

# Multi-Party Dialogues – Toronto Session, October 5-6, 2009

**NWMO SR-2009-08**

**November 2009**

**Stratos Inc.**

**nwmo**

NUCLEAR WASTE  
MANAGEMENT  
ORGANIZATION

SOCIÉTÉ DE GESTION  
DES DÉCHETS  
NUCLÉAIRES



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## **Nuclear Waste Management Organization**

The Nuclear Waste Management Organization (NWMO) was established in 2002 by Ontario Power Generation Inc., Hydro-Québec and New Brunswick Power Corporation in accordance with the *Nuclear Fuel Waste Act (NFWA)* to assume responsibility for the long-term management of Canada's used nuclear fuel.

NWMO's first mandate was to study options for the long-term management of used nuclear fuel. On June 14, 2007, the Government of Canada selected the NWMO's recommendation for Adaptive Phased Management (APM). The NWMO now has the mandate to implement the Government's decision.

Technically, Adaptive Phased Management (APM) has as its end-point the isolation and containment of used nuclear fuel in a deep repository constructed in a suitable rock formation. Collaboration, continuous learning and adaptability will underpin our implementation of the plan which will unfold over many decades, subject to extensive oversight and regulatory approvals.

## **NWMO Dialogue Reports**

The work of the NWMO is premised on the understanding that citizens have the right to know about and participate in discussions and decisions that affect their quality of life, including the long-term management of used nuclear fuel. Citizens bring special insight and expertise which result in better decisions. Decisions about safety and risk are properly societal decisions and for this reason the priorities and concerns of a broad diversity of citizens, particularly those most affected, need to be taken into account throughout the process. A critical component of APM is the inclusive and collaborative process of dialogue and decision-making through the phases of implementation.

In order to ensure that the implementation of APM reflects the values, concerns and expectations of citizens at each step along the way, the NWMO plans to initiate a broad range of activities. For each of these activities, reports are prepared by those who designed and conducted the work. This document is one such report. The nature and conduct of our activities is expected to change over time, as best practices evolve and the needs and preferences of citizens with respect to dialogue on nuclear waste management questions is better understood.

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**NWMO Multi-Party Dialogue on the Proposed Process to Select the Site for  
Managing Canada's Used Nuclear Fuel for the Long-Term**

**Toronto Session, October 5 and 6, 2009  
*Final Report***

Submitted to:

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A world where decision makers at all levels integrate sustainability into their actions to improve ecological and human well-being.

## **OUR MISSION**

To provide business, governments and organizations with expert advice, information, and tools that will assist the development and implementation of more sustainable policies and practices.



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## 1 Purpose and Context

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The Nuclear Waste Management Organization (NWMO) conducted a series of dialogues to test and refine the proposed process for selecting a site for managing Canada's used nuclear fuel for the long-term. The proposed process is presented in NWMO's Discussion Document *Moving Forward Together: Designing the process for Selecting a Site*. These dialogues are one of many inputs that NWMO will use to refine its proposed site selection process, which it intends on publishing in 2010.

NWMO retained Stratos Inc. to design, organise, facilitate and report on these dialogues. The dialogues were held in Saskatoon, Ottawa, Toronto and Saint John over September and October 2009. This report presents the input received during the Dialogue held in Toronto, Ontario on October 5 and 6, 2009.

The dialogue brought together individuals from a wide range of perspectives, including representatives from Aboriginal organizations, business associations, municipal groups, non-government organizations, academia, the nuclear industry, and professional associations. A total of 27 participants, as well as staff from NWMO and Stratos, attended the session (see Annex A for a list of the participants). To facilitate the dialogue on the site selection process, NWMO articulated four questions, which formed the basis for the agenda used in each of the dialogue sessions (see Annex B).

To ensure that specific input was provided on the proposed site selection process, participants were informed about the focus of this particular dialogue session, including the following aspects:

- The dialogues are focused on testing and refining the proposed site selection process document.
- The dialogues are intended to improve the proposed process so that it is supportable and implementable.

This report summarizes the discussions held under each agenda item, including written comments submitted at the end of the meeting. Note that some of the participants' comments have been grouped thematically to avoid repetition and improve the report's clarity. They are therefore not always presented in the order in which they were made. The meeting was not designed to seek consensus among participants, though the report notes areas of general agreement.



## 2 Introductory Presentation and Questions & Answers

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Ken Nash, NWMO President, welcomed the participants at the Toronto session and underlined the importance that NWMO attaches to hearing a diversity of views on its proposed site selection process. He traced briefly the history of NWMO's activities since its creation, paying particular attention to the development of the site selection process. After introducing the members of the NWMO team in attendance, he stated that NWMO wanted to hear from participants whether NWMO "had gotten it right".

George Greene, the Stratos facilitator, then reviewed the session's agenda and noted that the Dialogue's purpose was to test the NWMO's proposed site selection process, and more specifically each of the steps outlined in *Moving forward together: designing the process for selecting a site* (referred to as the Discussion Document below).

