December, 2011.

NWMO Ethics Framework Review Workshop Report December 7 and 8, 2011, Executive Learning Centre, York University

Adaptive Phased Management, the approach adopted by the NWMO for the long term management of Canada's used nuclear fuel, includes an ethical framework designed to guide all aspects and phases of the work of the NWMO. The framework was developed in the course of discussions on the part of a roundtable of ethics practitioners and was initially designed to guide the NWMO in selecting a management model for the long term management of Canada's used nuclear fuel. In its guide to "Implementing Adaptive Phased Management" published in March, 2011, the NWMO points out (p. 4) that "the period 2011 to 2015 marks a new phase in the continued implementation of Adaptive Phased Management". Through wide public consultation, a siting process has been created and is now being implemented. A number of communities have come forward in the initial phase of that process and initial reviews of potential future sites for the long term disposal of nuclear waste are under way. As a result, the ethical framework first used to guide the development of a management model is now finding concrete application as communities come forward and enter into dialogue with the NWMO around siting possibilities, issues and concerns.

In light of these developments and in the spirit of adaptive phased management, the NWMO asked Dr. Cragg in the fall of 2011 to consider organizing a workshop of ethical practitioners to review the ethical framework from the perspective of the siting process now under way. After extensive discussion and planning, a workshop took place at York University on Wednesday and Thursday, December 7 and 8, 2011. Workshop participants included: Dr. Cragg as workshop facilitator and planner, Andrew Brook, a member of the Department of Philosophy at Carleton University and a member of the original ethics roundtable, Frances Abele, Professor of Public Policy and Administration and Academic Director of the Centre for Community Innovation at Carleton University, Jim Cooney, formerly Vice President International and Government Affairs with Placer Dome and currently a consultant on extractive sector strategies with a focus on sustainable economic growth, ethics, environmental protection and effective governance and Donald Obonsawin, formerly a provincial deputy minister and currently an aboriginal consultant with a focus on First Nation traditional values, First Nation governance and economic development.

Workshop participants were invited to look at the framework with a view to determining whether there were emerging concerns or issues or gaps in the framework that suggest the need for additional elaboration or development. More specifically, to determine:

• Whether the values and principles set out in the Framework were adequately comprehensive and inclusive?

- Whether, in light of the challenges of implementation, there were concerns or issues not adequately addressed by the current framework?
- Whether the questions that the Framework called on management to continuously ask and answer as the plan was implemented were adequately articulated and sufficiently comprehensive?
- Whether the questions required further elaboration or development?
- Whether there were questions that the framers of the framework did not anticipate or perhaps did not anticipate in sufficient detail that now needed to be addressed?

The workshop initiated a day and a half conversation among the participants. Emerging from that conversation followed by a review by workshop participants of an early draft of this report are a number of conclusions and observations. What follows is an overview of those conclusions, observations and suggestions.

(Note: Readers of the report should note that parts of this report take the form of questions. In structuring the report this way, I have followed the spirit of the Roundtable framework. Please be aware that questions should not be interpreted as implied criticisms. They are genuine questions that workshop participants thought should be front of mind in implementing the Framework at the siting stage of the NWMO mandate. Neither should the questions be interpreted to mean that workshop participants were pointing to issues to which the NWMO has not given thought or alternatively given insufficient thought. Rather questions should be understood as suggesting the need for continuing, on-going thought as the NWMO proceeds to fulfill its mandate.)

