

*Arctic Waters Pollution Prevention Act* transporting the oil by means of huge tankers which will break through the ice to bring the oil to the markets of the world.

One of the most recent publications to reach me deals in part with the tremendous difficulties which would accompany the building of a pipeline over the permafrost. For obvious reasons, the oil would have to be fairly warm in order to move rapidly through the line, and the heat generated would gradually thaw out the permafrost upon which the line itself rested. Those directly concerned have some idea as to the magnitude of these problems. The depth of thaw to which the permafrost would be subjected over a period of time has been calculated. But we in Canada have done no research along these lines. We do not even understand the effects on the Arctic ecology of allowing machines to run over the delicate surface of the land. The tracks of vehicles and machines which were used decades, even generations ago, still remain to be seen after 70 or 80 years. The Arctic is not a temperate zone. Most of our planning is temperate zone planning; it has never been geared to the Arctic. This is why my hon. friend moved his motion urging acceptance of an amendment which would guarantee continued research into Arctic conditions. I trust the minister will accept the amendment and thus assure the Canadian people that research will go forward.

**Mr. Les Benjamin (Regina-Lake Centre):** I rise to support the amendment put forward by the hon. member for Comox-Alberni (Mr. Barnett). It seems to me that here is a classic example of a Liberal government overlooking the need to include a vital provision in its legislation. At some future time the Minister of Indian Affairs and Northern Development (Mr. Chrétien) may find himself in the position of realizing that something has gone wrong and he will have egg all over his face as he frantically tries to lock the barn door after the horses have left. The hon. member for York West (Mr. Otto) did not feel it necessary that the bill make provision for research. His remarks caused me to conclude that he, too, felt it was not necessary to make sure that the barn door would be locked while the horses were still in it.

• (5:10 p.m.)

The fact that Canada is already facing danger in the north from pollution, and that incidents have already occurred, surely makes it not only desirable but necessary that the government proceed to conduct extensive

[Mr. Harding.]

research not only into the sort of ships that should sail in the Arctic but into methods to clean up any accidental or deliberate pollution. The tragedy of the *Arrow* was followed by the fumbling, groping and desperate attempts by government agencies as well as those responsible for the spillage to find ways and means of cleaning up the oil. This problem would be compounded in the Arctic owing to the severity of the climate and other conditions that one would not find anywhere else, except in the Antarctic.

In my opinion, programs of oil exploration in Arctic waters should not be permitted until we have adequate safeguards and knowledge in this regard. In the event of spillage and well blowouts, we must be knowledgeable of all the techniques and improvements in techniques needed to stop pollution. Similarly, we still do not have adequate knowledge of the kind of ships that will be plying Arctic routes. I think the minister would be well advised to accept this amendment. I see no reason for any objection to it. A program of research in this field is a logical one for his department, and he can pass on the results of the work done in this field to other agencies and departments if he finds it necessary to do so. I hope the government will accept the amendment and I urge the minister to agree that it is a worth-while amendment to the bill.

**Hon. Jean Chrétien (Minister of Indian Affairs and Northern Development):** Mr. Speaker, I have listened with great interest to the arguments put forward by the hon. members who have spoken. This amendment was put forward in the committee, was debated by the committee and voted down because it was judged that it was a frivolous amendment, that it was really just the expression of a wish. I think the hon. member for Comox-Alberni (Mr. Barnett) has had many occasions to express his concern. Indeed, we also are concerned about research in the north and we moved forward a long time before this amendment was moved in the committee or in the House.

The Committee on Indian Affairs and Northern Development yesterday discussed at great length some of the aspects of the research program, the involvement of various people, conservation groups, the oil industry, and so on, in order to find ways and means to make sure the north is developed properly and that errors made south of the 60th parallel are not repeated. I do not think that an