

November 15, 2001

**Echo Bay Mines Ltd., Lupin Operations
Water Licence Number NWB1LUP0008
Amendment Hearing – Opening Remarks**

Acknowledgements.

Mr. Chairman, Members of the Board, Mr. Executive Director and other employees of the Board, representatives from DIAND all other interested parties.

My name is Bill Danyluk. I am a Professional Engineer and hold an Advanced Graduate Diploma in Management. I have been the General Manager of the Lupin operation for 2-years. I have been working for EBM at Lupin in various capacities since 1988 and have over 20 years of mine operations experience.

Mr. Chairman. I would like to introduce my colleagues and other expert witnesses who will be speaking on our behalf today, in order of appearance.

Mr. Hugh Ducasse, Certified Mining Safety Professional, is Manager of Loss Control and Environmental Affairs at Lupin and has held that position for 5-years. He has been an employee of Echo Bay since 1985 and has 26 years of experience in the mining industry.

Mr. David Hohnstein, C.E.T., is Environmental Coordinator at Lupin and has held that position for 4-years. He has been an employee of EBM since 1984, holding various positions within our environmental department including Manager of Environmental Affairs. Mr. Hohnstein has in total, almost 20-years experience in the environmental science field.

Mr. Courtland Smith, P. Eng., is Vice President Nuna Logistics Ltd. Mr. Smith has 15-years of engineering and management experience in the mining industry including 10-years working for EBM, with some of that time at the Lupin operation. Representing Nuna, Mr. Smith has done various project work for Lupin, including the preparation of this reclamation estimate.

Mr. John Zigarlick, Chairman and Chief Executive Officer Nuna Logistics Ltd. Mr. Zigarlick has worked in the mining and mining construction industry since 1968. He is the founder of Nuna Logistics Ltd. and past President and CEO of Echo Bay Mines Ltd. Mr. Zigarlick was instrumental in developing the Lupin mine and putting it into production. In total, he spent 21-years as an employee of EBM and is very familiar with the Lupin operation.

Mr. Brent Murphy, M.Sc., P.Geol., is Senior Environmental Geologist, EBA Engineering Consultants Ltd. Mr. Murphy has 15 years of experience working in directly related areas such as water quality management and evaluation, environmental impact assessments and mine reclamation and geophysical assessments. EBA has also sub-contracted out the geochemical assessment work to Robinson Geoconsultants Ltd. who are specialists in this field.

Mr. Jerry McCrank, P. Eng., is Vice President Operations Echo Bay Mines Ltd. and has held that position for 4-years. Mr. McCrank has been an employee of EBM for 25-

years in various capacities, including General Manager of the Lupin operation for many years.

Mr. Martin Ignasiak is our legal counsel and is associated with Fraser Milner Casgrain. Mr. Ignasiak will not be presenting any evidence today, but he is present to handle any legal issues that may arise on our behalf.

Mr. Chairman ... on behalf of Echo Bay Mines Ltd. and the Lupin operation, I would like to thank you and the Board for allowing this hearing today. I would also like to thank all in attendance for being present at today's hearing. I know many of you have traveled very far and have taken much time to prepare for and participate in this process. EBM acknowledges each of you as distinguished representatives of your respective organizations. Although we may not agree with you on all issues, we sincerely respect your right, as well as your obligation, to present any evidence, or ask any question of us as we proceed through this hearing process.

Echo Bay Mines Ltd. operates the Lupin gold mine on the western shore of Contwoyto Lake, in the Kitikmeot Region of Nunavut. The mine has been in operation since 1982 and has produced more than three million ounces of gold. The current Life of Mine Plan forecasts production of approximately 160,000 ounces of gold per year to 2006, with declining production in 2007. Ongoing exploration programs are currently underway which could extend the life of the operation.

EBM obtained the first water licence for the Lupin mine from the Northwest Territories Water Board on June 1, 1981. The licence was subsequently renewed in 1990 and again in 1995. In July 2000, EBM was granted another renewal of the Lupin water licence by the Nunavut Water Board for a period of eight years, to June 30, 2008. Within Part B, General Conditions, article 2, the reclamation security amount was set at \$29.2 million in the form and schedule as required by the Minister of Indian and Northern Affairs Canada. EBM has always contended that the ultimate reclamation amount is substantially less than the figure derived by the Nunavut Water Board. We believe the actual security amount should be set at **\$15.5** million or less. Today we will present to the Board what we believe to be a legitimate and reasonable proposal for the schedule of payments corresponding to the proposed security amount.

In its decision, the NWB gave notice that the reclamation security issue is to be reviewed annually, with the possibility of adjusting the security amount as new evidence or circumstances arise. It is with this annual review process in mind that we are requesting an amendment to the current total reclamation security amount.

The following points summarize our rationale for recommending that the NWB grant our application to reduce the amount of reclamation security for the Lupin operation:

- EBM has an exemplary record of environmental stewardship at each of its North American operations including Lupin. EBM has completely reclaimed two mines in the Northwest Territories and four others in the United States. Progressive reclamation is practiced at each of the current operations and completed on a timely

basis. EBM has proven by our actions that we will complete the reclamation of the Lupin mine.

