

Quality of Water

supplies serving only a few people would not be included for reasons of practicality and cost.

Consideration is also being given to regulating devices sold for home water treatment. At present there are no control requirements or performance standards to ensure both efficacy for the purposes claimed and the protection of human health.

The new legislation will contain provisions for making regulations to cover chemicals used in water treatment facilities, as well as concentrations of contaminants which may be present in these treatment chemicals. The new Bill would also include authority to prescribe standards for the composition of system components and surface materials that come into contact with potable water. This would also alleviate problems that have arisen concerning both direct and indirect contamination.

I notice that you are asking me to wind up, Mr. Speaker, and I thank you.

[*Translation*]

Mrs. Suzanne Duplessis (Parliamentary Secretary to Minister of State (Science and Technology)): Mr. Speaker, I am pleased to have the opportunity to discuss the safety of drinking water, a very important subject for the Department of National Health and Welfare and all Canadians concerned. The initiative of the Hon. Member for Beaches—Woodbine (Mr. Young) in presenting Bill C-224 on the quality of drinking water is encouraging. We recall some very similar Bills, C-266 and C-276, that were presented in the past.

Water is as essential to life as food and air. It is one of the most abundant terrestrial resources and is present in the air, on the ground and in the earth. However, pure water does not exist in nature. Water carries a great number of substances for which it acts as a solvent. For example, it contains gases absorbed from the atmosphere and natural organic and inorganic substances obtained by dissolving rocks and earth. In fact, it is this mixture of chemicals that gives water its pleasant taste. Everyone who has drunk chemically pure water will agree that it is insipid, bland and tasteless.

• (1920)

Unfortunately, water can also contain many toxic substances. The presence of bacterial and viral pathogens in public water supplies was all too obvious in the late 19th and early 20th centuries, when water-borne diseases were common in Canada and among the leading causes of death. The use of effective disinfection methods led to the virtual elimination of these diseases from our society and contributed to a major improvement in public health.

Mr. Speaker, although major epidemics of typhoid and cholera are a matter of history in Canada, we cannot afford to let ourselves become complacent about the presence of pathogens in drinking water. In western Canada, giardiasis has now become a serious concern and also causes problems further south, in the Adirondacks in New York State. There have also been outbreaks of viral diarrhea and occasional outbreaks of typhoid. These have all been traced to plant failures, cross-connections or flooding of wells, but still serve to demonstrate the potential health significance of organisms that may escape sanitary barriers. The current emphasis on chemical contaminants in drinking water, therefore, should not divert our attention from the need to control microbial pathogens in drinking water.

That being said, Mr. Speaker, I may recall that over the last 20 years, scientists have identified more than 1,000 organic chemicals in drinking water, at relatively low concentrations. This has usually been in the parts per billion range or less. This detection has resulted largely from significant advances made in our ability to measure such low concentrations.

We know that the general public is concerned that conventional water processes, which are designed primarily to control bacteriological contamination and to remove inorganic contaminants, may not adequately remove certain trace organic contaminants. According to a poll carried out recently by a major Canadian magazine, 44 per cent of the population believes that tap water will no longer be drinkable by the year 2001. This concern has been manifested by the phenomenal rise in sales of home-use treatment devices. In a survey carried out in 1984 by the Department of National Health and Welfare in metropolitan areas in Canada, it was found that 3 per cent of Canadian homes used some type of in-home device to treat municipal water supplies, and it is estimated that this figure has now increased to 10 per