The following extract from a letter to the NWMO is published here with the permission of the author.

June 10, 2005

… The recommendations in your interim report, to go for temporary (retrievable) storage and permanent deep burial in the shield on a rather long timescale, are **badly flawed**, and must be changed in their main essentials. To understand this, one needs to look at hidden assumptions behind your interim report. I did bring up the matter of assumptions about the state of society in the distant future at one (or more) of the three NWMO meetings I attended, but one cannot explore such matters fully where the agenda has been set in advance and there are many others who need to be heard.

The crucial hidden assumptions on which your recommendations are based are 1) that Canadian society will continue in its state of affluence and prosperity for the next many years – you must have assumed at least 80 years, judging from the scope of the proposals – and 2) that civil unrest will never be a factor to be considered, nor will disturbances from outside Canada where there might be unrest spilling over our borders in a significant way.

From futures studies, from the most advanced Club-of-Rome-type models, the declining state of agriculture and of tropical rainforests, from climate change data and the projections of climate models and especially the latest information on Greenland icecap melting, from the population explosion, and the present state of war and peace, and many other sources of evidence, your hidden assumptions could not be further from the realities that are to come. A group within the Canadian Association of the Club of Rome (CACOR) claims to have developed the most advanced global modeling in the world, and projects an onset of global collapse in about three decades, depending of course on the data that are fed into the model. Since the model is currently incapable of separating regions, it follows that they cannot show the relatively robust state of Canadian society as compared with, say, Ethiopian, Ugandan or Haitian, or that of Zimbabwe. However, people seem to be agreed that we are linked across the globe, and that comfy North America cannot escape what may hit Indonesians and others somewhat earlier in the process of collapse of civilization. I will touch upon possible response to the prospects of collapse in an appendix to this letter.

It does not follow from the above that Canadian society will find itself in a state of poverty or unrest within a few decades, but it does follow that we cannot take our present high levels of prosperity and stability for granted. It follows also that the huge responsibility and cost of looking after radioactive high level waste could turn out to be too great a burden for the generations only a few decades down the road – even twenty years may see profound changes in economic conditions. Not only is it immoral in principle to leave a most expensive process to future generations, but in practice they might not be able to carry out the task even given the will to do so coupled to our best efforts (today) at making provisions for them. Note that all the processes connected with deep geological disposal are energy intensive, and nobody can predict the cost of the necessary energy forty years from now.

Your report does you the credit of having given some thought to possible technological advances that could improve the whole process of making society safe from high-level wastes. However, those speculations are about possible techno-fix scenarios, not about the general state of the world. It is the unpredictability of the state of the world that dictates that we should make the burial permanent and do it fast.

I hope by this point my message is clear. The further into the future you project the handling of today's existing nuclear waste, the less certain you can be that that future generation will be able to manage it. This single factor dictates that the burial should be as permanent as we can make it **and the process should be maximally accelerated**. If the costs of deep geological burial

could be reduced, for example, by burying it less that 400 m into the granite and if this would save time, then such a short-cut should seriously be considered.

I came to conclusions almost as drastic as these during a March 2005 session of NWMO, facilitated by Pat Patton. For the first time, thanks to the format of that session, the basic responsibility became clear to me, namely, that we must not leave our problem to be solved by future generations who played no role in creating the problem, and who may not be able to handle it at distant future times.

I hope you will bring these salient points up before your Board of Directors.

Following the first two NWMO meetings that I attended (in 2004) I presented you with two briefs. One was basically to the effect that NWMO's present exercise had been manipulated by NRCan, a Ministry that irrationally favours the continuance of nuclear energy, and its promotion. I pointed out that the Health and Environment Ministries should have been responsible for the questions taken on by NRCan. The other brief spoke clearly of the need for a national energy debate, and begged NWMO to make an appeal to Government to have that debate initiated prior to NWMO's final report being due. It may now appear to you that I am going back on the views expressed in those briefs, but that is not so. Many opponents of nuclear power continue to feel that settling the nuclear waste into deep caverns in the shield serves the purposes of those promoting nuclear power, but I am recommending early burial in the shield for wholly independent reasons. The apparent contradiction between my earlier position and what I now put forward vanishes if one considers that nuclear power is its own worst enemy, and will collapse on its own unless it receives unprecedented support and subsidy. Essentially this means that I have quit the ranks of those who see deep burial in the granite as enabling the continuance of nuclear power, as if the problems of dealing with nuclear waste were the only factor barring a future for nuclear energy. The continuance of nuclear power would need much, much more than that to keep it going. There is too much stacked against nuclear power to give its future any credibility.

Appendix …