

*Northern Inland Waters Bill*

come. This has been apparent. We have heard of the wealth there. It was logical that moves would be made in this direction. What has been done has been too little and too late in so far as governmental planning is concerned.

In his speech today the minister said it is his firm belief that with the passage of this legislation we will have all the tools we require for multi-purpose planning and for rational development of our water resources. I do not agree with this. I am convinced that statement just does not hold up so far as the problem facing us in the north is concerned. I think there are a host of problems and that we will not solve them just by passing a water bill. Earlier the minister indicated that all these water problems would be solved and that he could guarantee the quality of our northern waters. I certainly hope he can, but it seems to me there are a number of things which have been overlooked.

I have obtained a number of scientific articles on the Arctic area. I shall not go into these at any length. However, I picked up one today which is very interesting. I would suggest to hon. members who do not have a copy of this article that they obtain one. It is in a little pamphlet apparently taken out of a larger book. It is entitled "A Look at the Future of Hazardous Contamination of the Circumpolar Environment." It was written by a Mr. Kingsley Kay, Ph.D. of Ottawa. This pamphlet sets out several problems which I believe should give members a little better insight into some of the difficulties we face so far as water resource management is concerned.

It does not go into a tremendous amount of detail but outlines several problems. For example, it talks about mining development coming into the Arctic area. Perhaps I should read a section of this because it states the situation much better than I could. It is not critical of the mining ventures but points out, for example, the problems waste materials can pose for the entire area so far as contamination is concerned. That is what we are talking about now—quality water and the possibility of pollution in this area. The article reads in part:

When mining and smelting operations began to develop in arctic regions following the war, it was supposed that discharge of effluents onto the barren arctic waste would not be harmful. However, communities quickly developed at operational sites, and it was evident to health workers that these operations might be even more hazardous to health under the climatic conditions of the Arctic than they had proved to be in populated temperature zone locations. This eventualized in one major

[Mr. Harding.]

case where gold mining and smelting were undertaken in the Northwest Territories of Canada without waste control. Two years after commencement of operations, arsenic trioxide produced by ore-roasters in the recovery of gold had contaminated the surrounding townsite to the extent that poisoning cases involving domestic animals and humans occurred. Then too, the process of distribution of radionuclide fission products around the earth has been under observation for a number of years, and health specialists in this field have suspected that the climatic conditions of the Arctic would also favour the accumulation of these contaminants.

The point he is making is that quite frequently we will take planning from a temperate zone—and we live in a temperate zone—and try to transplant that temperate zone planning into an area where there is a completely different type of climate. I think this has possibly happened with regard to this bill. The article continues:

It now seems clear that development of the Arctic in the temperate zone pattern could introduce the same progression of environmental contamination problems perhaps even in an intensified form due to the meteorology, geology, and geography of the high latitudes.

● (8:50 p.m.)

The interesting thing here, Mr. Speaker, and it has already been mentioned by some hon. members, is that much of the Arctic is an area covered with permafrost. It is not like the areas in which we live. The writer goes on to explain that probably they would spray with DDT to combat black flies. In most sections of Canada a lot of the residue would be carried into the soil with rainfall, and in a period of time would be dissipated. Chemical changes would take place, but when there is a layer of permafrost this does not happen. Matters of this sort should be brought to the attention of the House, the committee, and the minister who is piloting the bill through the House.

Just regulating water will not solve our pollution problem in the Arctic. We must sit down and do a lot of planning on what we will do with mineral wastes which could become toxic, and what we will do with other types of waste coming from the little settlements that will be established. They will have exactly the same problem. There is only one place for their wastes to go, into the pools, lakes and rivers. Very little of their wastes will seep into the soil and be dissipated in that way.

This pamphlet also deals with a fallout problem and how it can affect animals and people. With your permission, Mr. Speaker, I