- The Lupin operation has already spent over \$5 million on progressive reclamation of the site and further work is planned during each year of operation. Hugh Ducasse and David Hohnstein will present in detail the reclamation work that has already been completed at Lupin and the work planned and budgeted for each and every year throughout our remaining mine life. You will be given a visual representation of how this plan will continue to reduce the reclamation liability at the operation ... not add to it. We intend to spend an additional \$7.676 million on progressive reclamation activities over the remaining mine life. The salvage estimate for machinery, equipment and inventory at Lupin upon closure is considerable and EBM maintains this value should be taken into consideration when setting the schedule of payments for the reclamation security. Should the Bathurst Inlet Road and Port be constructed, valuable infrastructure at Lupin will be put to good use instead of being disassembled, reducing the reclamation requirement by a further \$1.6 million.
- We have obtained an independent estimate by a consortium of reputable northern consulting and construction companies that supports our lower reclamation estimate. Court Smith and John Zigarlick are here today to present details and answer questions regarding their estimates to move esker material to be used as ultimate cover of the TCA. Brent Murphy, of EBA Engineering, will talk about the analysis his firm has completed on our reclamation plan. He will also talk about some research that is required by EBM to prove the viability of the options we are presenting. The basis of our future research will be to show that an esker cover of 1.0 metre or less will adequately complete the tailings related reclamation.
- EBM maintains that the reclamation estimate completed by BCL, that which formed the basis of the security amount set by the NWB in 2000, was hastily prepared and based on unreasonable assumptions. Much concern was raised by the BCL estimate comparing the cost for EBM to do the work compared to contractor rates. The reclamation estimate presented today is already based on contractor rates. If EBM determines that we can do the work better or at a lesser cost than our major surface contractor, we will consider it. However, the current situation is that Nuna performs all surface work related to the operation already and we expect this to continue in the future. We do not understand the fear that somehow the cost of the work will dramatically increase if contractors are required to do the work ... when our estimate is in fact based on this very principle.

DIAND has contended that BCL, the NWB and their own reclamation estimates were based using the RECLAIM modeling program, which they claim is becoming the industry standard. EBM would like some clarification from DIAND as to their rationale for making this statement, because we are not aware of any company that relies on this program. We see the RECLAIM model only as a tool for roughly estimating reclamation costs in the absence of more tangible data. RECLAIM is nothing more than a big spread sheet. The model inherently produces estimates on

the high side, because those using it apply layer upon layer of contingencies to compensate for inadequate input data. It is EBM's position that BCL did not do adequate research in producing its estimate ... BCL did not visit the mine site even once, nor did BCL confer with any EBM personnel. Mr. Brodie admitted at the hearing for the license renewal, that he wished he had more time to do an adequate job. We contend that since BCL lacked well researched input data, he simply included multiple contingencies to derive his unreasonably high estimate. Compensating inadequate research with fudge factors and masking the result with a fancy name like "RECLAIM" does not constitute good science. The BCL estimate is inadequate by any reasonable standards and it should not be used as the basis of the required reclamation security at the Lupin operation. It is that simple. EBM is at a loss to understand why there is any continued support for the work and conclusions reached by BCL. In fact, let me quote for you from Mr. Brodie himself, from his RECLAIM generic guidelines document:

This model is not intended to replace reclamation planning or to be used to determine the activities required to reclaim a site or to dictate how much should be spent on reclamation.

Estimates of reclamation costs developed using the spreadsheet should be considered as "engineering estimates". A contractor's estimate is likely to be more accurate as it will reflect current construction costs for the specific equipment to be used.

DIAND, SRK and Brodie Consulting are not responsible for the completeness or accuracy of any reclamation estimate made using this model.

Mr. Chairman, DIAND and BCL are not prepared to take responsibility for the completeness or accuracy of their estimate using the RECLAIM model, yet it was from this estimate that our reclamation security amount was derived. Conversely, EBM and all of our contractors and consultants are unequivocally willing to take full responsibility for our estimate.

- DIAND also claims in their intervention that, "*traditional tailings reclamation has generally involved the covering of tailings with a quantity of suitable granular material sufficient to ensure that permafrost will re-form in the tailings area, and sufficient to ensure that the extent of re-formation will be such that, even at a time of maximum melt, the active layer will not extend downwards into the tailings material*". Once again, EBM must ask DIAND for the rationale for making such a statement. EBM contends that this statement is simply not based on actual practice, either in Nunavut, the NWT, or anywhere else throughout the country. EBM proposes to incorporate freezing of the Lupin tailings to limit oxidation potential, because the climate of the region allows for it. Incorporating natural physical attributes into a design is simply good engineering practice. The natural cold climate at Lupin is a valuable addition to our reclamation toolbox and we will utilize it to our best advantage. However, it was never meant to imply that the one and only

acceptable method to reclaim the TCA, was to totally encapsulate the tails in permafrost. That we have proposed to incorporate frozen tailings at Lupin in our reclamation plan (and perhaps the Cullaton Lake property had a similar line of thinking as the only other example we know of), comes far short from what we would consider constitutes “traditional tailings reclamation practice” as DIAND would contend. Our ultimate reclamation plan will ensure that any discharge from the TCA meets the discharge criteria specified within our water licence. Throughout the history of operation at Lupin, our discharge water always has met discharge requirements with very little treatment required. There is no good reason to believe that we will not be able to meet discharge requirements once operations are completed and no new tailings are being introduced into the system.

