# Final Report from the Citizens' Panel Dialogues and the Public Discussion Groups.

**NWMO SR-2010-01** 

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**Ascentum / Navigator** 



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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.

#### Disclaimer:

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**NAVIGATOR** 

January 2010 FINAL

#### **ENGAGEMENT REPORT**

DESIGNING THE PROCESS FOR SELECTING A SITE

THE NUCLEAR WASTE
MANAGEMENT ORGANIZATION

CITIZENS' PANEL DIALOGUES
AND PUBLIC DISCUSSION
GROUP SESSIONS

This report was prepared for the Nuclear Waste Management Organization by:



and



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### **Executive Summary**

In May 2009, the Nuclear Waste Management Organization (NWMO) released a discussion document entitled "Moving Forward Together: Designing the Process for Selecting a Site." The document proposes ten guiding principles to help inform and guide the process for selecting a site for the long-term storage of used nuclear fuel, outlines the NWMO's proposed nine-step process for selecting an informed and willing host community, and briefly describes what a host community should expect if it chooses to host the project.

In addition to other on-going engagement activities on the proposed process for selecting a site, in September and October 2009 the NWMO hosted two daylong dialogues with members of its Citizens' Panels, in Toronto and Ottawa (facilitated by a third-party contractor: Ascentum), as well as five Public Discussion Groups of randomly recruited citizens in Saskatoon, Sault Ste. Marie, Toronto, Scarborough/Pickering, and Saint John (also facilitated by a third-party contractor: Navigator).

This report synthesizes what was heard throughout the Citizens' Panel Dialogues and the Public Discussion Groups. The findings emerging from these engagements are captured under seven key themes.

#### 1. Guiding Principles are on track

Throughout discussions and in written feedback, participants reiterated the clear view that the guiding principles identified for the proposed site selection process cover what is essential and most important to them. They are hopeful that the principles will be implemented accordingly and that the NWMO will uphold in practice the principles that they believe hold great value.

#### 2. The site selection process meets the test of fairness and safety

While participants are supportive of the process as a whole, they believe that addressing their questions and suggestions would make for an even more effective process for finding the best and safest storage site.

## 3. Robust public participation: the heart and soul of a successful site selection process

Participants feel that this is a key component of the overall nine-step process. In particular, they see a strong public participation role – which for them means the involvement of citizens of the

possible host community, of surrounding areas, and others potentially affected, not just political representatives – in determining whether a community is informed and willing to host the site. This public participation role would also extend to the other stages of the site selection process, including signing a formal agreement with the NWMO, and on an on-going basis once the site is operational. Public participation emerged as an important element of the guiding principles for participants, particularly as a critical part of 'shared decision-making' and 'inclusiveness.'

## 4. The community must benefit from hosting the site and risks must be mitigated

Ensuring benefits and mitigating risks for all potentially affected citizens and communities is an overriding concern for participants. They identified a range of possible benefits of hosting the site that are grouped under three categories: community and culture; physical and social infrastructure; and job opportunities, business incentives, and community capacity-building.

Of particular concern to participants throughout and across the sessions is safety, health risks, environmental effects and risks associated with the transportation of nuclear waste.

#### 5. Need for transparency and third party involvement

It became evident that transparency is of utmost importance to participants. Similarly related is their recurring call for a neutral third party to ensure fairness and transparency, and help instil public confidence and trust in the siting process.

#### 6. A "social contract" with future generations

"Ensuring the protection of present and future generations...for a very long period of time" is part of the first guiding principle's "focus on safety." Participants' discussions and written feedback revealed concerns about intergenerational equity. As one participant put it, "you are building a social contract with generations in the future."

Participants hold the conviction that the current generation must demonstrate social and ethical responsibility for taking proper care of the nuclear waste that has been created. This includes considering ways of lessening any potential impact nuclear waste might have on future generations and the environment.

#### 7. Research on reducing the volume and toxicity of nuclear waste

Participants consistently came back to the importance of the project being *adaptive*, particularly in reference to incorporating new research and technology that would reduce the amount and toxicity of nuclear waste produced and therefore requiring safe storage.

While energy policy was outside the scope of the Citizens' Panel Dialogues and Public Discussion Groups, nevertheless, participants repeatedly raised issues related to greater use of 'green' energy. Their logic is that green energy production might reduce the amount of nuclear waste produced in Canada.

Overall, participants agreed that the guiding principles for selecting a site, and the site selection process itself, are both fair and appropriate. Participants shared their ideas on how the principles and site selection process could be refined and strengthened, and made suggestions on how to clarify certain aspects of the site selection process reference documents. Their concerns, ideas and suggestions are presented in Chapter 3 on the guiding principles and in Chapter 4 on the proposed nine-step site selection process. Chapter 5 contains the results of discussions on the cross-cutting themes of "informed and willing communities" and "community well-being." The citizens' contributions to assist the NWMO in developing a safe and fair site selection process are invaluable and greatly appreciated.

#### 1. Introduction

The Nuclear Waste Management Organization (NWMO), created in 2002 by Canada's nuclear electricity generators as a requirement of the *Nuclear Fuel Waste Act*, has studied and recommended a plan for the long-term management of Canada's used nuclear fuel and is now moving toward implementation of that plan.

After engaging thousands of citizens, stakeholders, experts and Aboriginal peoples since its inception, the NWMO heard that Canada's plan for managing used nuclear fuel must be fair — both to current and future generations — and that the outcome must be safe and secure for people, communities and the environment. The NWMO's mission statement speaks to its need to develop a long-term management approach that is socially acceptable, technically sound, environmentally responsible and economically feasible.

Based on this, the NWMO developed a plan for **Adaptive Phased Management (APM)**, which was approved by the Government of Canada in 2007. Technically, APM has as its end point the safe and secure containment and isolation of used nuclear fuel in a deep geological repository, constructed in a suitable rock formation. The management system that underpins the implementation of APM includes phased decision making, the incorporation of new knowledge at each key step, and the flexibility to adjust the plan if needed – all features that were considered important by Canadians.



The NWMO is now implementing APM and its current task is to "collaboratively design a process that will be used to identify a safe and secure site in an informed and willing community to host Canada's long-term management facilities for used nuclear fuel." In May 2009, the NWMO released a discussion document entitled "Moving Forward Together:

Designing the Process for Selecting a Site." The document proposes ten guiding principles to help inform and guide the site selection process, outlines the NWMO's proposed ninestep process for selecting an informed and willing host community and briefly describes what a host community should expect if it chooses to host the project.

<sup>&</sup>lt;sup>1</sup> Moving Forward Together: Designing the Process for Selecting a Site – Invitation to Review a Proposed Process for Selecting a Site, May 2009, Nuclear Waste Management Organization, p.2 (<a href="https://www.nwmo.org">www.nwmo.org</a>)

#### 1.1 A Dialogue With Canadians

Canadians were invited to review and provide their feedback on a proposed process to identify a site for Canada's long-term management facilities for used nuclear fuel. Online participation options included the opportunity to download and complete a workbook, to fill out a survey, engage in an E-dialogue and/or to make a submission on the NWMO website. In addition, Canadians were invited to attend one of 16 information sessions held in each of Canada's four nuclear provinces (Ontario, New Brunswick, Saskatchewan and Quebec).

The NWMO hosted two daylong dialogues with members of its Citizens' Panels, as well as five Public Discussion Groups of randomly recruited citizens. Panelists were originally selected

Canadians will have a decision to make:

Where should our used nuclear fuel be contained and isolated for the long term?

through random digit dialling among a general population sample in the area where each Panel was held. All individuals called underwent a standard research screening survey in which they indicated whether they were interested and able to participate in a discussion about a general public policy issue with no advance notice of the specific topic. They were screened to include community-engaged opinion leaders in the following topics: community, environment,

and public/social issues. Recruitment for the Public Discussion Group participants followed the same protocol as used for the Citizens' Panel Dialogue participants.

These participants were given a very clear message: the NWMO's aim is to ensure that in addition to being **technically safe for humans and the environment**, the process for making this decision must also be **fair** and **appropriate** in the eyes of citizens – as citizens are the ones who will be the ultimate judges of the process, and who will live with its outcomes.

The purpose of these events was therefore to:

- 1. Provide the NWMO with citizens' perspectives on the proposed process for selecting a site;
- 2. Identify possible ways of strengthening the proposed plan with a particular focus on ensuring that it is fair and appropriate; and
- Identify any particularly challenging or potentially problematic implications related to the selection process that require further consideration and, if possible, advise on ways to address these challenges.

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<sup>&</sup>lt;sup>2</sup> Available at: http://www.nwmo.ca/news?news\_id=43&uniqid=

#### 1.1.1 The Dialogues with NWMO Citizens' Panels

The NWMO Citizens' Panel program brought together groups of citizens, selected at random in each of the four provinces involved in the nuclear fuel cycle, to input into the NWMO's early plans. (Five panels, with about 18 participants each, drawn from Northern Ontario, Southern Ontario, New Brunswick, Saskatchewan and Quebec, met four times each between the fall of 2007 and spring, 2008). The panels were recruited, organized, administered and reported on by a third-party contractor (Navigator).

