

## **“Choosing a Way Forward” Has Chosen a Way Backwards A Report Card on the Nuclear Waste Management Organization**

High level radioactive waste (also known as irradiated or spent fuel) is the used uranium fuel from nuclear power and research reactors. Each fuel bundle from a power reactor weighs about 24 kilograms, and at the end of 2004 there were about 1.9 million fuel bundles at Canadian nuclear facilities (about 45,000 metric tonnes). Without an early nuclear phaseout, an additional 2 million fuel bundles (about 45,000 metric tonnes) will be produced.

High level radioactive waste contains over 100 different radioactive isotopes. Even low doses of radiation emitted by the waste can cause cancer, birth defects and other health problems. The waste is lethal and must be strictly isolated from the environment for a million years. If the wastes leak into the environment, the radioactive elements will contaminate the soil, water and air.

In 2003, over 30 environmental organizations agreed to a common *Position Statement* on the long-term management of high-level radioactive waste as part of a coalition called ***Nuclear Waste Watch/Action dechets nucleaires***. That Position Statement has formed the basis of numerous presentations to the Nuclear Waste Management Organization (NWMO), and has been presented to the NWMO in numerous consultation meetings. The National Steering Committee of Nuclear Waste Watch has met formally with the President, staff, and Advisory Committee of the NWMO. Thus, the NWMO was fully cognizant of these positions when it prepared its draft recommendation “Choosing a Way Forward” (released on May 24, 2005).

Because the *Position Statement of Nuclear Waste Watch/Action dechets nucleaires* represents a consensus position within the organized environmental community, it is an appropriate yardstick by which to evaluate the NWMO’s position as it prepares to make its final recommendation on radioactive waste management to the federal government by November 15, 2005.

On the basis of its position in “Choosing the Way Forward”, the overall grade assigned by Nuclear Waste Watch to the NWMO position is “F” -- a complete failure.

<b><i>Nuclear Waste Watch Position</i></b>	<b>Grade</b>	<b><i>Comment on NWMO Position</i></b>
<p><b>1. Waste Reduction Through Nuclear Phaseout</b></p> <p><i>The first priority of responsible waste management is reduction at source. High level radioactive waste in Canada can only be reduced at source through a binding commitment to the early phaseout of nuclear power. Early nuclear phaseout means that there would be no new reactors and no major refurbishment of reactors to prolong their current lifespans</i></p>	<b>F</b>	<p>The achievement of a social consensus on any long term nuclear waste strategy will depend on waste reduction through the phase-out of Canada’s 22 nuclear reactors by 2020, at the end of their operational lives. No community will accept a radioactive waste dump if the quantity of waste is open-ended because of ongoing reactor operation. NWMO says it has “not examined nor [made] a judgment about the appropriate role of nuclear power”. However, NWMO’s board members – Ontario Power Generation, New Brunswick Power and Hydro-Quebec – are all rebuilding or planning to rebuild their aging reactors, potentially doubling the amount of Canada’s radioactive waste.</p> <p>The NWMO has effectively condoned the increased production of radioactive waste by including in its draft recommendation (Appendix 12), waste volume scenarios based on reactor refurbishment. Moreover, it is irresponsible to continue to generate the waste without a long-term method of keeping it secure.</p>
<p><b>2. Monitored and Retrievable Surface Storage</b></p> <p><i>Neither the safety nor the acceptability of deep geological disposal of radioactive waste in perpetuity was established to the satisfaction of the federal environmental assessment panel (the Seaborn Panel) that reviewed the evidence [and reported to the federal government in 1998]. Any waste management option should [...] be based on surface and/or near-surface monitored and retrievable storage...</i></p>	<b>F</b>	<p>In 2002 the federal government gave NWMO a three-year mandate to choose between three radioactive waste management alternatives: “deep geological disposal in the Canadian Shield”; “storage at nuclear sites”; or “centralized storage”. However, as NWMO admits, all of these options have serious problems. NWMO has released a draft recommendation combining all three flawed options in a 300-year, \$24 billion “phased” approach moving from storage at nuclear plants, to centralized storage, and finally to deep rock disposal. The nuclear industry has long favoured deep geological disposal in the granite rock of the Canadian Shield, which is located in areas of Quebec, Ontario, Manitoba and Nunavut. The NWMO “phased approach” is just a re-packaged version of deep geological disposal.</p>

