

APPENDIX 3

Government of the Northwest Territories
Department of Environment and Natural Resources
Wildlife Division Comments

RE: Potential impacts to the health of terrestrial wildlife interacting with Snap Lake or downstream environments.

GNWT-ENR has considered the issue raised during the technical sessions regarding potential impacts of the proposed changes to the EQC parameters in the Water Licence on the health of terrestrial wildlife interacting with Snap Lake or downstream aquatic environments. The scientific literature from which to draw conclusions about potential toxic effects to particular wildlife species of elevated levels of various TDS constituents of concern is limited. Water quality standards set by bodies in other jurisdictions (e.g. BC ministry of Water, Land and Air Protection, CCME guidelines) generally extrapolate criteria derived for domestic animals. For example, The Ambient Water Quality Guidelines for Chloride in BC (Nagpal et al. accessed May 2014) lists a guideline of 600mg/L for livestock and, hence, wildlife. This is substantially higher than the maximum proposed end-of-pipe AML of 378 mg/L. While there is likely variability in species responses, this approach seems reasonable given that domestic livestock would typically have higher levels of exposure than wider-ranging mammal species. As such, health effects to individual animals are predicted to be minimal if DeBeers can maintain its AML and MG levels for TDS and various constituents at the levels proposed.