All of the NWMO's citizen panelists were invited to participate in one of two daylong Citizens' Panel Dialogues:

- A total of 63 citizen panelists from the Greater Toronto Area (32%), the rest of Ontario (28%), New Brunswick (14%) and Saskatchewan (26%), participated in an English-language Dialogue, on September 26, 2009 in Toronto; and
- A total of 6 citizen panelists from Quebec joined the French-language Dialogue, on October
   3, 2009 in Ottawa.

Both groups were comprised of a fairly even mix of males and females, and about half of participants were under 45 years of age. By virtue of their experience as citizen panelists, participants also had some baseline understanding of the NWMO's role, and the issues associated with used nuclear fuel management.

The two Dialogues were designed and facilitated by a third-party contractor (Ascentum, Inc.), whose process gave participants the opportunity to:

- Participate in learning sessions to deepen their understanding of Adaptive Phased Management and the proposed site selection process;
- Engage in a mix of small group and plenary dialogue to share their perspectives on the site selection process, with an emphasis on providing feedback and suggesting improvements to the ten proposed guiding principles and the nine-step site selection process;
- Propose and prioritize refinements to the definition of two fundamental concepts which underpin the proposed site selection process ("cross-cutting themes"): the notion of "informed and willing communities" and the community well-being criteria that might be utilized to assess a site's suitability, beyond ensuring its safety;
- Converse with the NWMO subject-matter experts to ask questions and share their perspectives.

Agendas of the Citizens' Panel Dialogues and the Public Discussion Groups are provided in Appendices C and D, and a profile of participants is available in Appendix F.

#### 1.1.2 Public Discussion Groups

Five, three-hour Public Discussion Groups were held in the cities of Saskatoon, Sault Ste-Marie, Toronto, Scarborough/Pickering and Saint John. The Public Discussion Groups were designed and facilitated by an independent third-party contractor (Navigator), and each session brought together 14 to 18 randomly recruited citizens from the area. Participants were not informed of the topic of discussion prior to arriving at the sessions, so as to ensure maximum objectivity.

The Public Discussion Group design was an adaptation of the Citizens' Panel Dialogue process: participants were informed about the NWMO, Adaptive Phased Management, and the proposed process for selecting a host site (guiding principles, nine-step process). They then engaged in a facilitated discussion on each of these topics, providing their feedback, asking questions and sharing their insights. At the end of the session, participants had time to pose any additional questions to the NWMO subject-matter experts in attendance, and to provide their final thoughts or comments in written form, using an anonymous feedback form.

Given the shorter format of the Public Discussion Groups, and the fact that this was the participants' first exposure to both the NWMO and to this issue, the intent was not to delve as deeply into the content as was done in the Citizens' Panel Dialogues. Rather, the goal was for the NWMO to inform and hear from Canadians who had not yet been engaged on this topic, and to learn about their ideas on how to strengthen the proposed site selection process, so as to make it as fair and appropriate as possible in the eyes of the general public.

#### Purpose of this Report

Ascentum, Inc. and Navigator collaborated on the preparation of this report. Key findings are summarized in the next section and the remaining chapters fill in the details. Sections 3 through 5 elaborate on the major themes that arose from the Citizens' Panel Dialogues and the Public Discussion Groups with respect to: guiding principles, the proposed nine-step site selection process, and the cross-cutting themes of "informed and willing communities" and "community well-being." These themes reflect the substantive common ground emerging from these two distinct groups.

## 2. Key Findings

The following seven findings are a synthesis of the key themes emerging from across the Citizens' Panel Dialogues and Public Discussion Groups.

#### 2.1 Guiding Principles are on track

Citizens' Panel and Public Discussion Group participants alike support the intent and purpose of the guiding principles, which were developed by the NWMO with substantive input from their Citizens' Panels in 2008. Throughout discussions and in written feedback, participants reiterated the clear view that the guiding principles covered what is essential and most important to them. They are hopeful that the principles will be implemented accordingly and that the NWMO will uphold in practice the principles that they believe hold great value.

## 2.2 The site selection process meets the test of fairness and safety

Overall, almost all participants agreed that the proposed nine-step process for selecting a site for the long-term containment of used nuclear fuel is both fair and appropriate. While they are generally satisfied with the process, they nonetheless have suggestions and ideas for strengthening both the description of the process, as well as the process itself. Participants also have many questions about the specifics of each step and the process of moving from one step to the next. While participants are supportive of the process as a whole, they feel that addressing their questions and suggestions would make for an even more effective process for finding the best and safest storage site.

## 2.3 Robust public participation: the heart and soul of a successful site selection process

The importance of a robust public participation plan is a recurring theme that emerged in the Dialogues and Public Discussion Groups. Participants see it as a key component of the overall nine-step site selection process and throughout the guiding principles, particularly as a critical part of 'shared decision-making' and 'inclusiveness.' However, they do feel that it merits greater attention in the proposed process and principles. In particular, they see a strong public participation role in determining whether a community is informed and willing to host the site, in signing a formal agreement with the NWMO, and on an on-going basis once the site is operational.

In concrete terms, their emphasis on the role of the public is seen most sharply in their belief that citizens should have a formal role in shared decision-making, including involvement in determining whether to withdraw.

Participants at all Citizens' Panel and Public Discussion Group sessions stressed the importance of ensuring that *communities be represented by their* <u>citizens</u> in an <u>on-going decision-making</u> <u>capacity</u>. Participants want a public participation process that guarantees the opportunity for all points of view to be heard including views that oppose hosting the site. The idea of holding referenda to demonstrate willingness to host is supported by many, with the additional caveat of having over a majority as a necessary threshold.

## 2.4 The community must benefit from hosting the site and risks must be mitigated

The discussions, in both the Citizens' Panel Dialogues and the Public Discussion Groups, revealed that ensuring benefits and mitigating risks for all potentially affected citizens and communities is an overriding concern for participants. They identified a range of possible benefits of hosting the site that are grouped under three categories: community and culture; physical and social infrastructure; and job opportunities, business incentives, and community capacity-building.

Their expectation is that quality of life <u>must not</u> be compromised for economic gain. They are looking for a "humanist approach" to evaluating the risks, benefits and trade-offs of hosting the storage site. Of particular concern to participants throughout the sessions are safety, health risks, environmental effects and risks of transportation.

#### 2.5 Need for transparency and third party involvement

It became evident that transparency is of utmost importance to participants. What emerged, as an underlying current connected to transparency, is their seeming lack of confidence in governments, and even to some extent in the NWMO, to serve the best interests of citizens. Public Discussion Group participants had many more questions about the role and independence of the NWMO, not surprisingly given that this was their first engagement with the organization. On the other hand, Citizens' Panel participants indicated more comfort with, and trust in, the NWMO.

Similarly related is their recurring call for a neutral third party to ensure fairness and transparency, and help instil public confidence and trust in the process. Participants suggest engaging third-party organizations to serve as experts in disseminating information, as

reviewers, auditors, monitors and regulators. A related suggestion is to create an ombudsman for the nuclear waste storage site and site selection process.

#### 2.6 A "social contract" with future generations

"Ensuring the protection of present and future generations...for a very long period of time" is part of the first guiding principle's "focus on safety." Participants' discussions and written feedback revealed concerns about intergenerational equity. As one participant put it, "you are building a social contract with generations in the future."

Participants hold the conviction that the current generation must demonstrate social and ethical responsibility for taking proper care of the nuclear waste that has been created. They also think that today's generations should consider ways of lessening any potential impact nuclear waste might have on future generations and the environment.

## 2.7 Research on reducing the volume and toxicity of nuclear waste

Participants consistently came back to the importance of the project being *adaptive*, particularly in reference to incorporating new research and technology that would reduce the amount and toxicity of nuclear waste produced and therefore requiring safe storage.

While energy policy was outside the scope of the Citizens' Panel Dialogues and Public Discussion Groups, nevertheless, participants repeatedly raised issues related to greater use of 'green' energy. Their logic is that green energy production might reduce the amount of nuclear waste produced in Canada.

## 3. Guiding Principles

Integral to the NWMO's proposed site selection process is a series of ten guiding principles, which taken together, provide a framework to guide decision making and to help assess whether the site selection process is indeed unfolding as intended.

The ten guiding principles as articulated in the discussion document are:

- Focus on Safety
- Informed and Willing "Host Community"
- Focus on Nuclear Provinces
- 4. Right to Withdraw
- Aboriginal Rights, Treaties and Land Claims 10. Regulatory Review

- 6. Shared Decision Making
- 7. Inclusiveness
- 8. Informing the Process
- Community Well-Being

A more detailed description of each of these principles is provided in Appendix A.

#### Participants considered:

- Will the proposed guiding principles help ensure that the siting process is fair and appropriate? Why? Why not?
- What additions and/or revisions, if any, should be made? Are there any critical gaps?

In general, Citizens' Panel Dialogue and Public Discussion Group participants alike support the intent and purpose of these principles. They also provided a number of suggestions on how each should be refined or more clearly articulated. The following section summarizes the citizens' feedback for each of the guiding principles.