Kathryn Shaver, Vice President, APM Engagement and Site Selection, and her colleagues made a detailed presentation in which they introduced the NWMO, explained how the Adaptive Phased Management process came about, described the proposed project and outlined the proposed process for site selection. A video of NWMO's presentation is available at [www.nwmo.ca](http://www.nwmo.ca).

After the presentation, participants asked questions related both to the project and the proposed site selection process. Detailed discussion of several of these questions was deferred because they addressed specific points in the Discussion Document that were to be reviewed on the second day.

### 2.1 Questions and comments regarding the project

One participant asked whether the details of the project design had been set by NWMO and what the assumptions were behind the design decisions. This participant and others suggested that it would be useful for NWMO to state the assumptions behind design features in the proposed project and to make clear which features were fixed and which could change as new information becomes available.

One participant wanted to know what decisions NWMO had made about shipping containers for the used fuel. Another participant noted that the key difference between NWMO's project and AECL's earlier deep geological disposal proposal revolved around the concept of retrievability. He asked NWMO whether its ultimate objective was to ensure retrievability at all times in the future. As, by definition, no engineering structure can be considered permanent, long-term retrievability would affect both the repository's cost and design.

One participant suggested that NWMO provide more information about the option of establishing a temporary shallow repository and the criteria it would use to design such

a facility. This participant felt that the issue of interim shallow storage warrants significant consideration due to what he perceived to be the increased risk involved in the added transfer and transportation of the used nuclear fuel.

One participant opposed NWMO's approach of burying the wastes in a deep geological repository. He stated that Aboriginal communities would look at this approach as passing on the problem to future generations and to those downstream from the repository. He argued for finding technological approaches to reduce and to reuse used fuel.

## **2.2 Questions and comments regarding the process**

The questions and comments offered by participants regarding the site selection process on the evening of the first day revolved primarily around the proposed technical site selection criteria and some of the proposed steps in the process.

Several participants stated that they found NWMO's proposed site selection process comprehensive and logical. One participant congratulated NWMO for having involved Aboriginal peoples from the very beginning. He noted that the nature of Aboriginal interests was very broad and extended beyond the land to include a way of life. He also noted that there were very few parts of Canada where Aboriginal peoples did not have an interest and that NWMO and regulatory processes would not be able to avoid having to address these interests in the future.

Several participants asked questions about the proposed steps in the process. One wanted to know what the links between Steps 2, 3 and 4 were and how a community would enter the site selection process. Another asked with how many communities NWMO would be prepared to negotiate concurrently.

One participant noted the challenges posed by a lengthy site selection process to democratic institutions and that it was possible that a community that expressed its interest in the repository might change its mind after the next municipal election. In a related vein, one participant wanted to know who should have authority to make commitments at the community level and invited NWMO to provide clarification of this point in the final version of the Discussion Document.

One participant expressed concern about a community signing an agreement with NWMO to become a willing host before the start of regulatory hearings. Such hearings often reveal new information about a proposal, information that might lead the community to want to reassess its position. He noted also that a site selection process could prove highly disruptive to a community even if a facility was eventually located elsewhere. Past site selection processes have disrupted many lives by introducing uncertainty over major personal decisions pending a site selection decision (e.g., will my son take over the farm or will he be forced to move?). Some countries have recognized

this disruption and provided offsetting benefits to communities that were involved in the site selection process but were not selected.

One participant was concerned that a community's decision on whether to become involved in the site selection process was likely to depend in part on what benefits it might be able to negotiate but that it would not know about these benefits until later in the process. He advised NWMO to explain earlier in the process what benefits communities would be able to expect from accepting to host a repository.

One participant sought clarification of the statement that an interested community might still qualify for consideration as a site for the repository even if it scored low on an initial socio-economic screening (page 31 of the Discussion Document).

Several participants commented on NWMO's use of language. A few cautioned the NWMO against using language that appears to "sell" its project and invited NWMO to use plain language. The heading "Fostering Community Well-being" (at page 31), for example, should more appropriately be titled "Evaluating Community Characteristics". Another participant noted that the term "visioning" (page 33) had a different meaning in Aboriginal communities and that the term "long term planning" might be an appropriate substitute.

Other comments made during the opening session included a suggestion that NWMO better reflect the technical work conducted on the long term management of used fuel before it was created and add an explanation of how it had identified the values on which it was relying to guide the site selection process.

Finally, one participant expressed concern about NWMO's current engagement activities, including its community citizenship program, that include funding for youth groups, which she characterized as "being close to a bribe". NWMO explained that it was engaging in these activities, including the creation of a youth round table, partly through its corporate social responsibility program, partly in response to the recognition that the management of nuclear waste was an inter-generational issue and that it was therefore imperative to engage young people on this issue.

### **3 Steps in the Site Selection Process**

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A member of the NWMO team started off the session with a brief presentation of the proposed steps in the site selection process, described in detail on pages 18 to 24 in the Discussion Document.

Participants then broke-up into four groups to discuss the following questions:

1. Are the proposed decision-making steps consistent with selecting a safe site and making a fair decision?
2. What are the strengths of the proposed steps?
3. How could the proposed process (considering all steps together and individually) be improved to address any weaknesses? Why are these modifications important to you?

