



Date: November 15, 2011

To: Phyllis Beaulieu, Manager of Licensing - Nunavut Water Board

From: Tanya Trenholm, Pollution Policy Specialist – Aboriginal Affairs and Northern Development Canada – Water Resources Division

Executive Summary Prepared by the Department of Aboriginal Affairs and Northern Development Canada

For: Nunavut Water Board Final Hearing (November 30 – December 1, 2011), in Kugluktuk, Nunavut, concerning Shear Diamonds Ltd. Application for Renewal of Type A Water Licence 2AM-JER0410

Aboriginal Affairs and Northern Development Canada (AANDC) has reviewed the Type 'A' water licence application as submitted by Shear Diamonds Ltd. (Shear) for the renewal of water licence 2AM-JER0410. AANDC and Shear met on August 24-26, 2011 in an effort to resolve as many outstanding issues as possible prior to the final hearing. Many items were resolved, and the remaining action items are outlined below for the Board's consideration in preparation for the final hearing. AANDC's intervention consists of outstanding technical issues and respectfully presents considerations for the development of licence terms and conditions. AANDC also understands that some of the forthcoming issues will not be resolved in advance of, or at the hearing, but rather by way of proposed plans to be submitted following the licensing hearing.

Appended to the written intervention is a draft conformance table summarizing outstanding information requests and conformity requirements, a proposed schedule for conformity/submission of plans, and a summary of AANDC's reclamation estimate.

Technical Issues and Recommendations:

1. The Site Water Management Plan should be updated to include peak flow events in the water balance calculations.
2. The Final Abandonment and Restoration Plan should address permafrost aggradation and the potential for talik formation at the bottom of the pit when mining concludes be addressed in the update.
3. Pursuant to the Waste Rock Management Plan, AANDC requests that results from Acid Rock Drainage and Metal Leaching testing be made available for review.



4. AANDC recommends that the Aquatic Effects Management Plan be updated to include toxicity testing of effluent discharged to stream C3 and that monitoring for phytoplankton and zooplankton be moved to sampling location JER-AEM-06 to be more representative of the mixing zone.
5. AANDC has updated the reclamation cost estimate, and has assessed Lands and Waters liability as follows:

A	Total Reclamation Est. Lands	\$8,527,431
	KIA Lands	<u>(\$1,264,034)</u>
	Crown Lands only	\$7,263,397
	Crown already holds	<u>(\$6,120,414)</u>
	Balance for Lands	\$1,142,983
B	Total Reclamation Est. Waters	\$3,389,074
	Crown already holds	<u>(\$2,200,000)</u>
	Balance for Waters	\$1,189,074
C	Total Reclamation Est. Lands & Waters (A + B)	\$11,916,505

AANDC can confirm that the Nunavut Regional Office's Lands Division will work with Shear to obtain the additional amount related to Land Liability. As such, AANDC proposes that the NWB require only the additional amount necessary for waters: \$1,189,074.00.

Additional Licensing Considerations:

- A schedule of plan submissions which proposes anticipated timeframes required for interveners to conduct a formal review of outstanding and updated plans (where required).
- Specific language to be included related to plan submissions that the Board identify that plans require review and approval, include the time required for review and comment, and state explicitly that the activity shall not occur until such time as Board approval is obtained.
- Inclusion as a term and condition of the licence a requirement for quarterly reporting/projections of plans and activities expected by Shear, understanding that this information will be draft and that any such submissions will be for information purposes only. This information will better assist authorizing agencies in effectively preparing for formal reviews and in planning and conducting inspection responsibilities.
- Concerning the term of the licence, AANDC supports Shear's proposed licence term of 10 years.