#### 3.1 Focus on Safety

"To me, it is the most important thing here; the site chosen must be the safest."

. . . . . . . . . . . . .

The importance of focusing on safety was supported unanimously across sessions, and is seen as the absolute top priority in selecting a storage site. Participants are concerned about the safety of people living in the host community and along the transportation route, now and in the future. They emphasized the need for an evacuation plan in case of emergency. Environmental safety was a predominant concern, particularly in regards to water quality and the impact of a potential accident or leak.

Participants also expressed concerns about the security of transporting used nuclear waste to the storage site, and the security of the storage site itself. They feel strict security measures would be necessary and suggest that the military oversee operational and transportation security.

Participants expressed the belief that all regulatory requirements should be exceeded, not just met. They want more information on how safety standards are currently set and strongly emphasized the need for standards to be reviewed and updated regularly.

Their suggestions for additions and revisions for this guiding principle are:

- Participants inquired what the timeframe was on: "a very long period of time";
- Participants feel that "acknowledge precautions" is vague. They prefer the word 'implement' over 'acknowledge';
- They want to see details on how safety standards will be maintained and updated on a continuous basis.

#### 3.2 Informed and Willing "Host Community"

The principle of having an informed and willing host community for the long-term nuclear waste storage site is a major cross-cutting theme throughout the guiding principles and the site-selection process. For this reason, it is addressed in more detail in Chapter 5.

Participants feel strongly that the public needs to be not only informed, but also educated about the project, the site selection process and the potential benefits and risks of nuclear waste transportation and storage. The process of informing the public needs to be thorough, well documented, and accompanied with a concrete measure that proves that everyone has been given the opportunity to become informed.

Participants are in agreement with the principle of willingness. They expressed concerns with determining willingness – that it should be based on well-informed consideration of the risks and benefits, and not based on other vested interests.

Participants have many questions about how to define and demonstrate willingness to accept the project. The idea of holding a referendum vote on the matter resonated with many participants, as they are insistent that citizens be involved in the decision making. This is driven in part because they do not believe that the decision to accept the project should be confined to government representatives. However, the idea of a referendum raised further questions about what percentage of the population would be required for acceptance, as well as who

would be eligible to vote in such a referendum (more detail on this element is presented in Chapter 5).

The term "host community" – which is used throughout the guiding principles and site-selection process documents – also raised many questions (see Appendices A and B). It sparked questions about whether the "host community" would be from only one municipality or if the storage site was in a central place within a region, whether there could be multiple host municipalities. Would the host community have to be a pre-existing community, or could a community be created in a remote, isolated area that is not already populated? Some land may be considered sacred to Aboriginal people despite being uninhabited – would that land be considered to be part of the community?

Their suggestions for additions and revisions for this guiding principle are:

- Expand upon definition of "host community" to address questions noted above, where appropriate or applicable;
- Participants wanted to know how willingness would be demonstrated and measured;
- Participants suggest a measure be taken to ensure that community willingness to accept this project is independent of vested interests.

#### 3.3 Focus on Nuclear Provinces

"Take into consideration how far away the site will be from the generating plants to minimize hazardous materials on our roads." Many participants agreed that it is fair for the provinces that produce, and therefore use, nuclear power to be responsible for storing the waste produced. However, they emphasized that what is most important is for it to be stored in the safest place. As transportation is a common safety concern, participants want to see the storage site located strategically to limit the distance of required transportation.

Participants also agreed that interested communities in non-producing provinces should be considered, so as not to limit options, and also based on the rationale of fairness. Other provinces may become nuclear producers in the future or may purchase nuclear energy from a producing province and therefore should also be considered in the site selection process.

In discussions on possible locations for the storage site, participants throughout the sessions suggested searching for a remote, isolated area in order to minimize the impact on a "host community." However, there are concerns that this would, in fact, increase transportation distances, which participants consider an undesirable trade-off. Furthermore, participants fear the storage site would be built 'up north' on Aboriginal land. This raised concerns about

fairness, taking advantage of vulnerable communities, and the possibility of the site being too far removed from public scrutiny, which would compromise transparency.

#### 3.4 Right to Withdraw

Participants feel very strongly that if, at any point in the process, new information or scientific research comes forth, the community should be able to reconsider their willingness to accept the project.

Elaborating on this reasoning, participants raised questions on *who* should decide and *how* it would be decided whether to withdraw. They emphasized that this decision should involve citizens directly and not rest solely with government representatives.

"The ultimate objective must always be the protection of the community, and the community must have recourse in the event of undisclosed or new information that changes the situation."

Furthermore, some participants expressed concerns that withdrawal should not result simply from a political change in government. This is tied in with discussions around public participation in decision making beyond determining whether to accept the project. Participants want multiple opportunities to have their say, or cast their vote, throughout the process, including in determining whether to withdraw. This is also seen as a safeguard against political motives or vested interests influencing decision making.

On the other hand, many participants are concerned about the consequences of withdrawing from the commitment to host the site once a formal agreement has been signed (such as lengthy delays in implementing the site and losing significant investments).

Their suggestions for additions and revisions for this guiding principle are:

- Participants want to see more imperative language than "take into account" such as 'must observe.'
- There is much support for a clause in the formal agreement that specifies the right to withdraw, within a set period of time after signing the agreement, if new information on safety comes forth.

#### 3.5 Aboriginal Rights, Treaties and Land Claims

Participants feel that this principle (the siting process will respect Aboriginal rights and treaties) is a very important one to maintain in order to have a fair process. They expressed strong concerns about the fairness and practicality of siting the facility on territory that is subject to unresolved legal disputes involving Aboriginal rights, treaties or land claims.

Participants feel that Aboriginal representatives should have a voice in the process in part because they fear that the federal government might not act fairly on behalf of Aboriginal communities. Participants believe that Aboriginal people must have a fair say in the decision-making process if Aboriginal land were to be considered. They also feel that there would need to be financial compensation and known benefits to Aboriginal people giving up their land.

Participants cited past instances where Aboriginal peoples had not been treated fairly in negotiations and decision making as the source of their concern. Participants' lack of trust in governments to act in the best interest of its citizens is a common theme throughout this consultation, especially in the Public Discussion Group sessions.

Their suggestion for a revision for this guiding principle is:

Strengthen the terms "respect" and "take into account" to be less ambiguous.

#### 3.6 Shared Decision making

As noted, participants strongly support public participation in decision making. In their view, while it is clearly important for the "host community" representatives to be involved in a shared decision-making model with the NWMO, it is equally important for any citizen of the community to have the opportunity to express his or her support and concerns, and have a say in decision making.

They communicated their expectation that this shared decision-making model would be ongoing, whereby informed citizens could be involved throughout the project. This means community members would have input in the process from site selection through to construction and the operation of the storage facility.

Participants support the idea of providing the "host community" with allotted funds to hire a third-party, independent, expert to provide citizens with an objective perspective on the risks and benefits of hosting the storage site. This would allow citizens to feel more confident about being well informed to make these important decisions. It is also seen to be a way to address concerns about trusting the NWMO and governments to make good decisions to protect and benefit citizens.

Their suggestion for a revision for this guiding principle is:

 To reflect that shared decision making includes the citizens of the host community, participants suggest expanding "host community" to "the citizens of that community" or "the host community and all its citizens."

#### 3.7 Inclusiveness

Participants are adamant that people living along the transportation route of the used nuclear

"Everyone potentially affected deserves [to have his or her] voice heard." fuel – from where it is produced to the long-term storage site – should be well informed of any potential affects and risks, for example the likelihood and consequences of a road collision.

Participants' opinions vary on the extent to which people living along the transportation route should be involved in decision making. Some

participants feel that it would be too challenging to seek approval from all "affected" communities, whereas others feel that transportation route communities should have as much say as the host community.

Likewise, many participants expressed the view that surrounding communities should be well informed and consulted, as they too could be potentially affected by the transportation and storage of nuclear waste in the vicinity. In this spirit, some participants wondered what would happen if the site location was near the border with the United States. Would the views of the people living nearby, but on the other side of the border, be considered?

Furthermore, participants have many questions on the geo-political boundaries for sharing information and engaging citizens. Would decision making extend beyond the host community to the immediate surrounding communities, to an entire region or even the whole province? And once again the question arose: would decision making include citizens or just government representatives?

Their suggestions for additions and revisions for this guiding principle are:

- Participants want a more precise definition of the parameters and metrics for "affected" communities and parameters of the host community;
- Participants are unclear about who may qualify as "likely to be affected" and therefore
  included in consultations. (For example, does this mean all surrounding communities,
  across provincial/territorial borders, all Canadians, across the U.S. border?);
- Clarify the decision-making role of the provincial/territorial government where the host community is located.

#### 3.8 Informing the Process

Participants support a third-party review at each step of the site selection process. However, they want more information on who would qualify as a third-party reviewer, what organizations would be considered, what level of expertise would be required, and what selection process is envisioned, including who would be making the final selection.