<b><i>Nuclear Waste Watch Position</i></b>	<b>Grade</b>	<b><i>Comment on NWMO Position</i></b>
<p><b>3. Objectivity of the NWMO is Questionable</b></p> <p><i>The Seaborn [environmental assessment] Panel called for the creation of a nuclear fuel waste management agency “at arm’s length” from the nuclear industry, with its board of directors representative of independent “key stakeholders”. In direct opposition to this, the government created the Nuclear Waste Management Organization (NWMO) with its board comprised solely of nuclear industry representatives. The nuclear industry strongly supports deep geological disposal of radioactive waste, so the ability of the NWMO to make an objective recommendation is questionable.</i></p>	<b>F</b>	<p>The NWMO’s governing Board of Directors consists only of representatives of Ontario Power Generation, New Brunswick Power and Hydro-Quebec – the three utilities in Canada that own and operate nuclear reactors. These utilities have produced most of the radioactive waste in Canada and are rebuilding or planning to rebuild their aging reactors, potentially doubling the amount of Canada’s radioactive waste. The NWMO has refused to acknowledge any conflict of interest. This is a classic case of the fox guarding the chicken coop.</p>
<p><b>4. An Accountable Process after November 2005</b></p> <p><i>Given the importance of this issue to present and future generations of Canadians, the government should guarantee a joint federal/provincial environmental assessment panel on the full range of radioactive waste management options following the NWMO recommendation in November 2005. The process should be adequately funded by the proponents in order to allow public interest intervenors to retain independent technical expertise. The federal government should also guarantee a full parliamentary debate and free vote on the recommendations of the NWMO and the environmental assessment panel</i></p>	<b>F</b>	<p>The NWMO has refused to comment on or make recommendations about the process that might follow its recommendation to the federal government in November 2005. The Seaborn environmental assessment panel, which reported after 10 years of deliberation in 1998, examined only the deep geological disposal option for radioactive waste, which it deemed to be unacceptable. A full range of alternative waste management options should be subjected to a new environmental assessment panel review. The Canadian parliament should also debate these questions. Anything less would disenfranchise the Canadian public and make a mockery of due democratic process.</p>

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<p><b>5. Protection for Recipient and Transport Communities</b></p> <p><i>[...] centralized waste management [...]will [entail] risk to communities along the transportation route, as well as to the potential recipient community. In such a case, the potential recipient and transport route communities should all have veto power, and should receive funding from proponents for independent research and community education.</i></p>	<b>F</b>	<p>If nuclear power is not phased out, and a centralized radioactive waste dump is created, as proposed by the NWMO, the number of sites with nuclear waste will increase, and transportation becomes a perpetual problem. The NWMO draft report ignores the risks to communities along any potential transportation route, and assumes those communities have no rights in any decision-making about eventual sites or transportation routes. If we are to honour our democratic Canadian traditions, all communities should have the absolute right to refuse the transportation or siting of radioactive waste through a simple majority referendum.</p>
<p><b>6. No Waste Import</b></p> <p><i>The Canadian Government should guarantee that Canada will not import high level radioactive waste.</i></p>	<b>F</b>	<p>The NWMO has refused to rule out the importation of radioactive waste -- raising the possibility that Canada could become an international radioactive waste dump. Indeed, Elizabeth Dowdeswell, the President of NWMO, has stated that Canada may have an "ethical" obligation to accept foreign radioactive waste (Peter Calamai, "CANDU waste could haunt us", <i>Toronto Star</i>, December 26, 2003, p. A24).</p>
<b>Final Grade</b>	<b>F</b>	<b>Failure</b>

### **WHO IS NUCLEAR WASTE WATCH?**

A Network of Organizations Concerned about High Level Radioactive Waste and Nuclear Power in Canada. For more information, please visit <http://www.cnp.ca/nww/groups.html>.

### **WHAT DOES NUCLEAR WASTE WATCH SUPPORT?**

For the foreseeable future, radioactive waste management should be based on surface and/or near-surface monitored and retrievable storage -- at least until a nuclear power phaseout has been achieved, the technical case for an alternative option (or options) has been thoroughly reviewed, and a social consensus has been achieved. Nuclear Waste Watch is also calling for a joint federal/provincial environmental assessment panel on the full range of waste options following the NWMO recommendation in November 2005. The federal government should also guarantee a full parliamentary debate and free vote on the recommendations of the NWMO and the environmental assessment panel.

### **For more information:**

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