### 3.1 General comments

Some participants identified the following strengths in NWMO's proposed site selection process:

- The imposition of a timeframe, albeit a loose one
- The evident application of a sustainability lens to the project
- Early funding to communities to help them consider their involvement in the process
- The proposal that communities drive the process and be able to exercise choices throughout
- The fact that the Discussion Document reflects input from previous dialogues

They expressed general support for a process that would require communities to demonstrate progressively higher levels of commitment to the project. Overall, comments ranged from "the process needs some fine tuning but the major elements are there" to "much work still needs to be done before the NWMO can consider starting the site selection process".

Participants offered the following suggestions for improving the site selection process:

- National and provincial interests need to be better reflected in the process. These include tax-payers, ratepayers and national organisations. The site selection decision will affect all Canadians and the process needs to accommodate these broader communities of interest as well.
- The definition of "willingness" in the text should be improved. Communities may need to reiterate their willingness repeatedly if the process is a long one. It is important to be clear on what such willingness needs to look like at each step.
- NWMO should better describe the various interests involved in retrievability and how the concept might be put into practice.
- It is important to be as clear as possible on who makes decisions and on what basis at each step.
- Several participants argued that surrounding communities, including Aboriginal communities, should be involved earlier in the process, recognizing that this would likely require a substantial engagement effort from NWMO. NWMO should provide more information in the Discussion Document on how it plans to make communities aware of its mandate. NWMO will need to use a variety of outreach techniques to engage these communities.

- While acknowledging that the process took diverse perspectives into account, some participants found it long and complicated and recommended that NWMO use visual aids to communicate it more clearly.

Some participants also offered comments about various aspects of the proposed process. One participant expressed concern that economically-vulnerable communities, who would understandably be attracted to the benefits of the project, might be placed at even greater risk if they became engaged in a protracted site selection process that stalled development, reduced property values, or caused people to leave the community.

In a different vein, some participants expressed concern about the capacity of Canadian regulatory authorities and the importance therefore of ensuring that communities had access to their own sources of information and expertise to assess the project.

Several participants urged the NWMO to indicate more definitively (than is described on page 13 of the Discussion Document) the volume of waste to be managed in the repository. These participants felt that the possibility of receiving additional waste from new reactors and from refurbished reactors would limit NWMO's ability to achieve support in interested communities. One participant went further by arguing that the NWMO mandate should specify that the repository be limited to waste from currently operating reactors. In his opinion, considering waste from 'new build' threatens the concept of "communal responsibility for managing the waste from the energy Canadians have enjoyed" that NWMO refers to in its documents.

### **3.2 Comments about the specific steps**

Many participants asked NWMO to provide greater detail about the proposed steps in the site selection process, in particular the timelines around Steps 1, 2, 3 and 4. In their view, the parallel and iterative nature of several of these steps needs to be made clearer, as should the main decision points. They also asked what standards NWMO would use at each step of the process to identify go/no-go decisions and who would be accountable for these decisions. One participant would have liked NWMO to strengthen the adaptive nature of the process by ensuring feedback loops and the possibility of continuous learning.

Participants made the following specific suggestions:

- Step 0: NWMO should add a step prior to Step 1 and develop a more complete list of excluded areas, using both geological<sup>1</sup> and non-geological criteria. This could save money, reduce future work and lower stress on communities. The Ontario Power Authority process for selecting wind resource generation sites was mentioned as a possible model that may be useful. Other participants, however,

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<sup>1</sup> The evening before, however, NWMO indicated that not enough is known about geology in all areas to be able to exclude large areas in any of the four provinces.

- pointed out that the application of exclusion criteria might lead some communities that are not excluded to feel targeted.
- Also before step 1, NWMO should seek confirmation from a province that it was willing to consider a repository on its territory before engaging interested communities. This confirmation could be expressed in a number of ways. Certain provinces oppose the location of a repository within their borders and it would not make sense for communities in these provinces to step forward unless the province gave its blessing first.
  - Step 1: A number of participants proposed that this step be divided in a Step 1a which focuses on broad public information in each province and a Step 1b which provides more specific information to communities in order for them to determine whether they would be interested or not. In addition to the awareness-building activities already envisaged, NWMO should make information available to the community that explains the history of waste management and how the process had reached the current stage as well as information on the nature of socio-economic benefits that would be offered and the environmental impacts and risks that would be involved. Awareness-building activities should feature a variety of media targeting different socio-economic groups. They should also feature a diversity of views (e.g., an “alternative reading list” for the interested public).
  - Step 2: There may be a need for a broader vehicle to involve the community once elected authorities decide to engage in the process or even before, where certain groups (e.g. economic development) are interested in going the next step. This vehicle could be a Community Liaison Committee that encompasses different community interests and would be able to draw on information from NWMO and governments as well as gain access to NWMO’s proposed third party review. There should also be an explicit check-in to determine broad community interest at the end of Step 2, and at each subsequent step up to step 4, through such means as a canvassing of the community, before it proceeds to the next step. The process that an Aboriginal community might follow to make its decision, however, may be different and would differ across different communities such as First Nation and Métis communities.
  - Some participants believed that an additional step should be added between Steps 3 and 4 to include an initial environmental screening by regulatory authorities, perhaps to be conducted concurrently with the detailed site evaluation. This approach may entail multiple environmental assessments (EAs) as more than one community would likely be involved in the process at this stage, but would add the rigour of the regulatory process at an earlier stage to the site selection process and would demonstrate goodwill by NWMO and the government. Others warned that this approach could lead to more generic, less useful, EAs and could be perceived as an effort to fast track the process.
  - Step 4: Some participants felt strongly that the interested communities (not just NWMO) need to undertake a concerted educational effort to let their citizens