Responding to the results being "published on the NWMO website at each step" of the process, participants expressed a desire to have the information more widely available and actively disseminated beyond the NWMO website alone. They feel public review and scrutiny are an important component of the review process to uphold transparency.

"The process needs to be on-going – again responding to new knowledge of the effects of waste management." The importance of being adaptive to new technology is a theme throughout. Participants recommend having an on-going process of research to investigate the best way to store, reduce and mitigate the effects of used nuclear fuel. They also want the process to be continuously informed by any new information.

#### 3.9 Community Well-Being

Fostering the long-term well-being of the community in which the storage site is located is an important guiding principle and a cross-cutting theme throughout the site selection process. It is reviewed in more depth in Chapter 5.

"How do we ensure that we are not taking advantage of poor, disadvantaged communities by offering them economic benefits to take this...waste." The protection of vulnerable communities arose as an important issue. Participants are concerned that an economically-depressed community, with few other resources and options, could be easily persuaded to host the site without properly considering all of the risks, benefits, and trade-offs. They advocated for some sort of protection for disadvantaged communities, to ensure that they are not taken advantage of.

Another predominant concern for participants is in relation to residential proximity to the storage site and compensation. This raised many questions for participants. How close would the site be to residential areas? If residents did not want to live near the site and wished to leave the area, would they be offered market value for their homes? Would they be assisted in moving?

#### 3.10 Regulatory Review

Participants, particularly those at the Public Discussion Group sessions who were new to the engagement, did not have a clear understanding of the Canadian nuclear regulatory system. However, they expressed that they would like to see as many regulatory safeguards in place as possible. They suggest having on-going regulatory reviews, by more than one regulating body, as well as another third-party reviewer.

One participant wondered, "What happens if regulations change during the course of the project?" A far more common concern among participants is that the regulatory standards be flexible enough to adapt as scientific research reveals new knowledge and technologies.

### 4. Proposed Site Selection Process

Participants discussed the nine-step site selection process outlined in the NWMO's "Moving Forward Together: Designing the Process for Selecting a Site – Invitation to Review a Proposed Process for Selecting a Site" discussion document. In the Citizens' Panel Dialogues, this discussion was preceded by a presentation by the NWMO, while in most of the Public Discussion Group sessions the facilitator provided this orientation. Both processes built in a question and answer period before the discussion.

Figure 4.1: Proposed Site Selection Process (from the NWMO presentation to participants)



A more detailed description of each of the nine steps in the site selection process is provided in Appendix B.

Participants considered the following three questions:

- Is this nine-step siting process fair and appropriate? Why? Why not?
- Are there any critical elements and considerations missing or not adequately addressed?
- How might we strengthen each of the individual steps and/or the process as a whole to make it as fair and appropriate as possible?

Again, the views of Citizen Panelists and Public Discussion Group participants generally converged with similar themes emerging throughout the sessions. Overall, almost all participants agreed that the proposed nine-step process for selecting a site was fair and appropriate. Participants highlighted what was most important to them and sought further detail about the process.

Unless otherwise indicated, the points raised under each of the nine steps emerged from both the Citizens' Panel Dialogues and the Public Discussion Groups.

#### 4.1 Step 1: The NWMO initiates the siting process

Participants want to know more about what the "broad program of activities" would entail to create awareness about the site selection process. They feel that assertive use of various media would be critical to ensure that *all* Canadians would have opportunities to be made aware of this project (this idea is expanded upon in Chapter 5 on Cross-Cutting Themes).

Participants are unclear on *how* the NWMO would initiate the site selection process. They suggest that the NWMO could issue tenders with specific requirements so that communities would understand what is involved. They recommend the creation of a clear checklist to help communities determine their eligibility before expressing interest.

Many participants suggest that a first step would be for the NWMO to create a short list of communities with the best geographic, geologic and environmental qualities necessary for a suitable host site. This is seen to eliminate ineligible communities and alert eligible communities, which is considered an important first step in the site selection process.

Their suggestions for additions and revisions to this site selection step are:

- Participants sought clarity on what the "broad program" of "awareness-building" activities would consist of;
- Participants requested the dissemination of a short list of suitable locations, e.g. a map showing the suitable geographic areas of the country.

## 4.2 Step 2: For communities that would like to learn more, an initial screening is conducted

Participants agreed that an initial screening is an essential step in the site selection process. Some questions were raised about how the community would decide to request a screening, and who would make the request on behalf of the community. Participants wondered if *all* communities that expressed interest would be granted a screening, and who would pay for the screenings.

In regards to the screening criteria, participants feel that it would be very important for communities to understand the evaluation criteria for site selection. They view the existence of such criteria to be key for fairness and transparency.

Their suggestions for additions and revisions to this site selection step are:

- Specify how the community would decide to request a screening;
- Include a reference to how "broadly based community interest" will be evaluated;
- Participants noted that the reference "outlined on page 25" was out of place in the sixpage summary document and suggested removing the phrase.

## 4.3 Step 3: For interested communities, a preliminary assessment of potential suitability is conducted

Participants understand that the initial screening in step 2 would be a first round of evaluation to eliminate unsuitable communities before proceeding to the more in-depth feasibility study in step 3. Nonetheless, many of the same questions were again raised for this step, including how it would be determined whether a community was interested. Participants would like to see citizens involved at each step of the process to ensure that the interest of community members is secured before proceeding to the next step.

Questions were again raised about whether all interested communities would be evaluated, and if so, concurrently or in prioritized order. Participants are also curious about what would happen if no communities were interested, or none passed the pre-screening. Again, they expressed the desire that the initial screenings and preliminary assessments not be lengthy and costly steps.

Their suggestions for additions and revisions to this site selection step are:

- Specify how many communities could be considered for the feasibility study;
- State the amount of money that will be spent on this step and limit the number of communities assessed accordingly.

## 4.4 Step 4: For interested communities, potentially affected surrounding communities are engaged and detailed site evaluations are completed

Public participation in determining the extent of community interest, in demonstrating willingness and in decision-making at every step, is a significant recurring theme across the site

selection process. With reference to step 4, participants want a more precise explanation of what it means for citizens to be engaged in the study, how engagement would differ between citizens of the host community and the affected surrounding communities, and what level of involvement would continue throughout the site selection process.

Participants strongly support the study of health, safety, environmental, social, economic and cultural effects of the project at a regional level. They are firm about the importance of avoiding any short-term or long-term negative consequences for the host and surrounding communities.

Under this step, the NWMO selects suitable sites from communities that have expressed formal interest. Participants feel that it must be made public which communities are deemed to have suitable sites following an evaluation process, in order to uphold transparency and fairness. They also expressed concerns about the potential for the site evaluation process itself to be intrusive and environmentally destructive.

Their suggestions for additions and revisions to this site selection step are:

- Participants feel "region" is more inclusive than "surrounding communities";
- Participants requested further specificity on how "engaged" and "involved" will be defined;
- Elaborate on the involvement of residents of the region.

# 4.5 Step 5: Communities with confirmed suitable sites decide whether they are willing to accept the project and negotiate the terms and conditions of a formal agreement to host the facility with the NWMO

This step generated many questions from participants. Again the predominant theme arising is how would a community "decide whether they are willing to accept the project." What would be the decision-making methodology?

Participants feel that consent should be elicited from a predetermined percentage of the population that would demonstrate that support was broad- based.

Again, participants wondered what would happen if no interested communities were willing to host the site. They want to know if the federal government would be prepared to mandate where the site should be, and if it would be prepared to have the site built on crown land.

Their suggestion for a revision to this site selection step is:

Elaborate on this step. It is the only step in the "The Proposed Process for Selecting a Site –
 At a Glance" document that does not have further explanation beyond the title.

## 4.6 Step 6: The NWMO and the community with the preferred site enter into a formal agreement to host the project

In the possible scenario of multiple eligible communities coming forth that were equally suitable and willing, participants wondered how the NWMO would select the host community and site. They want the process plan to include information on what criteria would be used, and a more clearly articulated process of elimination in the site selection process.

Some participants are unclear about the process to be used in the "potential suitability screening" (step 2), the process for undertaking feasibility studies (step 3), and how sites would be evaluated (step 4). This seemed to lead to some confusion as to how, under step 6, the NWMO would arrive at their preferred site and be ready to ratify a formal agreement with one community.

Some participants are uncomfortable with the idea that the NWMO alone would select the preferred host site. They feel that this should be done in collaboration with the community. They also raised questions on the legal process of ratifying an agreement, including who would represent the community. For example, they asked about what legal authority a provincial or territorial government would have vis-à-vis the ratified agreement under a scenario in which a city council was deemed to be the decision-making body.

Their suggestion for a revision to this site selection step is:

 Under circumstances in which multiple communities were evaluated to be desirable host sites, the NWMO should select the community that has demonstrated the greatest degree of broad-based citizen support for the project.

## 4.7 Step 7: A centre of expertise is established, and construction and operation of an underground demonstration facility proceeds

In general, most participants approve of the plan to have a demonstration facility to inform the general public, allowing them to observe and learn firsthand about the project. On the other hand, some participants are concerned about whether this step is necessary and warrants the expense of building such a demonstration facility and centre of expertise.

