air pollution would be solved. Any new industry could be prevented from locating anywhere unless it committed itself to taking the means required to avoid polluting the air and the water.

According to a summary of biological culture there are three main causes of water pollution. I quote:

First cause of pollution: degradation of the cultural balance.

Second cause: the use of chemical fertilizers which are all acidic and provoke the introduction of minerals into seepage. These minerals are almost always ammoniacs, potash, lime. Yet drinking water has to have among other things high electrical resistance and few electrolytes. Only then can it be safe to health.

Third cause: the disposal of human waste into rivers (fermented dejections from septic tanks and sewage). This practice is perhaps necessary because of the human concentration in cities.

But it is perhaps possible to avoid this latter cause by purifying the waters.

I go on:

Fourth cause, which is probably the most serious and over which we have absolutely no control at present: pollution by industrial waste.

Big industry uses enormous quantities of water for every kind of production: metal, cement, pulp and paper, leather or plastics. Food industries, be it dairy products, meat or sugar, have similar requirements and every time the plant waste water flows into the river without being treated or sufficiently treated. Industrialists find it more immediately profitable to pay fines rather than change their facilities to meet vital requirements.

• (9:20 p.m.)

So, in view of those sources of pollution, I feel that the act must be firm enough and strong enough to minimize loopholes. As far as rivers are concerned, for instance, we hear from time to time of ships' masters being fined for polluting rivers with hydrocarbon waste. And still such infractions seem to continue and be quite frequent in spite of the fines. Apparently it is cheaper to pay the fine than not to throw the waste into the river and therefore the ship masters adopt the cheapest way. I feel that the government is not being firm enough, strict enough.

In studying the legislation which is before us tonight, I wonder whether it has been made firm enough. At any rate, we will be able to go thoroughly into it in committee. We will be able then to ask for further information from the minister and the officials who will be called upon to give us a word of explanation. However, I wish to tell the minister that, as far as offences are concerned, when the act is in force, it will be absolutely necessary for us to take a very firm stand.

We must eradicate completely every cause of water pollution. The Canadian Water Pollution Control Institute moved a resolution that was agreed to on October 26, 1965, and subsequently published in the *Canadian Worker* in June 1966.

I am convinced that the minister has read that resolution, but I should like to quote it in part tonight for the information of hon. members.

Item (3) particularly, states the following, and I quote:

(3) It is for industry, regional, provincial and federal governments, individually and collectively, to ensure adequately the treatment and control of sewage in order to prevent pollution;—

—and Item (5), on which I spoke earlier, is to the effect that

(5) Pollution control has to be administered firmly, efficiently and equitably;

As to Item (8), it is worded as follows:

(8) As sewage represents an increasing proportion of water resources as a whole and since it could very well be recuperated and re-used through its restauration to a sufficient degree of quality, it is advisable to promote the perfecting of methods for the treatment of sewage and the adoption of standards so that they may be used again.

Of the 14 sections, those struck me particularly even though the others are interesting.

The City of Chicago, for example, was drawing large quantities of water from Lake Michigan to supply its municipal services, but the waters were later discharged into a river flowing south, so they did not come back into Lake Michigan. Some people submitted a project for replacing the water taken out of Lake Michigan by Chicago and other industrial cities.

As the minister said in his speech this afternoon, people are moving towards water bodies, and it has been like that since the beginning of the world. Industrial cities use up tremendous quantities of water which must be replaced.

An engineer from Sudbury, Mr. Kierans—not the Postmaster General and Minister of Communications but an engineer—put forward the so-called "Grand Canal" project. Its purpose would be to draw the water discharged in James Bay by a number of rivers, to pump it as far as Amos and from there to direct it to Lake Nipissing and Georgian Bay