- know where they are in the process (e.g. through TV and newspaper articles). Another participant likened this initiative to providing a "Notice of Interest" to all potentially affected communities, as well as the potential host community. These participants felt that this approach could help lower resistance and conflict within and around the potentially-interested community.
- Step 5: Some participants recommended that the environmental assessment process occur after a community has expressed substantial support for the repository but before it has reached a final agreement with NWMO and that it be used as a planning tool to help design the project, not just as a means of assessing its impacts. There is a need for an explicit mechanism to determine overall community willingness, whether this is through referendum or other means, with an agreed threshold (e.g., 66% or higher support).
  - Step 6: The nature of the formal agreement to be negotiated between the community and NWMO should to be spelled out more clearly. This agreement should include provisions for information-sharing and dispute resolution, and should be made public. A few participants stated that if a final agreement is signed before the EA, then there needs to be an escape clause that allows a community to opt out should new and significant information emerge during the EA process. Some argued that NWMO faces a conflict of interest in negotiating with interested communities in Step 5 and then selecting one of them to host the repository in Step 6. The Discussion Document needs to include more information about who makes the final decision on site selection at Step 6: Is it the NWMO Board, or does the NWMO provide a recommendation to the federal government?
  - Step 8: An effective environmental assessment will need to be customised to the proposed project design and specific community concerns. The EA process should involve the province(s) as well as the federal government and be carried out to the same standard regardless of where the repository is located.

### 3.3 Additional comments

Additional comments by individual participants included:

- NWMO needs to overcome the "ignorance and fear" of community residents. The best way to do this is to ensure that they retain control of the process.
- A participant noted the difficulty and inappropriateness of a community being expected to make a decision affecting multiple generations.
- A community's decision to engage in the process should be transparent and signalled publicly. The community should have an opportunity to re-assess its comfort with its involvement and possibly opt out at every stage of the process.
- Some participants had difficulty understanding how a province would operate as a 'community' in the case of unorganised territory. Whatever its role, the

- province will need to ensure that surrounding communities are included in the process.
- The Discussion Document should provide more guidance as to how private land owners might participate in the process.
  - The Discussion Document needs to be clear about what design decisions have already been made, and which are still operating assumptions. This transparency is important, particularly in light of the frustrations that occurred during the environmental assessment of the AECL proposal.
  - The roles and responsibilities of all parties (e.g., NWMO, community, provincial/federal governments, national Aboriginal organisations and NGOs) need to be spelled out clearly as the process moves forward.
  - NWMO should be flexible, open and clear in all its communications and aggressive in funding public/community participation.
  - NWMO should be prepared for possible “failures” along the way and acknowledge the possibility of not finding a willing host community at the conclusion of the site selection process. In this eventuality, NWMO may have to hand the issue back to Parliament.
  - NWMO should not waste time worrying about the “politics” as it has no control over them; it should focus instead on the integrity of the process. In a similar vein, NWMO should not spend too much time speculating about what community willingness will look like (it will be obvious either way) and avoid focussing on “illegitimate” representation as there is none on this issue.
  - NWMO should consider preparing material for use in schools that would be vetted for inclusion in Resources for Rethinking (See [www.r4r.ca](http://www.r4r.ca)), an initiative that aims to enhance the quality and scope of sustainability education resources.

## 4 Guiding Principles

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A member of the NWMO team presented the Discussion Document chapter on principles and asked the group whether these represented a suitable foundation for the proposed site selection process.

While one participant believed that, for the sake of clarity, NWMO should limit itself to fewer principles and another believed that several principles could be combined or subsumed, others proposed new principles as well as different ways of organising the guiding and operational principles presented. Several participants argued that NWMO should present a single rather than two lists of principles. One participant also suggested that NWMO use its statement of values to organise the principles, while another proposed that the Discussion Document explain how NWMO’s ethical framework inspired the principles presented on pages 16 and 17.



Participants suggested the addition of principles on:

- transparency and access to information;
- community well-being;
- cost;
- flexibility, the precautionary principle and adaptation;
- inter-generational and inter-community equity;
- volume of waste (no wastes from new reactors); and
- social safety.

