

Copy for - Dr. K.C. Charron,
Dept. of National Health
and Welfare.

Ottawa, 21 July, 1950.

A.K. Muir, Esq.,
General Manager,
Giant Yellowknife Gold Mines Ltd.,
Yellowknife, N.W.T.

Dear Mr. Muir:

ARSENIC DISPOSAL, YELLOWKNIFE

The above subject and the proposals put forward by yourself and Mr. J.G. McNiven were discussed at length by officials of the Department of Mines and Technical Surveys, the Department of National Health and Welfare and this Department in my office on the 19th of July.

It was the unanimous opinion of the meeting that the responsibility for the solution of this arsenic disposal problem rests with the mining companies but that as departments we can properly assist by making the various scientific services available. It was agreed:

- (1) That a great deal more information would have to be available before consideration could be given to the disposal of As_2O_3 in Veronica Lake because data relating to the nature of the lake bottom, amount of evaporation, amount of run-off and precipitation, feasibility of damming-off the entire lake to prevent arsenic escaping in solution through fissures in the rock, is insufficient to permit a decision on whether the suggested method would be a satisfactory solution to the problem.
- (2) That it should be possible for the mining companies interested in this arsenic disposal problem to figure

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out whether they will be able to construct a rock chamber which will hold the arsenic effectively. This idea was favoured, provided that there is no direct contact with any of the mine workings and that the chamber would be vented to take care of arsène in a safe manner and, of course, that assurance would be given that seepage from the chamber would not contaminate the surrounding country.

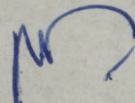
- (3) That while the use of concrete vats is recognized as the safest method of storage, the Departments concerned do not desire to put the mining companies to unnecessary expense.

Thus we feel that if surface storage is to be adopted, we will have to be supplied with evidence that the method in mind would, within reason, meet the requirements. Likewise if underground storage is to be used, we would have to be shown that the conditions mentioned herein would be met.

In offering these views, we have in mind that no solution other than transporting the arsenic out of the territory would be wholly satisfactory. We feel that some reasonable measure which will not be unduly costly to the companies is the approach to the problem. In brief, we feel it is up to the companies to satisfy competent authority that the method of disposal they advocate will be a reasonably effective solution to the problem.

Please be assured of our continued interest in this matter and I will be very pleased to have your views on the above suggestions which have the unanimous concurrence of those present.

Yours very truly,



R.A. Gibson,
Director.