While participants are most concerned with upholding transparency, a few questioned whether having a demonstration facility might jeopardize security by advertising the storage operations of hazardous and potentially dangerous materials.

Some participants do not understand why the centre of expertise would be built before the storage site itself. They see merit in having regulatory reviews, with respect to the demonstration site and centre of expertise, occur earlier in the process. Moreover, they expressed their belief that the public should be informed of all regulatory requirements and how each requirement is being met.

Their suggestion for a revision to this site selection step is:

Clarify the purpose of the centre of expertise and the demonstration facility.

## 4.8 Step 8: Regulatory authorities review the safety of the project and, if all requirements are satisfied, give their approvals to proceed

Participants feel that regulatory review is one of the most important steps in terms of ensuring safety – a top priority. As noted, they suggest that regulatory authorities should be involved earlier in the process, in step 4, in particular for environmental and transportation assessments.

The regulatory review process, sparked many questions. For example, participants inquired about which regulatory authorities would be involved, and how conflicts of interest would be avoided. They wondered what would happen if one of the "series of consecutive licenses" was not to be granted. This seemed to influence their desire to place regulatory approvals earlier in the process so as to avoid a major roadblock further down the road.

Considering transportation, participants discussed different possible methods of transportation, and who would bear responsibility for the costs of ensuring the safety of the various transport routes, e.g. re-invest in railway infrastructure, road maintenance, etc. They perceive this to be an important safety concern, given the dangers of transporting hazardous waste on highways that are in states of disrepair, for example.

Many participants expressed a desire for the public to have a role in regulatory review through a formal consultation process, whereby concerned groups have a formal input channel. They also expect the regulatory authorities to report back to the general public and especially to the designated host community on the regulatory review process.

#### 4.9 Step 9: Construction and operation of the facility

Participants are curious about the process for selecting the contractor to build the site and the process for selecting the organization that would operate the site. Some cautioned against allowing the facility to be privatized, and others voiced concerns about ensuring that construction costs are contained within the allotted budget.

Many participants feel that this final site selection process step should include details on how the site will be continuously monitored during operation. They suggest that there should be a third-party overseer, in addition to multiple government ministries, to ensure optimal safety and transparency.

Participants inquired about the proposed timeline for the site selection process, and the specific time allotted to each step. At this step, participants wondered how long the storage site would take to construct, how long it would take to be filled to capacity and how long it would be open and operational. This line of inquiry raised further questions about what would happen if the site were ever to close, and what the consequences would be for the community and the environment.

Their suggestions for additions or revisions to this site selection step are:

- Participants want to know how the NWMO will "continue to work in partnership" with the host community. They also want to know more about what involvement the host community would have and what kind of a working relationship they would have with the NWMO;
- Here participants want clarity on what "entire lifetime of the project" refers to. Does this mean throughout the site selection process and construction, or does it include the postconstruction, operational phase.

## 5. Cross-Cutting Themes

Finally, participants explored two cross-cutting themes (identified in advance by the Nuclear Waste Management Organization on the basis of earlier citizen engagement work) that underpin the site selection process, and which – beyond safety and security – are at the very core of citizens' concerns about the long-term management of Canada's used nuclear fuel: "informed and willing host communities" and "community well-being."

#### 5.1 Informed and Willing Host Communities

The NWMO discussion document states that the site should be hosted by an "informed and willing" community. These concepts are embedded in multiple steps of the site selection process. Taking this concept to heart, participants provided suggestions for strengthening how these concepts are defined, measured and communicated. Citizens' Panel Dialogue participants, who had more time to delve into this topic, and Public Discussion Group participants using an open discussion format, explored the following two questions:

- How well does the siting process provide for the kinds of information, tools and resources that are needed to support the participation of communities that may be interested?
- What might a community be expected to do to demonstrate 'in a compelling way' that it is willing to become a host site?

#### 5.1.1 Informed and Educated

As noted in Chapter 3, participants feel strongly that the public must be not only informed, but also educated about the project, the site selection process and the potential benefits and risks of nuclear waste transportation and storage.

In their view, the process of informing the public needs to be thorough, well documented, and accompanied with concrete measures to prove that everyone has been given the opportunity to become informed.

Participants have many suggestions on how to reach and educate the general public through an information campaign, as outlined in the table below:

#### Media and methods of dissemination

- Broad-based, direct distribution through mail and email in multiple languages
- Websites, Facebook and Twitter
- Local media, public announcements
- Radio ads
- News channels on TV, television commercials in different languages, talk shows
- Newspaper ads
- Literature available, brochures in multiple languages, pamphlets, handouts, flyers, newsletters, posters, billboards
- Provide a DVD with diagrams of the project
- Produce a documentary showing lots of support from different areas of the community

#### **In-person communication**

- Open forums
- Word of mouth
- Go door to door
- Community workshops
- General information sessions to public and media
- Information kiosks, models of the site
- Town hall meetings
- Community conversations: coffee and sandwiches, BBQs
- Local clubs
- Church groups
- Speakers' bureau

- Have someone come to speak to ladies luncheon
- Kitchen table conversations
- Through schools have kids talk to their parents, secondary and post-secondary schools
- Public libraries, particularly in small towns
- Send consultants into community
- Our local experts to present plan/proposal
- Presentation to city/town council
- Contact all mayors to inform them
- Contact all levels of government
- (Potential) host community could have a town hall meeting that is also televised so everyone can watch it

#### Other strategic ideas

- Set up a team of experts to give information to people with layman terms, not technical jargon
- Materials to make it fun
- Use all media, e.g. online and a brochure would reach different people. Not everyone would go online or would read a brochure
- Forums in languages that will relate to all persons Cree, French, Ukrainian, etc.
- Greater involvement of media to inform public of process and what is going on
- Making information available over an extended period of time, including prime time
- Make everyone familiar with the Nuclear Fuel Waste Act
- Target all age groups: youth, adults, seniors
- The NWMO must work with people in the community
- Look to the community's natural leaders, e.g. priests, unions
- Use surveys to assess level of knowledge and understanding of the issues
- Concise, precise, plain language documentation to demystify the process and nuclear energy/waste
- Engage well-known and respected spokespersons or champions
- Leverage programs and resources already in place to reach people. Use the channels of communication people know and trust
- Frame messaging so that it resonates with people's concerns and interests, e.g. video games are an effective way to get a message out to youth

#### 5.1.2 Expert Input and Public Participation

As seen in Chapter 3 under 'Shared Decision Making,' providing resources to communities to hire an expert as a neutral source of information for citizens emerged as a popular idea among participants. One participant advocated having a team of unbiased experts to explain the positive and negative aspects of the project to citizens.

Ensuring that everyone is well informed of the details of the project, and its risks and benefits, is an essential prerequisite to a community expressing interest and willingness to host the storage site. Participants feel that citizens should be given the opportunity to "both receive and contribute information." This highlights the importance of both awareness-building, as well as public participation.

Participants expressed a strong view that it is critical that everyone's voice be heard. In particular, they want those with concerns or opposing views to have equal chance to have their concerns heard.

One popular idea is the creation of a type of "citizens' panel" to guide public participation in the process. Other participants expressed a similar approach using this description: "mobilizing citizen participation through working groups and committees."

#### 5.1.3 Demonstrating Willingness: Voting

As seen in Chapter 3, participants have many questions about how to define and demonstrate willingness to accept the project. The idea of holding a referendum on the matter resonates with many participants. They are keen on having citizens play a role in the decision-making process. Many participants expressed the view that the decision to accept the project should not be confined to government representatives alone.

The idea of a referendum is strongly supported by participants. However, their opinions vary on what would constitute an acceptable percentage of favourable votes necessary to demonstrate 'willingness.' Most participants feel that in order for a referendum to yield a positive result, and therefore acceptance of the project, there would need to be more than a majority vote in favour. Many participants like the idea of a super majority of 2/3. Others argue for a near unanimous vote, whereas others feel that that is unreasonable and unachievable. Furthermore, participants throughout the sessions underlined the importance of continued involvement in decision making beyond an initial vote to demonstrate willingness to host the site.

Participants identified another criterion for determining success in a referendum: voter turnout. Many participants feel that a referendum would be invalidated if only a minority of eligible voters turned out to cast their ballot. Other considerations related to the use of a referendum are: who would be eligible to vote; what would be the age requirement; and would the vote be only for citizens of the municipality or province-wide?

#### 5.2 Community Well-Being

Beyond ensuring the safety and security of the site for Canada's deep geological repository, another key objective for the site selection process is to ensure that the community which ultimately hosts the site will reap benefits from its decision. To that end, the NWMO has proposed five criteria (beyond safety) for assessing proposed sites, with a focus on fostering community well-being. These are:

- Potential social, economic and cultural effects, including factors identified by Aboriginal traditional knowledge
- Potential for the project's enhancement of the community's and the region's longterm sustainability, including factors identified by Aboriginal traditional knowledge
- Physical and social infrastructure in place and/or potential to be put in place to implement the project
- 4. Potential to avoid ecologically sensitive areas and locally significant features
- Potential to avoid or minimize effects of the transportation of used nuclear fuel from existing storage facilities to the repository site

#### Participants considered:

How well do the criteria to assess community well-being capture the key factors that should be considered in deciding whether the project would support or damage a community's well-being?