In the opinion of one participant, there may be some tension between the wording of the guiding and operational principles as they are currently drafted. She asked that the definitions provided under each principle be revised to reflect the recommendations made during the course of the Dialogue: e.g., the regulatory review should occur earlier; a community should have the right to withdraw even late in the process; issues around vulnerable communities need to be acknowledged.

One participant noted that NWMO has identified transparency as one of its operating principles but did not believe that NWMO was fully living up to it in its every day activities. She gave as examples the existence of two mailing lists for communicating upcoming events (one mailing list receives full notice and information about events; the other does not); and the inaccessibility of the upcoming events calendar on the NWMO website.

Another participant argued that the section on principles should include a discussion of the rights, responsibilities, and accountabilities of the different parties. This section, for example, would describe the rights of potential affected communities (those experiencing the potential negative impacts of the project) as well as the responsibilities of the proponent – for example, to provide compensation to victims.

Some participants also asked that the Discussion Document add language making it clear that NWMO would not impose the repository on an unwilling community.

## **5 Proposed Criteria – Safety and Community Well-Being**

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Members of the NWMO team provided a brief overview of chapter 4 of the Discussion Document, entitled *Ensuring the Safety of a Site and Fostering Community Well-Being*.

Participants then broke into four discussion groups. One group discussed criteria for safety by addressing the following questions:

1. Are the six-safety related questions reasonable and appropriate?

2. What additional safety-related questions or topics, if any, would you like to see addressed? Why are these additional questions important to you?

The other three groups discussed community well-being by addressing the following questions:

1. Is the proposed approach to considering factors beyond technical safety (i.e. community well-being factors and evaluation factors) appropriate?
2. What are the strengths of the proposed community well-being factors?
3. What additional factors or improvements would you recommend for addressing community well-being? Why are these modifications important to you?

## **5.1 General comments**

Some participants stated that the distinction between safety and community well-being criteria is not as clear-cut as the Discussion Document implies and would have preferred a more integrated presentation of these criteria.

Some participants felt that the proposed criteria read more like considerations than criteria because they do not provide a specific level of safety or community well-being that the project has to meet. They recommended also that the Discussion Document express a hierarchy among criteria and identify which ones are essential.

One participant proposed the addition of another set of site selection criteria dealing with financial viability as financial factors would determine the site selection decision if all technical and socio-economic considerations were equal.

One participant asked that the Discussion Document make clearer connections between the project description (page 14), the nine process steps, and the technical criteria.

One participant suggested that NWMO use the CSA Q850 Risk Management Guidelines to guide its evaluation process.

## **5.2 Safety criteria**

Several participants felt that the terms used in the six safety questions on page 26 of the Discussion Document are too vague (e.g. stable, suitable, unlikely, sufficient). They recommended that these questions be clarified and include some quantification of the evaluation factors presented on pages 28 to 31. They believe that it is essential to have all technical criteria defined in advance (e.g. rock characteristics, groundwater velocity, etc.), so that all communities are working from the same basic technical criteria. They recognized that NWMO has extensive scientific evidence to back up these criteria and recommended that it be made more accessible (e.g., through end notes). Others felt that the proposed evaluation factors rely too much on trust (i.e. that these factors will only be defined after a feasibility study has been completed).

One participant made the following comments about NWMO's proposed initial screening criteria on page 25 of the Discussion Document:

- *Have enough available land to accommodate the surface and underground facilities.* It would seem clearer to simply state that a surface land area of at least about six square km providing access to the proposed underground body of rock be available.
- *Be outside of protected areas, heritage sites, provincial parks, and national parks.* These areas could be shown on a screening map.
- *Not contain groundwater resources at repository depth, so that the repository site is unlikely to be disturbed by future generations.* Measures of quantity and quality of the underground resource should be given (Would the potential for a single household well adjacent to the proposed site in a fracture zone that extends to repository depth eliminate the site?). If the presence of such resources is known at the time of initial screening, it could be put on a screening map. Overall, it seems difficult to have this as an initial screening criterion without being arbitrary.
- *Not contain economically exploitable resources as known today, so that the repository site is unlikely to be disturbed by future generations.* If they are known today, this can be put on a screening map. Once again, the conclusion that future disturbance is unlikely does not follow.
- *Not be located in areas with known geological and hydro-geological features that would prevent the site from being safe, considering the safety factors outlined beginning on page 28.* If the features are known, they can be put on a screening map to avoid ambiguity. As an initial screening, a clearer set of criteria could be that the site: a) be in seismic zones 0 or 1; and b) not contain ancient rifts or areas of clustering of historic earthquake activity.

One participant argued that not all technical criteria were equally important and that NWMO should indicate which ones were essential. Two participants stated that the protection of groundwater was of critical importance but that our knowledge of groundwater resources is inadequate. NWMO indicated that it was seeking areas with limited groundwater flow and that the repository would be built deeper than where potable groundwater typically occurs.

Participants suggested that NWMO identify how it was planning to apply each of these criteria at every step of the site selection process, perhaps through a decision diamond flow diagram. For each decision diamond (i.e. Step), there would be a clear description of the criteria to be met (ensuring that these questions are consistent for different communities). The criteria would be "determination points" for the decision diamonds in the process between steps. At the end of each step, there would be a clear Yes or No choice (i.e. if No – the process ends, or there is an iterative loop back to address

shortcomings if possible; if Yes – this means that the community can continue onto the next step if it wishes).

