



Indian and Northern
Affairs Canada

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et du Nord Canada

Water Resources Division
Regulatory Approvals Section
P.O. Box 1500
Yellowknife, NT
X1A 2R3

Telephone: (867) 669-2650
Facsimile: (867) 669-2716

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Mr. Thomas Kudloo, Chairman
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NT X0E 1J0

INTERNAL	
PC	RB
LA	April 25
OM	
TA	
BS	
ED	Box 119
CEO	
BRD	

Our file Votre référence

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NUNAVUT WATER BOARD

APR 25 2000

PUBLIC REGISTRY

RE: REQUEST FOR COMMENTS

Echo Bay Mines Ltd.- Review of Reclamation Liability for the Lupin Mine

The Water Resources Division has reviewed the above-mentioned document and has the following comments. It is unclear why this review of reclamation liability does not separate the water-based reclamation costs from the total cost of reclaiming the site. The Lands Division of DIAND holds the land leases for Echo Bay's Lupin Mine, and has the responsibility to ensure that the reclamation costs for the land-based liability of the mine are covered. Areas where there is an implication for the cost of land based reclamation have been identified below.

1. Esker Cover on Cell 4 of the Tailings Containment Area

In the Department's intervention, it was recommended that a cover for Cell 4 be considered in the estimate of closure costs used to set security, as it was not clear that Echo Bay had totally excluded Cell 4 as a solids storage cell for the next licence term. As stated in the Department's April 14 submissions, if the Water Board is satisfied by Echo Bay's assurances that Cell 4 will not be used in this licence term as an area for tailings solids deposition, then the cost of an esker cover for this Cell could be excluded from the estimate.

3. Placing 1.75 m of esker cover on exposed tailings

The Department believes that Echo Bay is overstating the case when they state "DIAND concluded a 1.75 m esker cover would be sufficient to keep the tailings in a permanently frozen state". The data collected thus far suggests that this may be the case, however the recommended study of covered Cell 1 would be needed to substantiate this. There has not been any region of the TCA covered with 1.75 m of esker cover, and while the proposed cover thickness may be adequate it has yet to be proven in the field. Addition of cover material to the TCA to exclude the tailings from the active layer is required, as well as a thorough examination of the potential for pore water rupture of cover material. These should be done in the course of the recommended study of Cell 1.

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6. Winter Road Construction

The costs of operating the winter road influences both land based and water based reclamation costs. This cost should be split between security required under the land lease and the security deposit for the water licence. While it is likely that there may be other users of the winter road who could contribute to the sharing of costs, as is pointed out in the Brodie estimate, there is uncertainty as to the amount of this contribution, and the additional work required on the winter road as a result of higher use. The cost to the Crown of opening the winter road should be conservative, and cost estimates for reclamation work generally exclude potential revenue.

- 2. Labour Costs Based on an Overtime Averaging Permit,**
- 4. Cost Reductions in the General Expense Category,**
- 5. Inflation Estimate, and**
- 7. Cost Reductions in the Fuel Delivery Expense**

If the reduction in the cost of the above components is considered appropriate by the Nunavut Water Board, then it is recommended that the reductions be split according to an appropriate percentage between the reclamation costs of the land based components and the water based components.

After a general review of the Brodie estimate, DIAND Lands estimated the reclamation costs of the land-based components in this estimate to be \$18,779,542.00 (including the cost estimated for operating the winter road) which would leave \$25,828,598.00 of Brodie's total as water based reclamation costs. If the cost of operating the winter road is split equally between land and water based reclamation costs, then the water related portion of the Brodie estimate is increased to \$29,072,598.00. Those reductions proposed by Echo Bay which the Nunavut Water Board considers appropriate could be subtracted from this total.

Regardless of which estimate is used to determine reclamation costs, only the costs of reclamation of the water-related components should be required under the Water Licence. This is done to avoid duplication of security requirements, as was stated previously in the Department's written intervention and at the public hearing.

Thank you for the opportunity to comment on these submissions.

Sincerely,



David Milburn
Manager, Water Resources Division