

nuclear waste is not your friend

Nuclear waste is very long-lived and extremely dangerous. High level nuclear fuel waste is created when nuclear power is used to generate electricity.

The waste is a radioactive poison, and includes hundreds of different isotopes, or radiation-producing substances.

Even low doses of radiation can cause cancer, birth defects and other health problems. The waste is lethal and must be strictly isolated from the environment for hundreds of thousands years. If the wastes leak into the environment, the radioactive elements will contaminate the soil, water and air.

and it won't be a good neighbour.



The first step is a nuclear phaseout.

The Nuclear Waste Management Organization says that energy policy is beyond their mandate, but the problem of nuclear waste is unsolvable as long as the waste continues to be produced. At the end of 2004, there were 1.9 million fuel bundles or 45,000 metric tonnes of nuclear fuel waste. Without an early phaseout, that amount will double. If new reactors are ever built, the volume will rise even higher.

**Conservation and alternative energy sources can and must replace nuclear power.
Conservation and alternative energy sources are cheaper, cleaner and more reliable.**

Nuclear power production began in the 1970's, before the government or the nuclear industry had any safe means of storing or disposing of the highly radioactive wastes.

- ? in 1977 a 3 month 3-man federal "commission" recommended burying nuclear waste in the Canadian Shield of northern Ontario
- ? in 1988 the federal government referred the "concept" of burying nuclear waste to a ten person environmental assessment panel
- ? in 1998 the environmental assessment panel concluded that burying nuclear waste was not acceptable to Canadians, and recommended that an independent agency be established to do future research into the long term management of nuclear waste
- ? in 2002 the federal government passed the Nuclear Fuel Waste Act which made an agency controlled by the nuclear waste owners responsible for research options for nuclear waste management

The Nuclear Waste Management Organization (NWMO) was created by Ontario Power Generation, Hydro Quebec and New Brunswick Power, the generators and owners of nuclear fuel waste. The NWMO was directed by the Nuclear Fuel Waste Act to review three "options" for the long term management of nuclear fuel waste (continued storage at the reactor site, centralized storage, or geological disposal) and report with a recommended option by November 15, 2005.

In November 2005 the Nuclear Waste Management Organization submitted its recommendation to the federal government. Calling it "Adaptive Phased Management", the NWMO combined all three of the federal government's "options" in a 300-year phased approach moving from storage at nuclear plants, to centralized storage, and finally to deep rock disposal. In the first phase of the NWMO plan, the waste will remain at nuclear plants for 30 years while a centralized site is selected. The site will have rock formations allowing shallow underground storage, an underground research laboratory, and a deep geological repository. In the second 30-year phase of the NWMO plan, either a shallow underground facility will be built at the identified site and waste transportation will begin, or waste will remain at the nuclear plants pending completion of a site research facility and construction of a deep geological repository at the site. In either case, the waste will be moved to the selected site. The repository may or may not be closed after the following 240 years

The Nuclear Waste Management Organization's "fourth option" combines the worst of all three options the NWMO considered!

- ? the option encourages continued production of nuclear waste
- ? it assumes that the waste will eventually be buried, letting the industry off the hook for long term management
- ? communities will be put at risk by the transport of nuclear waste, potentially very long distances
- ? a site will be selected before research is completed
- ? it will be hundreds of years before the community that is made "host" to the disposal facility will know what kind of a facility they are being set up to "host"