Several participants asked that NWMO address security concerns more explicitly in the safety criteria (e.g., terrorism, human intrusion into the repository, and threat of theft during transportation).

### 5.3 Community well-being criteria

Some participants proposed that the community well-being criteria (page 32 of the Document) be presented differently, with the first two (potential social, economic and cultural effects; potential to enhance long term sustainability) to be labelled as “social, economic and cultural evaluation factors” and the last three (infrastructure, environmental considerations, transportation considerations) as “community characteristics”.

Other participants believed that the criteria, as currently stated, are too vague and require additional detail to help communities identify what types of issues they may face and what factors they will have to consider. They suggested that NWMO identify what it would provide to address community needs in the short-term (construction phase), what the community would need to respond to or avoid in the medium-term (active operation phase) and what the community would need to consider in the long-term (decommissioning phase).

They proposed the following additional clarifications:

#### *General*

- More detail on types of impacts and what to avoid, based on relevant past experience of communities that have hosted large infrastructure or resource projects

#### *Criterion 2*

- Addition of local traditional knowledge to the list of factors to be considered. Other NWMO documents were said to characterize traditional ecological knowledge more accurately than the Discussion Document

#### *Criterion 3*

- Better definition of the infrastructure factors

#### *Criterion 4*

- More detailed elaboration of ecological factors to be considered (e.g., groundwater, wildlife, cultural resources) and cross-reference to safety factors
- Specify who decides what is “significant”

#### *Criterion 5*

- Clearer definition by trying to anticipate the volume of wastes
- Clarify how long the transportation corridors would be used

Some participants also suggested the addition of three new criteria or sets of factors to address the following aspects:

- The impacts a community would have to manage as a result of participating in the site selection process
- The long-term viability of the community
- The enhanced capability of the community to participate in, and derive benefits, from the repository

A few participants drew a distinction between *assessing* community impacts and *addressing* these impacts. They recommended that NWMO describe what mitigative and compensatory measures it would deploy in the event of adverse impact and that such measures be included in any agreement with a community. Such measures could include setting aside something of long term value to the community as a surety in the event that “something went wrong”. These participants linked this approach to the proposed new principle on rights, responsibilities, and accountabilities.

## **6 Partnership and Community Support**

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After a member of the NWMO team introduced Chapter 5 of the Discussion Document (*Partnership and Community Support*), participants broke up into four groups to discuss the following questions:

1. Considering the proposed partnership and community support approach for potentially interested and/or willing host communities:
  - a. What are the strengths of the proposed approach?
  - b. What improvements would you recommend, and why are these modifications important to you?
2. Are the other types of communities appropriately involved? If not, how could the process of involving potentially affected communities be improved? Consider the following:
  - a. Surrounding communities & regions
  - b. Communities on potential transportation routes
  - c. Aboriginal peoples
  - d. Public and other interested individuals/groups

A few participants stated that the site selection process must ensure that negotiations between NWMO and interested communities regarding project benefits do not overshadow safety considerations. Participants acknowledged that community interest in becoming a host to the repository may need to be sparked by a discussion about benefits, but emphasized that a discussion of risks should not be “back-loaded”. One participant also noted that there is an ethical tipping point at which the level benefits

offered to the community may interfere with its ability to consider the costs and risks of the project properly.

While participants supported a community-led process, many argued that NWMO needs to assume its full responsibilities as a proponent in front of regulatory authorities. In their view, NWMO should not seek to have the host community co-sponsor its proposal as its inherently-controversial nature is bound to create conflict, exacerbate existing internal divisions, or lead to conflicts with surrounding communities. They asked that some sentences in the Discussion Document be reworded to make clear that the NWMO alone would be the applicant, recognizing that the community may be supporting the licensing application having established a partnership with the NWMO (e.g., page 34, 2<sup>nd</sup> paragraph currently states that the “NWMO and the community will work together to seek regulatory approval to proceed to implement the project...”; other statements throughout the Discussion Document may also need to be reworded to reflect this distinction).

In a related vein, several participants asked NWMO to define further what it understands by the term “willing” both so that communities know what will be expected of them and to ensure a consistent standard among communities. Several participants suggested that the site selection process be designed to confirm periodically a community’s level of commitment to hosting the site. Rather than relying solely on the accountable authorities’ decisions, multiple tests should be instituted throughout the process to ensure high awareness levels across the community and to assess the degree of willingness of the community’s citizens. This proactive monitoring would help reduce the risks of low levels of awareness or political reversals of decisions jeopardizing the project.

More specifically, NWMO could consider the following approaches to building awareness and measuring communities’ levels of commitment over time:

- The current process does not look for a “compelling demonstration of interest” from the community until Step 5. An earlier demonstration might depoliticize the decision of elected officials and reduce the risk of it being overturned.
- A Community Advisory Board could be established to serve as an independent “listening post” to monitor the community’s interest in the project. The Community Advisory Board would include independent representatives from various sectors, such as environmental, social, business, etc<sup>2</sup>.
- A Youth Council could build capacity of young people to understand the project and its potential impacts on their future.

