



Kugluktuk

Bathurst Inlet
Kingaok

Bay Chimo
Umingmaktok

Cambridge Bay
Ikaluktutiak

Gjoa Haven
Okhoktok

Taloyoak

Kugaaruk

- TIA Expansion Capacity (KIA-1),
- TIA Wildlife Attraction and Deterrence (KIA-2),
- TIA Floatation Tailings Dust Fall and Leaching (KIA-3),
- TIA Elevated Parameters of Potential Concern Upon Closure (KIA-4),
- TIA NPAG Tailings Cover Depth (KIA-5),



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- Roberts Bay Discharge and AEMP (KIA-6),
- Potential Interaction with Marine Environment (KIA-7),
- Mixing Zone Delineation (KIA-8),
- Increasing Contaminants of Potential Concern in Roberts Bay (KIA-9),
- Hydrology (KIA-10),
- Site-Wide Water and Load Balance (KIA-11),
- Prediction of Environmental Effects on Water Quality KIA-12), and
- Doris North Water Levels (KIA-13).

In addition, KIA and TMAC have negotiated long term land tenures, benefits agreements and frameworks for water and wildlife compensation and executed comprehensive legal agreements addressing the requirements of Articles 26 and 27.2 as well as Articles 6 and 20 of the Nunavut Land Claims Agreement. These agreements are in force.

Currently, the KIA has \$3.49 million in letters of credit from TMAC and a Corporate Guarantee of \$8.0 million under Schedule K of the Commercial Lease for Doris North for a total of \$11.49 million in security. In addition to this, KIA has a General Security Agreement (GSA) under Schedule I of the Commercial Lease, which provides KIA a claim to TMAC's assets in support of the Corporate Guarantee.

KIA considers this amount of security to be inadequate for the Doris North mine site given the current level of development and the proposed amendment to the project certificate and Type A water license.

Under Article 12.2 of the Framework Agreement between KIA and TMAC, closure and reclamation costs were to be assessed and total Reclamation Security determined by an independent Reclamation Security Expert at TMAC Resources Inc.'s expense. This independent Reclamation Security Expert was to be jointly selected by KIA and TMAC.

TMAC recently provided its reclamation cost estimate information and comparison to the INAC reclamation cost estimate to KIA. These reclamation cost estimates were provided to KIA's engineering consultants for review.

The major conclusions of our engineering consultant are as follows:

- The quantum of \$28.94 million in reclamation cost for Doris North mine site is reasonable and the more accurate estimate given its unit costs are based on submitted contractor rates and work experience in reclamation.
- The split between security for land and water is \$24.20 million and \$4.74 million respectively. This means that KIA could hold 84% of the quantum for land and that INAC should hold 16% for water security.



- Residual risks that can lead to cost escalation are identified for the tailings cover, tailings, Interim Dyke, the South and North Dam. A list of questions has been provided by our consultant to us for clarification with TMAC.

The KIA has discussed with TMAC the \$28.94 million for reclamation work and identified residual risks and cost escalators. TMAC's engineering consultant answered all of our engineering consultant's questions to their satisfaction. Through this discussion the KIA has concluded that TMAC's reclamation cost estimate with its 20% contingency is very reasonable. Therefore, the KIA supports a quantum of \$28.94 million for reclamation security for the Doris North mine site.

The KIA seeks to discuss with INAC the land and water split of a quantum of \$28.94 million or an amount that is agreed to by INAC and TMAC. The KIA is prepared to discuss the land and water split of reclamation security once INAC and TMAC have come to an agreement on the overall quantum.

The basis of our discussion with INAC would be the 84% and 16% split between land and water security holdings as indicated by our engineering consultant.

INAC's engineering consultant has a quantum of \$44.12 million of which \$43.42 million (98%) is related to IOL while \$0.7 million (2%) is related to Crown land. Of the \$43.42 million, \$19.71 million (45%) is allotted to land while \$23.72 million (55%) is allotted to water.

This 45% and 55% split between land and water security holdings is based on INAC's consultant assigning 80 to 100% liability to water for any work in and around water crossings or bodies of water. Re-grading or earthmoving and production of run of quarry (ROQ) or other materials is assigned a water liability of between 20 to 50%. Removal of structures was assigned 10% water liability.

The KIA finds this allocation of water liability to be unreasonable, subjective, and arbitrary based on its actual experience with spillage resulting in both land and water contamination. The leakage of drilling fluid at the Orbit 25 drill site at Boston Camp caused approximately 1200 square metres of tundra to be damaged by potassium chloride in July 2011. This deleterious substance had both elevated chloride levels in the soil and had also entered in a nearby water body.

Environment Canada had charged both HBML/Newmont and Orbit Grant with breaking Federal environmental laws and both parties had agreed to contribute to EC's environmental fund. The effects of spillage to the water body dissipated within days without loss of fish or damage to the aquatic environment. No reclamation action was undertaken by the Federal government.



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The KIA investigated possible means of land reclamation for this drilling fluid brine spill. If no action were taken, it would take 15 to 20 years for reclamation to occur through natural revegetation. To restore the land through human intervention, it would require both experimentation and remedial action based on experimental results. The cost of intervention to reclaim 1200 square metres of tundra was found to be approximately \$3 million.

This case clearly demonstrates that the liability for security is primarily with land contamination and not water. Therefore, the KIA does not find INAC's assignment of liability of land and water security to be at all reasonable and accepting a 45% and 55% split of land and water liability would expose the KIA to excessive risk.

Consequently, KIA is in support of the TMAC Project and recommends that the NWB approve the amendments requested to the TMAC water licence, subject to the satisfaction of regulatory requirements, appropriate mitigation measures being imposed and pending satisfactory resolution of reclamation security.

Yours truly

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KIA Department of Lands and Environment

Cc: Geoff Clark, KIA Director of Lands and Environment, and John Roberts VP Environmental Affairs, TMAC Resources Inc., and David Abernethy, Regional Coordinator, Water Resources Division, Resource Management Directorate, INAC.