- Another comment made by DIAND in their intervention statement is very disturbing to EBM. DIAND claims that “*Echo Bay has not established any definitive results as yet*”, and “*There has been no data generated, no data analyzed, and no demonstration that the option proposed is effective, feasible, suitable and reliable.*” Mr. Chairman, EBM has conducted extensive research for more than a decade on our TCA and frozen core dam structures at great expense. We have collected much valuable data and Mr. Murphy will attest to this in his presentation later. We ourselves are experienced operating professionals and we support our work with many different consultants as required. May I repeat that throughout the history of operation at Lupin, our discharge water has always met discharge requirements. While DIAND may not think so, EBM consider this to be effective, feasible, suitable and reliable performance. Again, there has not been a single good argument put forward illustrating that we will not be able to meet discharge requirements once final reclamation has been completed.

Mr. Chairman, the points I have just discussed represent the basis of our request for this hearing and outline the approach we will take to assure the Board that our request is well founded.

Mr. Chairman, within their intervention statement DIAND has submitted to the Board that they still do not recognize our water licence since it lacks the Minister’s approval. EBM has no intention of entering into any jurisdictional arguments regarding our licence. Regardless, we need water to run the operation and we consider our licence, issued July 1, 2000 and notarized by the NWB, as giving us the right to do so. DIAND has also submitted arguments as to what EBM should and should not be able to present at this hearing. Once again Mr. Chairman, EBM also has no intention of clouding the very important and fundamental issue at hand here, the ultimate reclamation of the Lupin mine, by entering into a procedural debate. The majority of us are at this hearing today to talk about the technical issues regarding our reclamation plan, not to get side-tracked by matters of procedure. The majority of us want to discuss our reclamation plan on its technical merits, considering costs and ultimate impact on the environment. Everyone attending this hearing wants to be heard and we all have a right to be heard. Input from each person here today is valuable and should be taken into consideration. We are all professionals in our own right and there is much we can learn from one another. Mr.

Chairman, this hearing has severe consequences for EBM and the Lupin operation. This hearing is not a game for us, nor should it be for anyone else. Mr. Chairman, I urge everyone here today to take this into consideration as we proceed through this hearing process.

The economic realities facing the gold mining industry provide sufficient motivation for both the NWB and DIAND to work with EBM to develop a reclamation security amount and subsequent schedule of payment that is both reasonable and affordable. Demanding or expecting money the company can't possibly provide is not advancing anyone's interests. Within their intervention statement, DIAND expresses concern that "*cost for mine site clean-up do not become the responsibility of the Crown and thus the taxpayer.*" Mr. Chairman, the Lupin gold mine is about as far away from being a burden on the Canadian taxpayer as could be imagined. Over \$8.0 million annually of direct tax revenues is generated for various levels of government from the Lupin mine. These direct taxes I speak of include income tax, property tax, land leases, quarry permits, excise tax, WCB contributions and royalties. For the remainder of our expected mine life, this will add up to over \$50 million. For the nineteen years prior to this, approximately \$150 million in direct tax revenues were generated from the operation. Mining is considered a primary industry that generates spin-off jobs in many different sectors, primarily the manufacturing sector but many others as well. Yes, even government jobs are created in support of the mining industry. The Lupin operation has provided jobs for thousands of different employees over almost a twenty-year time period. We will continue to provide many more jobs for the duration of our mine life, many within the Kitikmeot region where they are much needed. Throw in some non-direct taxes such as sales taxes, municipal taxes and the like and the total tax revenue from the operation is that much greater. Mr. Chairman, taking all this into consideration it is very hard for EBM and the mining industry in general for that matter, to understand how any reasonable person can consider us a burden on the taxpayer. The simple fact of the matter is that the Lupin operation has created tremendous wealth for this country and we will continue to do so, unless we are faced with such an unrealistic reclamation security schedule that forces us out of operation. Such a scenario would turn the Lupin operation from a \$50 million asset for the government into a liability. Now that Mr. Chairman would indeed place an unnecessary burden on the taxpayer.

Thankyou Mr. Chairman for the opportunity to present EBM opening statement. I would especially like to thank the Hamlet of Kugluktuk for hosting this hearing. I would also like to acknowledge all elders who are in attendance today. Your valuable input and advice is always required and listened to.

Mr. Chairman, unless you feel it is appropriate at this time to take a short break, I would like to turn the floor over now to Mr. Ducasse and Mr. Hohnstein who will talk in more specific detail about our reclamation program at Lupin.

Bill Danyluk, P.Eng.
General Manager, Lupin Operations