Communities, however, should avoid using tools such as referenda to measure support as they are potentially divisive and also exclude youth.

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<sup>2</sup> See also the discussion in Section 3 above under Step 2.

Several participants argued for a broader definition of the term “community”, extending beyond municipal boundaries. They discussed the concept of a radius or concentric circles around the host community, based on exposure to risk, in which community support would be required. This radius would likely vary by region (e.g. rural vs. urban). One participant noted that certain impacts (e.g. groundwater impacts) may actually only occur in surrounding communities and not in the host community.

Many participants recommended that the support of surrounding and transportation route communities needs to factor more strongly into the site selection process. One participant felt that this support needs to be an explicit evaluation criterion for selecting a host community. Several participants stated that the process needs to explicitly provide some level of decision-making power to surrounding communities. One participant suggested that the potential host community might be responsible for engaging its surrounding communities while NWMO would be responsible for engaging transportation communities.

While one participant thought that transportation communities should have a veto, the majority believed that these communities should have less decision-making power than the potential host community (in part because some participants believe that transportation risks have been exaggerated). One participant suggested the concept of overlapping communities of interest, whereby transportation route communities would express their support as a group, rather than each needing to express majority support. Many participants believe that transportation communities will need their own funding support to assess the project’s impacts and benefits on them.

Several participants felt that funds to support a community in its decision-making processes about the project should come from a neutral third party (i.e. not through the NWMO), to avoid placing communities in an applicant’s role vis-à-vis the NWMO. They also agreed that there need be clearly defined expectations of how such resources would be used (e.g. “we expect you to consult all community members...”).

In a related vein, some participants argued that, while NWMO needs to engage the public broadly, it should support only those with a clear interest in the project (for and against). Because the identification of these interests is bound to be controversial, NWMO should consider channelling its funding through a third party who would decide whom to fund.

Some participants felt that the site selection process should involve ongoing consultation with major national interest groups but gave diverging reasons for this inclusion: some thought that NWMO should fund national NGOs to continue participating in the process because they represent national interests that need to be reflected, while others argued in favour of the continued involvement of such groups in order to reduce the risk that they would oppose and perhaps derail the process.

A participant noted the tension between using Aboriginal traditional ecological knowledge and the need for transparency because of the intellectual property issues involved.

Last but not least, some participants noted that it will be important for NWMO to establish an early physical presence in interested communities to provide information, build relationships and learn about the community's interests. A few participants recommended that establishing a community office be a mandatory step for NWMO to present itself as the proponent, rather than an optional step as suggested on page 33 of the Discussion Document.

## **7 Third-Party Review**

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A member of the NWMO team introduced chapter 6 of the Discussion Document and outlined the three levels of third-party review NWMO was proposing.

Participants were then invited to provide their perspectives in plenary by responding to the following questions:

1. Is the proposed approach for third-party review which is available to communities appropriate?
2. What are the strengths of the proposed approach to third-party review?
3. What improvements would you recommend, and why are these modifications important to you?

While most participants favoured the inclusion of third-party review in the site selection process, there was much debate about the scope and role of the review process as well as who should appoint members to it. At least one participant believed that the first level of third-party review proposed (to assess the potential suitability of a site) was redundant as regulatory authorities would in effect be conducting the same review.

Another participant noted that the quality of third-party reviews depends fundamentally on the quality of the individuals named to such review groups and their ability to work collaboratively. He emphasized that much care will be needed in selecting a chair and in ensuring the appropriate composition for each group.

Participants also discussed who should appoint review groups. While they recognized that having the community nominate members would enhance public trust in the site selection process, it might also create a conflict of interest for these members, who would be called on both to defend their community's interests and present impartial advice about the repository.



Another participant drew a distinction between ensuring that communities received independent advice in order to make an informed decision, and NWMO soliciting a third-party review to give its proposal greater rigour and credibility. She saw these functions as being fundamentally different and not to be combined in the same body.

While some participants argued that each community should have its own third-party review group, others thought it might be possible, and desirable in ensuring consistency of information, to have a single body serve the needs of the different communities involved in the site selection process. In a related vein, one participant noted that such a review group might constitute one avenue to involve national NGOs (which some participants believe have played an important role in the debate so far and should explicitly be recognized as one of the communities of interests NWMO plans to engage in Chapter 5), while another suggested that universities might have a part to play in assembling and presenting technical information for communities in an accessible and credible manner.

One participant asked what the authority of review groups would be and how their advice was intended to be used. As a partial answer, one participant suggested that a review group would be able to help evaluate the relative merits of various sites if more than one willing host community emerged from the site selection process.

Arguing that safety was not exclusively a technical matter, one participant recommended that the proposed panel established to review site suitability should be multi-disciplinary from the start and not be limited to the consideration of technical factors.