The discussions, in both the Citizens' Panel Dialogues and the Public Discussion Groups, can be synthesized by what is most important to them: mitigating risks and ensuring benefits for all potentially affected citizens and communities.

### 5.2.1 Mitigate Risks

It is of utmost importance to participants that the nuclear waste storage site does not negatively affect the host community or surrounding communities. Of particular concern to participants throughout the sessions are safety, health risks, environmental effects and risks associated with transportation of nuclear waste.

Participants expressed their desire for transparency with respect to the known facts about potential risks, including worst case scenarios, the strategies to avoid them, and what emergency plans would be in place to deal with an adverse incident. They are concerned that there could be unknown long-term effects on health and the environment. In addition, they identified the prospect of an economic downturn once the construction boom ended. One participant wanted to know what would happen to the community if the storage site were to be shut down, citing mining towns that have died out once their mines closed. Another was concerned about the risk of negatively impacting relations between Aboriginal and non-Aboriginal peoples.

Most important for participants is the sentiment that quality of life <u>must not</u> be compromised for economic gain. They want to see a "humanist approach" to evaluating the risks, benefits and trade-offs of hosting the storage site.

Some common suggestions identified by participants to mitigate risks include:

- Participants hope the storage site will be built close to where most nuclear energy is produced in the country in order to reduce the distance of nuclear waste transportation;
- They also suggest avoiding building the site near ecologically sensitive areas;
- They want to see continuous monitoring and documenting: of the surrounding environment (e.g. water quality); of population health; and of general community wellbeing (e.g. property value, infrastructural decay, crime rates, job loss or other businesses or industries leaving, etc.)

#### 5.2.2 Benefits

As outlined in Table 5.2, participants felt strongly that becoming a host community should advance community socio-economic well-being and infrastructural development. They generated many ideas (summarized below) about how the project and the NWMO could achieve this goal.

Table 5.2 – Promoting Community Well-Being: Participant Ideas

#### Community and culture

- Have strong on-going relationships with the community, and open information/communication, allowing the community to have a sense of ownership over the project
- Volunteerism, active social life outside of the storage facility
- The storage site needs to become part of the community's fabric
- Part of the community not just a big black box out there with a true symbiotic relationship between the facility and the community
- Enhance the community/region's long-term sustainability
- "NWMO town" like mining towns were, cohesive community
- Want to avoid creating another Fort McMurray (socially)
- How do we address potential conflicts/competition arising between communities who reap the benefits of the project and those neighbouring ones who don't

#### Build physical and social infrastructure

- Make a commitment to education and provide scholarships
- Health benefits
- In order to attract people to live in the vicinity and work at the facility, you need to offer good healthcare and schools, etc.
- This town will need schools, hospitals and businesses.
- Build health clinics and hospitals
- Provide guarantees: start up costs for local businesses
- Availability of physical and social infrastructure
- Better roads
- The storage site should give back to the community, e.g. recreation centres
- Need support/assistance/resources to build up housing
- You could make more of the site by making a research/university/education site there
- Make it pretty; make a vision for this community
- Make a park

#### Employment opportunities, capacity-building, tax and business incentives

- Involve the current citizens to be employees at the site
- Importance of building local jobs and capacity
- Guarantee that it will employ a certain number of local people
- Train people, local capacity, job fairs
- Jobs created need to be also for the locals not just bringing experts from outside the community
- Create jobs and give first opportunity to those who already live there, and even educate them to fill the jobs
- Make sure you build local skills and capacity for people to reap the full benefits
- Need to help people learn what this means for them, prepare them to benefit from the opportunities: e.g. go into schools and job fairs, offer training programs in local colleges, offer scholarships and internship
- Capacity-building on many levels
- A tax-reduced area near the site
- Community should get a tax break
- The community/town should charge the nuclear producers a fee in order to store the waste there
- Diverse business community: Marketing plan to make the community bigger and better

# 6. Conclusion

The Citizens' Panel Dialogues provided an opportunity for panelists to continue to contribute to the solution for the long-term storage of used nuclear fuel in Canada, whereas the Public Discussion Groups engaged a broader cross-section of citizens who came to the discussion without prior experience with the Nuclear Waste Management Organization. Each group's experience and degree of familiarity with the issue varied, but nonetheless key common themes and shared values emerged from their discussions, as well as similar expectations, concerns and suggestions.

Overall, participants agreed that the guiding principles for selecting a site, and the site selection process itself, are both fair and appropriate. This report synthesizes their ideas on how these might be refined and strengthened, and their suggestions on how to clarify certain aspects of the site selection process reference documents.

Throughout these sessions, participants shared their time, energy and perspectives to assist the NWMO in developing a site selection process that reflects the expectations, concerns and values of Canadians – their contribution has been invaluable and is greatly appreciated.

"The risks and benefits of being a host community, and of nuclear energy, must be clearly communicated. We need to talk about this more it's a big issue!" "I feel more comfortable now that [the] NWMO is serious about selecting a site in a proper and more human way; that the interest and safety of the people is just as important as selecting and building a site."

"I think you have taken the right approach by involving average people. You show respect for our opinions by using most of our suggestions in developing your literature."

# **Appendices**

- Appendix A: Guiding Principles
- Appendix B: Proposed Site Selection Process
- Appendix C: Agenda Citizens' Panel Dialogues
- Appendix D: Agenda Public Discussion Groups
- Appendix E: Event Venues and Dates
- Appendix F: Profile of Participants
- Appendix G: Evaluations Citizens' Panel Dialogues

# **Appendix A: Guiding Principles**

Moving Forward Together: Designing the Process for Selecting a Site



# **NWMO Guiding Principles for the Process of Selecting a Site**

1 Focus on safety	Safety, security and protection of people and the environment are central to the siting process. Any site selected will need to address scientific and technical site evaluation factors that will acknowledge precaution and ensure protection of present and future generations and the environment for a very long period of time. All applicable regulatory requirements will need to be met and, if possible, exceeded.
2 Informed and willing "host community"	The host community, the local geographic community in which the facility is to be located, must be informed and willing to accept the project. The local community must have an understanding of the project, and how it is likely to be impacted by it. As well, the local community must demonstrate that it is willing to accept the project.
3 Focus on the nuclear provinces	As identified by Canadians involved in the NWMO study, fairness is best achieved with the site selection process focused within the provinces directly involved in the nuclear fuel cycle: Ontario, New Brunswick, Québec and Saskatchewan. These provinces will be the focus of NWMO siting activities. Communities in other regions that identify themselves as interested in possibly hosting the facility will also be considered.
4 Right to withdraw	Communities that decide to engage in the process for selecting a site as potential hosts have the right to end their involvement in the siting process at any point up to and until the final agreement is signed, just prior to the project being submitted for regulatory approvals.
5 Aboriginal rights, treaties and land claims	The siting process will respect Aboriginal rights and treaties and will take into account that there may be unresolved claims between Aboriginal peoples and the Crown.

6 Shared decision-making	The site selection decision will be made in stages and will entail a series of decisions about whether and how to proceed. Each potential host community, and later the host community, would be involved in decision-making throughout the process. For example, criteria and procedures to assess the effects of the project on the community would be collaboratively developed and assessed with the NWMO.
7 Inclusiveness	In addition, the NWMO will respond to, and address where appropriate, the views of others that are most likely to be affected by implementation, including the transportation of used nuclear fuel that would be required. Full opportunity will be provided to have their questions and concerns heard and taken into account in decision-making on a preferred site. The NWMO will provide the forms of assistance they require to formulate and communicate their questions and concerns. The views of provincial governments that could be affected will also be addressed.
8 Informing the process	The selection of a site will be informed by the best available knowledge—including science, social science, Aboriginal Traditional Knowledge, and ethics—relevant to making a decision and/or formulating a recommendation throughout the process. Consistent with the NWMO's commitment to transparency in its work, the information that is collected and used to assess the potential suitability of a site will be the subject of third-party review at each step and will be published on the NWMO website for public review and scrutiny throughout the process.
9 Community well-being	An important objective of project implementation will be to foster the long-term well-being, or quality of life, of the community in which it is implemented. The site selection process is designed to assist the potential host community to think carefully and thoroughly about the potential benefits and risks to their community associated with this project in assessing their interest and, ultimately, willingness.
10 Regulatory review	Once a willing host community has been identified, and a preferred site has been selected and its safety assessed through detailed study, construction of the facility will not proceed until it has been further demonstrated that the safety, health and environmental protection standards set by the regulatory authorities can be met and enforced. The project and site will be independently reviewed in a stepwise fashion through a series of regulatory approval processes as outlined in the Canadian Environmental Assessment Act and the Nuclear Safety and Control Act and their regulations. These regulatory processes involve detailed independent review as well as the conduct of public hearings.

