## Amax Limited

It would be useful, I believe, if I were to re-emphasize the factors which were taken into account in approving the Alice Arm Tailings Deposit Regulations. This was not a decision that was taken flippantly or in great haste but one that was made only after a detailed technical examination of data on various tailings disposal alternatives carried out by the staff of the Department of Fisheries and Oceans and the Department of the Environment.

By way of example of the thoroughness with which this task was carried out, I might mention that more than 40 technical reports on the biology and oceanography of Alice Arm were reviewed to assess the immediate and long-term risks associated with maintenance of a conventional on-land tailings impoundment, as compared with the underwater disposal system which is in contention today. Following this extensive study, the conclusion drawn was that a properly designed marine tailings disposal system would not adversely affect the fisheries resources and, on balance, would be preferable in this particular case to a containment pond on land.

The Minister in making his decision based his approval of the Tailings Deposit Regulations on the following factors: first, the conclusion that Pacific salmon and other important fishery resources would not be adversely affected; second, that tailings deposited from the mine would not extend outside of Alice Arm; third, that the tailings would keep to the bottom of Alice Arm at a minimum depth of 100 metres; and fourth, that an alternative method of tailings storage—that is on-land impoundment—would represent a threat in perpetuity to salmon resources entering Alice Arm. This conclusion was arrived at in view of the high rainfall and the steep topography of the area, which meant, in effect, that the permanent stability of an on-land storage basin could not be assured. I feel this is a very important point, Mr. Speaker, one which has been frequently overlooked by those critical of the underwater disposal system.

Having satisfied himself as to the technical aspects of this disposal system, the Minister has freely admitted that there still remained a nagging thought that perhaps the experts might have miscalculated or slipped up somewhere along the line. It was for that reason that he was not unsympathetic or unresponsive to the concerns expressed by the Nishga Tribal Council, on behalf of the native people who live in the vicinity of Alice Arm, that some damage might be caused to the fishery resource as a result of the mining operation.

Because of this, and to make doubly sure that we were doing the right thing, the Minister asked for the establishment of a review panel of independent and highly respected scientists to go over all the data and reports on which the decision was based, and to publicly report their findings. He opted for a scientific review panel rather than the public inquiry which was advocated by the Nishga Indians because the evidence on which the panel would have to base its findings was almost exclusively scientific or, at best, very technical. However, it was made very clear to the Nishgas, and to any other groups or individuals interested in the issue, that the panel would be prepared to meet with them and hear their views or evidence,

and that all reports of the panel would be readily available to the public.

The Minister, and most others involved in this matter, were disappointed that the Nishgas, for reasons best known to themselves, decided to boycott the review panel. In view of the concerns they had raised and their repeated demands for a public inquiry, it was somewhat difficult to understand their position. However, that was their decision.

In the recruitment of members to the review panel, considerable care was taken to ensure that competent and independent scientists were appointed. Its Chairman was Dr. J. E. McInerney, who is Chairman of the Department of Biology at the University of Victoria and a specialist in the physiology and behaviour of fish. The other two members were Dr. R. W. Burling, Professor of Oceanography at the Department of Oceanography, University of British Columbia, and Dr. W. K. Oldham, a member of the Faculty of Civil Engineering at the University of B.C.

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The panel's terms of reference were as follows:

- To examine and advise on the adequacy of the Alice Arm Tailings Deposit
  Regulations for protecting economically important fisheries resources and
  Indian food fisheries of Alice Arm and environs.
- 2. To examine and advise on whether planned tailings deposit practices are likely to meet the terms and conditions of the regulations.
- 3. To assess the planned monitoring to determine whether it will be adequate to detect violations of the terms of the regulations or impacts upon fish and fish habitat, and to recommend necessary improvements.
- 4. To consult with interested agencies and parties knowledgeable about the issue.
- To examine and recommend any alternative tailings disposal methods which could significantly reduce or preclude hazards to the fisheries resources.
- To recommend further courses of action in the future which in the opinion of the Panel, may be necessary to address the issue.
- To prepare two reports: as soon as possible an interim report recommending any action deemed important for protecting the public interest, and a final report by July 1, 1981.

It was believed by the then Minister of Fisheries and Oceans that these terms of reference would look after any possible questions which could arise on this very important issue. The scientific review panel went about its work with much dedication and diligence, and starting around the end of March, 1981 consulted with knowledgeable people in various parts of British Columbia and held open public meetings at Prince Rupert and Vancouver. Between meetings they studied an immense amount of correspondence and reports which had a bearing on the subject.

In the early part of May the scientific review panel introduced its interim report, which commenced with the statement, and I quote:

It is the panel's considered opinion that, in the short term, the public interest will not be jeopardized by the continued discharge of Amax mine tailings to Alice Arm. Accordingly, no major restrictive actions are deemed necessary at this time.

The panel's report was issued on July 24, 1981 and consisted of a document of some 154 pages, in itself a somewhat remarkable feat considering the fact that the three scientists involved