Another participant noted that communities may find it difficult to contract independent expertise as most experts may have some ties with the nuclear industry (especially technical expertise).

One participant argued that NWMO's proposal would be clearer if it referred to "independent" rather than "third-party" reviews. She recommended that the scope of such reviews be expanded from a *post facto* examination of site evaluation studies to include consideration of the technical criteria that will guide the site selection process. She noted that the Sudbury Soil Study included a credible and helpful third-party process that NWMO might want to emulate<sup>3</sup>.

As a point of clarification, some participants suggested that the last sentence in the section describing the review group (page 36) should be revised to affirm the right of a community to hire its own independent expertise at NWMO's expense.

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<sup>3</sup> The same participant regretted however, that the Study, had not been as transparent as it could have, publishing only summaries of its work rather than full technical reports.

### *Advisory Council*

By contrast to the preceding discussion, participants had little to say about the Advisory Council. One participant noted that the federal statute creating the NWMO specifies that it name a representative from the economic regions it is considering on its Advisory Council. Such representation should be included on the Advisory Council early on.

## **8 Closing Remarks**

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Two participants spoke up in the final round of comments. The first noted that the large expenses associated with nuclear power may preclude societal investments in green energy while the health risks posed by radiation and security risks posed by proliferation remained major concerns. The second participant noted that every energy technology raises trade-offs and that there was no easy solution to Canada's energy problems.

Kathryn Shaver thanked the participants for their thoughtful comments. She explained that Stratos would prepare both a report for each of the multi-party dialogues as well as a consolidated report of all the sessions, both of which would be distributed to participants. During the Fall, NWMO will continue its current engagement activities on the site selection process with the Provinces, Aboriginal groups and the public. NWMO will review all input received at the end of the year and aim to release a revised site selection process in 2010. NWMO will also send a copy of this document to participants when it becomes available.

## 9 Annexes

### 9.1 Annex A - List of participants

First Name	Last Name	Organization
Anne	Koven	Faculty of Forestry, University of Toronto
Pauline	Browes	Waterfront Regeneration Trust
Ken	Dormuth	
Shirley	Farlinger	International Institute of Concern for Public Health
Thomas	Mattinas Sr.	Niigani
Michael	McGuire	Niigani
Brenda	Murphy	Wilfred Laurier University
Jatin	Nathwani	University of Waterloo
Grant	Sheng	York University
Mark	Stevenson	MAS Consulting
Murray	Stewart	Stewart Advantage Consultants Inc.
Gordon	Williams	Niigani
Mel	Fruitman	Consumers Association of Canada
John	Jackson	Great Lakes United
Brennain	Lloyd	Northwatch
David	Bell	
Jo-Anne	Usher	Canadian Nuclear Workers Council
Norm	Rubin	Energy Probe Research Foundation
Caryl	Arundel	Canadian Urban Institute
Lee	Doran	Ecological Writings #1, Inc.
Dave	Martin	Greenpeace
Theresa	McClenaghan	Canadian Environmental Law Association
Anne	Krassilowsky	Northwestern Ontario Municipal Association (NOMA)
Janice	Auger Szwarcz	Canadian Association of Nuclear Host Communities
K.Y.	Lo	University of Western Ontario
Blair	Seaborn	
Paul	Acchione	Ontario Society of Professional Engineers (OSPE)

## 9.2 Annex B - Agenda

### Objective

- To engage interested parties with diverse perspectives in the provinces involved in the nuclear fuel cycle in a dialogue to test and refine the proposed site selection process for Canada's long-term management facilities for used nuclear fuel

<b>EVENING SESSION (6:00 p.m. – 9:00 p.m.)</b>
<b>Greeting &amp; Dinner</b>
<b>Opening Remarks</b> ( <i>Stratos</i> )
<b>Overview of the Project &amp; Proposed Site Selection Process</b> <i>NWMO Panel Presentation</i>
<b>Plenary Discussion</b>
<b>Presentation of Next Day's Agenda</b> <i>Stratos Overview</i>

<b>DAY SESSION (8:30 a.m. – 4:00 p.m.)</b>
<b>Introduction to Session</b> ( <i>Stratos</i> )
<b>Proposed Steps &amp; Guiding Principles</b> <i>NWMO Panel Presentation, Breakout Groups Discussion &amp; Reporting Back in Plenary</i>
<b>Break</b>
<b>Proposed Steps &amp; Guiding Principles</b> (continued) <i>Plenary Discussion</i>
<b>Proposed Criteria – Safety and Community Well-Being</b> <i>NWMO Panel Presentation, Breakout Groups Discussion &amp; Reporting Back in Plenary</i>
<b>Working Lunch</b>
<b>Partnership and Community Support for Decision Making</b> <i>NWMO Panel Presentation, Breakout Groups Discussion &amp; Reporting Back in Plenary</i>
<b>Break</b>
<b>Approach to Third-Party Review</b> <i>NWMO Panel Presentation, Plenary Discussion</i>
<b>Closing Remarks &amp; Next Steps</b> <i>Plenary Discussion, Participant Written Input, NWMO Closing Remarks</i>