- 1. **About the ethics framework itself**: After extensive probing and discussion, the conclusion that emerged was that the frame work is coherent, comprehensive and well articulated. Against that background, participants did have a number of observations.
  - a) Although the framework is comprehensive and well articulated, it is clear on careful reading that it was created in a context in which the dominant concern was finding a management approach to the long term management of existing nuclear waste. The NWMO has now adopted adaptive phased management which was, when the framework was being built, only one of several possible available options. Attention has now shifted to finding a site suitable for long term disposal. In some respects, therefore, the underlying focus of the framework as it is currently articulated is out of date. That being the case, the NWMO might want to consider up-dating the framework by bringing the questions to focus more clearly and specifically on the siting process now underway and which is expected to be central to the work of the NWMO for at least the next 15 years.
  - b) If there is one aspect of the framework that could be more fully developed it has to do with its treatment of aboriginal traditional knowledge. In question one (Q1) the framework asks: "Is NWMO giving special attention to aboriginal communities?" There was a consensus that what constituted "special attention" required more development. An

ethical framework interpreted in light of traditional knowledge would likely be articulated by aboriginal communities quite differently than the ethical framework integral to the NWMO's approach to adaptive phased management. For that reason, understanding the ethical values that ground traditional knowledge could be expected to be challenging for the NWMO. Further, bringing scientific knowledge frameworks with their embedded world views into dialogue with traditional aboriginal world views, for example its three levels of knowledge and seven sacred teachings, would require more than simply "special attention". Fleshing out this dimension of the NWMO's ethical framework and the ethical challenges likely to be encountered if traditional knowledge is to be effectively integrated into adaptive phased management is something that the NWMO should consider doing. Workshop participants identified Frances Abele's discussion of the three levels (or ways of understanding) Aboriginal knowledge in "Between Respect and Control: Traditional Indigenous Knowledge in Canadian Public Policy" in Michael Orsini and Miriam Smith, eds. Critical Policy Studies: Contemporary Canadian Approaches. Vancouver: UBC Press, 2006 to be a useful resource for this purpose.

c) Workshop participants noted that in earlier planning and strategy documents the core ethical values to which the NWMO was committed were set out clearly in opening document pages. Workshop participants noted that this does not seem to be the case in more recent documents. For example, in "Implementing Adaptive Phased Management 2011 to 2015, on the inside front page, the core value are listed. However, in the "Preliminary Assessment of Potential Suitability" document which is intended as a kind of handbook for communities who express an interest in exploring the suitability of their geographical area for a disposal site, the core values are not set out though they are implicit in the process that has been developed for assessing the suitability of suggested disposal sites. The workshop participants also noted that there seemed to be no explicit reference to the ethics framework and the core values in the slide deck used to brief interested communities wishing to enter into dialogue with the NWMO. Yet these are the documents with which communities expressing an interest are most like to encounter.

The NWMO should therefore consider putting its core ethical values up front in all its documents so that the ethical framework to which it is committed is explicit to the various communities and individuals and groups that become stakeholders in the siting process.

d) Has the NWMO developed a system and process for ensuring its ethical framework is in fact governing all aspects of its management program for nuclear waste? The need for impartial and independent audits or reviews of the implementation of the ethical framework was an element of this discussion. A good deal of discussion also focused on the concept of building the core ethical values into management as "core competencies". To incorporate the core ethical values as core competencies would require identifying the

level of competency in the understanding and application of the core ethical values required by individual managers in their specific roles and then evaluate whether individuals have acquired the level of core competency required for their role and responsibilities. Upgrading of required core ethical competency skills could then be provided where required. The goal would be to have the core values become personal motivators and defining characteristics of corporate culture.

