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Department of Environment

Ministère de l'Environnement

NWB File: *NWB2MEA0507*

February 24, 2006

Mrs. Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
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via Email to:
licensing@nwb.nunavut.ca

Dear Mrs. Beaulieu:

RE: GEOCHEMICAL CHARACTERIZATION OF MEADOWBANK AIRSTRIP MATERIALS

DOE has reviewed the report by Golder Associates on behalf of Cumberland Resources Limited titled, 'Geochemical Characterization of Meadowbank Airstrip Materials'

DOE note that ARD screening criteria for this project are based on INAC Guidelines (1992) with the net potential ratio (NPR = NP/AP) as the principal indicator of ARD potential. The screening criteria used by Cumberland are reported as:

	Initial screening criteria	ARD potential
Waste rock	NPR < 1	Likely acid-generating (PAG)
	1 < NPR < 2	Uncertain
	2 < NPR	Not potentially acid-generating (non-PAG)

The screening criteria presented in INAC (1992) include material classification based on NPR, which is presented as the following:

	Initial screening criteria	ARD potential

Waste rock	NPR < 1	Likely acid-generating (PAG)
	1 < NPR < 3	Uncertain
	3 < NPR	Not potentially acid-generating (non-PAG)

It is unclear how the NPR range of 1 to 2 was determined to be uncertain potential for this project. If the 1 to 3 screening range was used to determine uncertain potential, the effect on classification is unlikely to be much different - i.e. IF would remain PAG, and UM would remain non-PAG as screened by Cumberland. What does get affected, however, would be the classification of IV material from the starter pit, which could be used in the construction of the runway if insufficient UM rock in available

DOE requests that revised NPR ratios be used as a screening tool when undertaking geochemical characterization of this uncertain IV material.

Furthermore, the report states runoff from the runway will be collected in 5 settling ponds and is expected to infiltrate into the soil beneath them. It also states that water quality monitoring will be undertaken within these ponds. DOE questions what Cumberland will do if the monitoring shows water quality to be poor. Will alternative disposal/treatment methods be considered? What is the risk to groundwater from allowing this water to infiltrate into soil? What are the triggers for alternatives? If no alternatives are being considered then the purpose of the monitoring needs clarification.

DOE thanks NWB for the opportunity to comment on this matter.

Yours sincerely

Mike Atkinson
Manager Land Use and Environmental Assessment
Department of Environment