# **Appendix B: Proposed Site Selection Process**

# The Proposed Process for Selecting a Site – At a Glance

Step 1	The NWMO initiates the siting process. Through a broad program of activities, the NWMO will provide information, answer questions, and build awareness among Canadians and communities about the project and the siting process. Awareness-building activities will continue throughout the siting process.
Step 2	For communities that would like to learn more, an initial screening is conducted. At the request of the community, the NWMO will evaluate the potential suitability of the community against a list of initial screening criteria.
Step 3	For interested communities, a preliminary assessment of potential suitability is conducted. At the request of the community, a feasibility study will be conducted to determine whether a site in the community has the potential to meet the detailed requirements for the project. The NWMO will conduct the feasibility study in collaboration with the community.
Step 4	For interested communities, potentially affected surrounding communities are engaged and detailed site evaluations are completed. In this step, the NWMO will work with interested communities to engage potentially affected surrounding communities in a study of health, safety, environment, social, economic and cultural effects of the project at a regional level, including effects that may be associated with transportation. Involvement will continue throughout the siting process. The NWMO will also select one or more suitable sites from communities expressing formal interest, and conduct detailed site evaluations in collaboration with the community.
Step 5	Communities with confirmed suitable sites decide whether they are willing to accept the project and negotiate the terms and conditions of a formal agreement to host the facility with the NWMO.
Step 6	The NWMO and the community with the preferred site enter into a formal agreement to host the project. The NWMO selects preferred site, and the NWMO and community ratify formal agreement.
Step 7	A centre of expertise is established, and construction and operation of an underground demonstration facility proceeds. The NWMO, in partnership with the community, will establish a centre of expertise involving the construction of an underground demonstration facility and surface facilities to demonstrate technologies that will be used to implement the project. The regulatory requirements for this step will be discussed with regulatory agencies.
Step 8	Regulatory authorities review the safety of the project and, if all requirements are satisfied, give their approvals to proceed. The regulatory review and approval process will involve an environmental assessment and a series of consecutive licensing phases related to site preparation and construction, and the operation of facilities associated with the project. Various aspects of transportation of used nuclear fuel will also need to be approved by regulatory authorities.
Step 9	Construction and operation of the facility. The NWMO implements the project, starting with site preparation and construction of the deep geological repository and associated surface facilities. Operation will begin after an operating licence is obtained. The NWMO will continue to work in partnership with the host community in order to ensure the commitments to the community are addressed throughout the entire lifetime of the project.

Moving Forward Together: Designing the Process for Selecting a Site



# Appendix C: Agenda – Citizens' Panel Dialogues

# Agenda – September 26, 2009, Toronto, ON

Time	Item
7:30 – 8:30	Registration and Breakfast
8:30 – 9:00	Opening: Welcome, Introductions, Ice-Breaker, Review of Agenda NWMO, Ascentum (Facilitators)
9:00 – 10:00	Learning Session: Orientation/Recap of Past Work (Navigator- Jamie Watt) Overview of Site Selection Process, (NWMO –Jo-Ann Facella), Review of Regulatory Role (CNSC) Q&A
10:00 – 10:15	BREAK
10:15 – 11:15	<ul><li>Guiding Principles for Siting Selection Process</li><li>Small Group Work at Tables followed by Plenary Discussion of Results</li></ul>
11:15 – 12:15	<ul> <li>Learning Session: Unpacking the Site Selection Process (Q&amp;A) – NWMO</li> <li>Keypad Voting on Initial Assessment – Ascentum</li> </ul>
12:15 – 1:00	LUNCH
1:00 – 3:00	Site Selection Process: Diving Deeper (Small Group Work)  • Tables – Site Selection Process, and  • Cross Cutting Issues Work Stations: (A) Community Capacity/Partnerships/ Willing Communities; (B) Community Well-Being
3:00 – 3:15	BREAK
3:15 – 4:15	Plenary: Diving Deeper – Site Selection Process  Recap of Small Group Work on Site Selection Process with Keypad Voting Recap of Small Group Work at Issue Stations and Dot-mocracy
4:15 – 4:45	Armchair Session with NWMO Staff: Open Q&A Discussion
4:45 – 5:00	Close: Next Steps, Reporting Back, Evaluation

# Appendix D: Agenda – Public Discussion Groups

#### Agenda and Process Design

- A. Lobby work [10-15 minutes preceding group discussion]
- 1. Welcome
  - a. Logistics
  - b. Explanation of session, our objectives
  - c. Parking lot
  - d. Introduction of participants to each other
- 2. Session #1 Presentation by NWMO Representatives
  - a. Presentation by NWMO representatives (social and technical)
  - b. Q & A
- 3. Session #2 Guiding Principles
  - a. Hand-out containing guiding principles
    - i. Re-convene as larger group, Discuss
    - ii. Review 10 guiding principles (on hand-out) as a group
- 4. Session #3 9 steps (Navigator & NWMO) [30 minutes]
  - a. NWMO presentation of 9 step process [10-12 minutes]
    - i. How confident are you the siting process as a whole is **fair**?
    - ii. How confident are you the siting process as a whole is **appropriate**?
    - iii. Questions/Discussion
  - b. Plenary discussion
- 5. Session #4 Cross-cutting themes
  - i. Informed and willing communities
  - ii. Community well-being
  - iii. Discussion

# **Appendix E: Event Venues and Dates**

#### Citizens' Panel Dialogues

September 26, 2009 Toronto, ON

Toronto Airport Marriott, 901 Dixon

Road

October 3, 2009 Ottawa, ON

Arc Hotel, 140 Slater Street

#### **Public Discussion Groups**

October 7, 2009 Saskatoon, SK

Saskatoon Inn, 2002 Airport Drive

October 8, 2009 Sault Ste. Marie, ON

Quality Inn, 180 Bay Street

October 15, 2009 Toronto, ON

Research House, 1867 Yonge Street

October 17, 2009 Scarborough/Pickering, ON

Delta Toronto East, 2035 Kennedy Road

October 19, 2009 Saint John, NB

Hilton, 1 Market Square

# **Appendix F: Profile of Participants**

### Citizens' Panel Dialogues

- English-language dialogue in Toronto:
  - A total of 63 citizen panelists participated from the Greater Toronto Area (32%),
     the rest of Ontario (28%), New Brunswick (14%) and Saskatchewan (26%);
  - O The age of participants varied with 2 under 25, 13 between 26-35, 13 between 46-55, 16 between 56-65, and 7 over 65;
  - o The gender break down was 49% male and 51% female.
- French-language dialogue in Ottawa:
  - A total of 6 citizen panelists from Quebec participated;
  - o The gender break down was 50% male and 50% female.

#### **Public Discussion Groups**

- Saskatoon session gender profile of 15 participants: 40% male and 60% female.
- Sault Ste. Marie session gender profile of 16 participants: 50% male and 50% female.
- Toronto session gender profile of 13 participants: 30% male and 70% female.
- Scarborough/Pickering session gender profile of 14 participants: 57% male and 43% female.
- Saint John session gender profile of 14 participants: 50% male and 50% female.

Overall the five groups, there were 72 participants, totalling 46% male and 54% female.

# Appendix G: Evaluations – Citizens' Panel Dialogues

# NWMO Citizens' Panel Dialogue Evaluation Summary

#### September 26, 2009 Marriott Airport Hotel, Toronto, Ontario

Results are reported in percentages.

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	N=
1. Meeting Format							
The facilitators were effective (promoted reflection and constructive, respectful dialogue).	56.6	43.4					53
The meeting was the right length.	18.8	56.6	3.8	20.7			53
The assistance I received regarding travel and accommodation was satisfactory.	63.5	28.9	3.8			3.8	52
The meeting facilities were appropriate.	37.7	50.9	5.7	5.7			53

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N=
2. Dialogue Content						
The dialogue agenda was relevant (focused on the right topics).	42.3	55.7	1.9			52
There was enough time for informed discussion and deliberation (to assess, think through, and choose) on the proposed process for selecting a site.	28.9	50	5.8	11.5	3.8	52
In general, the presentations were useful (use space below if you wish to give feedback on individual presenters).	36	60	4			50
The armchair session with NWMO was useful.	38	52	6	4		50
The discussion paper was helpful in preparing for the dialogue.	42	46	8	4		50

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N=
3. Your Experience						
I felt I could express my views freely.	55.8	42.3	2			52
There was a good mix of participants in the room.	50.9	43.2	1.9	3.9		51
I value this opportunity to contribute to designing the process for selecting a site.	78.4	19.6		1.9		51
I enjoyed participating in this meeting.	76	24				50