- e) Does the framework apply to everything the NWMO does including its decision to take on the disposal of low level wastes at what the workshop participants understood to be the request of one of the power generators for whom it is serving as an agent?
- f) Are the power generators to whom the NWMO is accountable and who appoint its Board of Directors aware of the ethical framework and its central role in adaptive phased management? Have they acknowledged and are they committed to respecting the framework in their multifaceted relationships with the NWMO?
- 2. Discussions of the use and articulation of the ethics framework and NWMO's core values led to a second and related discussion. Specifically, to what extent do the communities entering into dialogue with the NWMO understand the central role of the ethics framework in the siting process? Do the communities with whom the NWMO is currently in dialogue understand the importance the NWMO is attaching to working within an ethical framework and the character of the ethical framework the NWMO has adopted? This train of thought led the workshop participants to pose a number of related questions:
  - a) The ethical framework applies specifically to the NWMO. Its goal is in part to form a stable ethical foundation for its work with the communities with which it becomes engaged in the siting process. Equally important is the goal of building a strong ethical foundation for the long term relationship/partnership with the community that emerges as the preferred site. For this to happen, the ethical framework on which the partnership is eventually built will have to be understood and shared. Can this happen in the absence of a clear articulation by its partner community of the ethical values on which their engagement is grounded? Should one element of the siting process be the need for those communities that constitute potential sites to develop an ethical framework to guide their deliberative process and provide the basis for a long term partnership with the NWMO? Can a long term stable partnership be developed if the foundational ethical values governing the relationship of the partners are incompatible?
  - b) The question just raised in (2-a) above should be understood in part in the context of the intergenerational and multigenerational character of any partnership for the long term storage of nuclear waste. The siting process itself is expected to require 15 years or more. Even over this relatively short time frame there may well be generational changes in community leadership. The process leading to the completion of construction is expected

to take at least 25 years. Over this period of time there will inevitably be significant changes in the people with whom NWMO is dealing and the NWMO personnel responsible for community engagement and the disposal process itself. The disposal process itself is expected to require at least an additional 30 years. By this time, those involved in the partnership will likely not have been born when the partnership was formed. If the partnership is not anchored on a set of core ethical values that have interand multigenerational legitimacy, it is likely to be unstable. At some point, therefore, it will be necessary to build an ethical framework to govern the partnership. If the community entering into the partnership has not articulated the values on which it believes a long term relationship can be constructed, it is hard to see how a sustainable long term partnership can result.

- c) Essentially, the partnership the NWMO is proposing to form will be an inter- and multigenerational partnership. This should be factored into discussions around benefits to be generated by the partnership. The identification and generation of benefits will have to be seen as ethically justifiable by people not yet born. The same will be true of costs. These considerations will be particularly important as the impact of the project and its implications for young people in the communities affected is explored and interpreted. For this to happen, costs and benefits will have to be assessed within the context of an ethical framework that takes into account the inter- and multigenerational character of the partnership. It will be particularly important to develop programs for youth that help to cement intergenerational commitment and intergenerational benefits.
- d) The underlying issue that requires reflection is maintaining long term institutional commitment for both partners to the eventual storage project. What leadership models need to be developed? More particularly, what needs to be done if strong sustainable institutional structures are to emerge to guide the long term partnership?
- 3. A key concern in the articulation of the NWMO ethical framework was the issue of uncertainty. The "Ethical and Social Framework" suggested by the Roundtable refers, for example, to "gaps and areas of uncertainty in current knowledge". Acknowledging uncertainty and building it into the management model to be adopted was an important consideration on which adaptive phased management is grounded. Doing so would among other things require the full and honest application of the precautionary principle and embedding the principle of reversibility in all aspects of the work of the NWMO.

It is not clear from the documents reviewed by the workshop participants that the issue of uncertainty is being systematically identified, effectively articulated and explicitly discussed in the siting process as currently described. The challenge of acknowledging the fact of uncertainty and addressing it transparently is a fundamental ethical challenge for the NWMO. Has the NWMO put in place a process for thinking systematically about this challenge?

4. A final topic explored by workshop participants was that of transportation. There was consensus that the framework provides a sound foundation for this aspect of the siting process. It was also agreed that the issues that the NWMO will face as it moves to address the question of transportation will be quite different in character. The NWMO will need to consider carefully what will be required to build a transportation corridor and system ethically. Mapping potential costs and benefits fairly, impartially and transparently for communities on transportation routes will be central to this challenge and may well play an important role in the selection of the eventual disposal site.

A final observation: Workshop participants were impressed with the way in which the logic of the ethical framework has been integrated into the siting process now underway. This is a significant achievement. The challenge is to understand and accept that understanding and integrating the framework is an on-going process. It is a work in progress which will require ongoing commitment and dedication over all dimensions of the project into the indefinite future.

Respectfully submitted

Wesley Cragg

Workshop coordinator and facilitator.