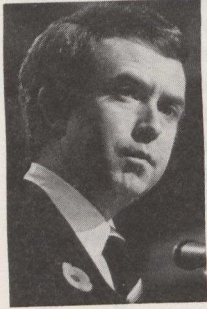


Year of peace program



Joe Clark

As a strong supporter of the International Year of Peace (IYP), the federal government has initiated a program of activities that reflects Canada's great concern for the enhancement of international peace and security. The program includes:

- a contribution of \$10 000 to the International Year of Peace Voluntary Trust Fund of the United Nations;
- a cross-Canada tour from April 14 to May 2 by the Ambassador for Disarmament Douglas Roche, for discussions on the IYP and the question of the relationship between disarmament and development;
- a book of essays reflecting on the basic requirements of peace to be published in autumn 1986 and presented to the UN as well as distributed in Canada;
- an essay competition for Canadians dealing with the theme *What Is Peace and What Can I Do to Achieve It* and a poster competition;
- the issuing of a commemorative stamp by Canada Post Corporation also in autumn; and
- funding priority, through the Disarmament Fund, to projects directly linked to the objectives of the IYP that meet the criteria of the fund.

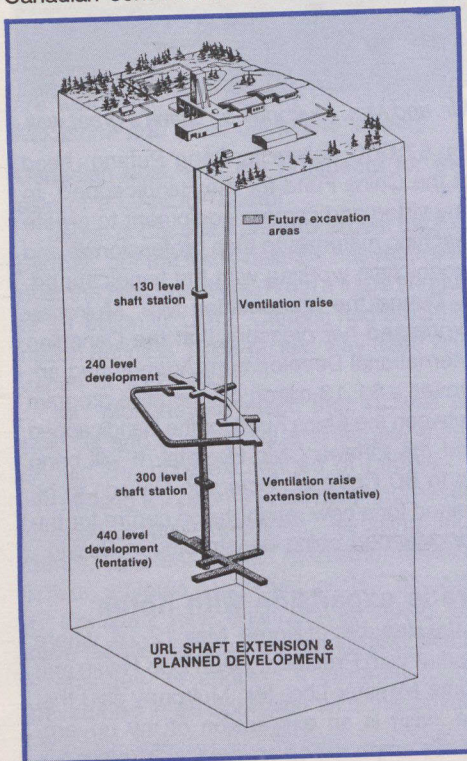
Canada was a co-sponsor of the IYP resolution that received the unanimous consent of the UN General Assembly on October 24, 1985. The IYP resolution recognizes the multi-dimensionality of peace in that it encompasses not only the prevention of war but also the enhancement of the quality of life, human rights and fundamental freedoms, the satisfaction of human needs, international development, the protection of the environment and other questions.

Secretary of State for External Affairs Joe Clark said that Canada supports the broad objectives of the IYP which include stimulating action by the United Nations and member states in promoting peace and security on the basis of the UN Charter; strengthening the UN system as the principal international system devoted to the promotion of peace; and focusing attention on the basic requirements of peace in the contemporary world. Mr. Clark added that Canada will continue to work towards enhancing international peace and security "not just in 1986 but every year".

Canada/US nuclear waste research accord

Atomic Energy of Canada Limited (AECL) has signed a \$81.1-million (Cdn) co-operative agreement with the United States Department of Energy for research work on the disposal of nuclear fuel waste deep in stable rock formation.

Under the agreement the US will spend \$22.4 million in Canada. About \$17.5 million will be used to deepen AECL's Underground Research Laboratory (URL) near Lac du Bonnet, Manitoba to 455 metres from its present depth of 240 metres. The US will provide a further \$10.2 million in the US for research to which Canada will have full access. The Canadian contribution is \$48.6 million.



Health and Welfare Minister Jake Epp said the agreement would provide valuable research to ensure that fuel waste is disposed of safely. He added further that it "is a recognition by the US of the high calibre of the Canadian research program".

Dr. S.R. Hatcher, president of the AECL Research Company, said the agreement had a number of advantages for Canada. "It will further enhance the reputation of the Canadian Nuclear Fuel Waste Management Program in international scientific circles, and will result in a stronger and more comprehensive Canadian program," he said.

"The US has been evaluating nuclear waste disposal in salt, volcanic tuff, basalt and granite rock while Canada has concentrated on granite. The co-operative program will give the US access to Canadian research results and will give Canada access

to US results, as well as providing additional money and staff in support of the Canadian program," he added.

Canadian research

Canada's preliminary research into the disposal of nuclear waste in plutonic rock shows that there would probably be nothing released from a waste disposal vault in the first 10 000 years, by which time it is expected that the waste will have decayed to the point where it is no more hazardous than naturally occurring uranium ore. Researchers maintain that releases after this time would only represent a small fraction of background radiation which would be so small that the risk to people would be negligible.

Nuclear fuel waste is a solid, and does not dissolve easily in water. The penetrating gamma radiation from the waste is stopped by about a metre of rock and decays to a very small fraction of its original intensity in about 300 years. Canadian research shows containers can be expected to last 500 years and other engineered barriers have been designed to provide a back-up, should the containers fail.

The remaining concern is that when the containers eventually corrode, small amounts of waste could be very slowly dissolved by groundwater and carried back to the surface environment.

The URL provides a representative geological formation where studies can be done on the behaviour of the groundwater system to determine how the stresses imposed by the construction of a disposal vault and the emplacement of waste would affect that system and its potential to serve as a natural barrier to the release of the waste.

Long-term participation

A general agreement for co-operation in nuclear waste management research between the United States and Canada was signed in 1982. The new subsidiary agreement details specific areas of co-operation over the next four years. It includes deepening the URL, participating in a regional hydrology study, planning experiments and developing computer models. No actual nuclear wastes will be used.

The present experimental level of the URL is at a depth of 240 metres from the surface, significantly shallower than the expected depth of a disposal vault. Deepening the shaft to 455 metres will allow the relocation of various experiments so that they may be conducted at stress and temperature conditions more representative of disposal vault conditions.