### **Comments: Meeting Format**

- Facilitators were awesome!
  - Some parts were rushed (small group work) and some seemed too long (afternoon sessions)
  - o Hotel and facilities was top notch!
- Nope everything seemed to be in order.
- Well organized!
  - Appreciate cash payment
  - More aboriginal and Quebec people in room WITH US
  - A social function in the evening would be nice as we've become friends over the vears.
- Meeting was very well organized. It flowed smoothly and time was followed closely.
- Well put together and very informative. Also appreciated the opportunity to participate I would rather a hotel that doesn't change 14\$ a day for internet (double tree is free)
- This was well put together and I feel the committee put a lot of work in this in both the presentation and all the information put forth
- Everything was well organized. Job well done. To all who were involved in organizing the event GOOD JOB!
- Just a long day, but all of us were given notice of the timeline.
- Could have been longer for some felt rushed.
- This place did not even have a bottle of water in the room especially when you check in after a long day.
- Not long enough
  - o Room shape obstructed view of others + screen

- Hotel fine fruit rather than cake/cookies at break.
- I felt the meeting was too long ½ day session would have been more appropriate, the meeting room was acceptable but could have been a bit wider for better viewing.
- Some sugar for drunks or sweets would be appreciated.
- More time would have been better
- L shaped room prevented clear sight lines!
- Larger room, square room, better visual layout...too cramped.
- We should have had breakout rooms as it was difficult to hear group members.
- It was hard to hear in the groups while working.
- Meeting facility could have been better allowed for group work it became really loud.
- A larger room would be better for appropriate meetings.
- The meeting room could have been more efficiently laid out.
- Poor choice of room. Big wall blocked view for most of the day, which meant we were listening to "invisible" people.
- Meeting could have been longer, not in one day. No more 'L' Shaped rooms.
- The travel agent took until Sept 24<sup>th</sup> to give me travel info and booked my flight out of the wrong city.
- One of the assignments I found to be redundant
- Full view of screen was blocked. Lost its effectiveness
  - Dragged on a bit too long.

## **Comments: Dialogue Content**

- Glad to see the day was timed and well planned out.
- Armchair session was excellent. The real questions and opinions were expressed by the participants See comments on #1 to time available
- Good comments.
- Excellent conference. Well presented and very easily understood. Better understood now. Good work! I feel more confident about this process.
- My one major criticism is the reluctance of NWMO to acknowledge the possibility for disaster. It can happen through no fault of the NWMO, so it would actually engender confidence to admit it, rather than waffle, or appear to.
  - An excellent array of presentations and "hands on" activities.
- Good job No comment.
- The time line was very well maintained however I found we were unable to get through our roundtable discussions/activities because people have such varied opinions a 3 day session may suit to allow longer discussion times.

- Felt listened to but don't trust that we aren't just a formality in the long run.
- Lots of paperwork to go through, but not given enough time to study.
- I did not receive the discussion paper.
- Less paper put several PowerPoint slides per sheet
- Have recycling containers for paper and bottles
- Less paper waste. Could computer not have been used? Repetitive could not see reps sitting in the armchairs during questions.
- A little too much paper we are trying to become a paperless world.
- Not able to read so much before session.
  - o Volunteer facilitator not appropriate for this table discussion not skilled.
  - Surprised (happily) emphasis on First Nations.
- I would have liked the tables more spread out so that you can hear yourself speak or hear what is being discussed in groups.
- I wish that there has been time for each of us to say who we were!
- Shorten discussion group by an hour.
  - o Food was good.
- Somewhat rushed.
- The mediator should have cut off the lawyer much sooner.
- I prefer our smaller panel sessions.

## **Comments: Your Experience**

- Thanks! It was very well dome! Very professional.
- Glad to see the agenda was kept on track
- Very enjoyable and interesting.
- The group was a great experience and I enjoyed meeting people from other areas and have learned much more about what not only my concerns but theirs as well.
- Well done. I am over 70 years of age and the learning experience has been fantastic.
- Great folks great topic!
- I consider myself very fortunate to be part of these discussions.
- Very meeting get this issue closer to it happening, great.
- Thank you for the excellent opportunity to participate.
- I would like to continue to be involved in this process.
- It was a great pleasure to be led by so many, nice, bright was well-organized people.
- Thanks!
- Well facilitated!
- Thank you very much for the opportunity to participate in such a significant topic and socially important issue.
- Great job Navigator!

- Sean (sp?) was very helpful to have! Overall all very well done!
- Thank you for allowing me to be a part of the group. I have enjoyed the ongoing series.
   Great job!
- It was a great experience to meet with everyone.
- Thank you very much for including me.
- I regret the absence of aboriginal voices today though it was not the fault or intention of the NWMO.
- Needed to have aboriginal representation today. Since Saskatoon is a possible site more
  information was needed to focus on where and how the site would be established. Not
  everyone got a leather binder with literature in the mail (including me!)
- Would have been nice to see aboriginals in our meeting.
- It would have been nice to have aboriginal representation I felt the panel discussion was too rushed and long for one day, would have been wonderful to be split into a two day discussion panel.
- No Natives in the group were I live there is a strong aboriginal Base but never seen any at any of our panels.
- I would like more information about alternatives to short timeline facility construction. Implications to larger message to nuclear industry NOT endorsement to expand.
- Better Breakfast
- Facilitators/speakers should always move to corner where all can see them.
- Don't invite lawyer next time.
- In breakout the moderator injected her ideas too often.

# Before you go, please share any additional comments or suggestions you may have regarding the proposed process for selecting a site for long-term used nuclear fuel management.

- Respect then community the site is on and stay true to your word.
- You are on the right track.
- I think the process will take far too long not fair to the communities like Pickering who were originally promised that the waste would be store elsewhere. For it to take 10+ years is unreasonable.
- I just want to emphasize that everybody in the community should be included for decision making, and not only interested people in the community.
- Wait a few more years →especially until the U.S.A has a plan
- Was this worth the \$ to listen to such a small group?
- Safety is truly vital therefore also areas discussed are necessary to follow
  - Maybe switch some priorities such as general screening should be done prior to advertising.
- I feel more comfortable now that NWMO is serious about selecting a site in a proper and more human way that the interest and safety of the people is of just a important as selecting + building a site.

- o I Thank you for allowing me to be involved and hope that I have put something of worthy towards the future decision not only for the communities involved but also for children's future.
- The time line seems to be appropriate to the scope of the job if not longer, after all technology could change drastically in 30-60yrs
- Keep Talking and walking the talk!
- Please keep me informed on the NWMO.
- Good luck!
- It is important for everyone to know that Canada is being cautious and thorough in selecting a site. We did find that out. So everyone in Canada needs to know that. Yea for Canada! We are considering the people who will be part of the community being chosen to best the chosen site.
- "moving forward together" should be a reprinted to reflect our participation! (it has been 2 years)
- I am very interested in receiving material from this session.
- Maybe the concept of community is way too emphasized, since the selected land could finally end up without anybody in it.
- I really like Jaime's idea of also supporting any "con" arguments in terms of financial supports this would support an impartial stance.
- I feel that it will be a long hard uphill battle to get a site. There needs to be education to inform public on safe nuclear storage.
- I feel very strongly about that early education is imperative this will become a future in
  the lives of our youth the earlier they understand it is better. I have enjoyed being part
  of these panel discussions very much I think you have taking the right approach by
  involving average people and you show your respect for our opinions but using most of
  out suggestions in developing your literature.
  - P.S The video this morning was the clearest and most understandable type of info yet – Excellent!

# NWMO Citizens' Panel Dialogue Evaluation Summary

## October 3<sup>rd</sup>, 2009 The Arc Hotel, Ottawa, Ontario

#### Results are presented as percentages.

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A	N=
1. Meeting Format							
The facilitators were effective (promoted reflection and constructive, respectful dialogue).	100						6
The meeting was the right length.	66.6	33.3					6
The assistance I received regarding travel and accommodation was satisfactory.	66.6	33.3					6
The meeting facilities were appropriate.	83.3	16.6					6

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N=
2. Dialogue Content						
The dialogue agenda was relevant (focused on the right topics).	83.3	16.6				6
There was enough time for informed discussion and deliberation (to assess, think through, and choose) on the proposed process for selecting a site.	66.6	16.6	16.6			6
In general, the presentations were useful (use space below if you wish to give feedback on individual presenters).	83.3		16.6			6
The armchair session with NWMO was useful.	66.6	33.3				6
The discussion paper was helpful in preparing for the dialogue.	50	50				6

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N=
3. Your Experience						
I felt I could express my views freely.	66.6	33.3				6
There was a good mix of participants in the room.	16.6	66.6			16.6	6
I value this opportunity to contribute to designing the process for selecting a site.	100					6
I enjoyed participating in this meeting.	100					6

# **Comments: Meeting Format**

- Très bonne animateur (trice)
- Les animations antérieures n'ont pas toujours été aussi bien animées, Bravo! J'aurais été heureux de recevoir al la réception, a l'arrivée, un mot SGDN annoncent la bienvenue et l'horaires de la journée d'après.

## **Comments: Dialogue Content**

• Bravo pour les intervenants propos pertinents, concis

# **Comments: Your Experience**

- Garder les mêmes intervenants
- Le groupe n'était pas assez nombreux mais très efficace!
- A la prochaine

Before you go, please share any additional comments or suggestions you may have regarding the proposed process for selecting a site for long-term used nuclear fuel management.

- J'ai tous dit
- Bravo. Vous êtes dans la bonne voie...
- Bonne chance