasons for this:

1) Toxicity test have shown that there are no toxicity in tailings and waste rocks. This means that there cannot be high concentrations of soluble fluorine in the tailings and waste rock. The company resumes the results in this way in the EIA report:

*To assess if the tailings or waste rock could potentially contain other toxic substances than the known metals, a specific eco-toxicity test was carried out. Samples of tailings and waste rock material were placed in water tanks with daphnia and trout to test for unexpected mortality. The tests recorded no unexpected mortality among the daphnia or fish.*

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2) The ore processing consists of crushing and magnetic separation into an un-magnetic fraction, a medium magnetic fraction, both of which are exported, and a highly magnetic fraction. The highly magnetic fraction is planned to be deposited in the lake "Fostersø". In the separation process the fluorine containing minerals will end in one of the two fractions that are exported.

We do not, however, recommend to base decisions solely on the two arguments given above. The company should be asked to give a judgement of what happens to the fluorine in the ore, tailings and waste rock based on chemical analyses and solubility of fluorine.

Further we suggest that GEUS is consulted about their knowledge to fluorine minerals and their solubility.

**Chemical processing:**

We shall draw the attention to the fact that the EIA report is based on a project that does not include a chemical separation plant. If, at a later stage of the project, the company decides to apply for a chemical separation plant in Greenland we recommend to consider whether a new EIA report is needed.

With kind regard

Gert Asmund