

nwmo

NUCLEAR WASTE
MANAGEMENT
ORGANIZATION

SOCIÉTÉ DE GESTION
DES DÉCHETS
NUCLÉAIRES

Implementing Adaptive Phased Management 2014 to 2018

**What We Heard – Comments
Received About *DRAFT PLAN***

MARCH 2014



Introduction

Every year since 2007, when the Government of Canada selected Adaptive Phased Management as the preferred approach for the safe long-term management of Canada's used nuclear fuel, the Nuclear Waste Management Organization (NWMO) has published a five-year strategic plan. Titled *Implementing Adaptive Phased Management*, the Plan describes how the NWMO will implement Adaptive Phased Management in the planning period. The NWMO invites all interested individuals and organizations to get involved in the long-term management of used nuclear fuel. To encourage public review and comment, the Plan is distributed by mail to 2,500 individuals and organizations that had previously expressed interest, and it is posted on the NWMO's website with an invitation to comment by making a submission, sending a letter, completing a web survey or filling out the comment form.

The purpose of this document is to report on the comments received from more than 55 individuals and organizations about the most recent Plan, *Implementing Adaptive Phased Management 2014 to 2018 – Draft for Public Review*, and on how the NWMO will take these comments into account in work going forward.

Five questions were identified for consideration during review of the Plan:

1. The draft Plan is built around seven strategic objectives. Are the objectives that we have identified appropriate? Have we missed key areas?
2. The draft Plan identifies work and activities we propose to undertake to accomplish these objectives. Have we set out appropriate activities?
3. The draft Plan is intended to anticipate the challenges ahead and plan for them. Over the next five years, what are the key challenges that will need to be addressed?
4. What will the NWMO need to put in place to respond to these challenges?
5. Other comments, questions or suggestions?

The NWMO greatly appreciates receiving comments and suggestions about its work programs and plans. We continue to welcome your thoughts as we move forward together to implement Canada's plan for the long-term management of used nuclear fuel.

Overview of Key Refinements

Comments received about the NWMO's strategic objectives were largely positive, and most people found the objectives and associated activities appropriate. Many suggested revisions were minor and accommodated in the final Plan, though a number of editorial comments also highlighted broader issues for special attention. The sum of this input provided helpful insight that guided revisions to the draft Plan and will inform future Plans.

The table that follows briefly summarizes the key

refinements made to the draft Plan in response to comments received and the ongoing work of the NWMO. A number of other minor edits, revisions and changes were also initiated by the NWMO over the course of the internal review process to bring greater clarity to the discussion of NWMO plans. Comments and suggestions that were received about challenges that need to be addressed going forward are also summarized and discussed later in this document.

Page Number (Refined Plan)	Comment Received and Refinements Made
Page 1	Update made to the text to reflect this document is no longer a draft for discussion, but has been revised in light of comments and represents the current plan of work.
Page 2	<p>It was suggested by different commenters that the Executive Summary should: (1) include a discussion of transportation plans; (2) clearly state that the project is for Canadian used fuel; (3) note the total number of communities remaining in the process; (4) include discussion of Aboriginal Traditional Knowledge given its importance to the NWMO program; and (5) focus on more specific milestones and objectives.</p> <p>The Executive Summary was substantially revised in response to comments including addition of discussion of key milestones.</p>
Page 4	<p>It was suggested that the discussion of 'Progress Since Last Implementation Plan' would benefit from (1) greater specificity and detail on past activities, and (2) a stronger acknowledgment of the contribution that insight from Aboriginal Traditional Knowledge can make to adapting plans.</p> <p>This section was revised to include additional detail on work completed over the previous year and to more strongly acknowledge the importance of seeking insight from Aboriginal Traditional Knowledge in the NWMO's work.</p>
Page 7	<p>It was suggested that the NWMO's work on the Ontario Power Generation's Deep Geologic Repository Project for Low and Intermediate Level Waste (L&ILW) be highlighted, including opportunity to learn from this project in planning the implementation of Adaptive Phased Management.</p> <p>Discussion was added to the end of the section to address the NWMO's involvement and work on the OPG project.</p>

Page Number (Refined Plan)	Comment Received and Refinements Made
Page 8	<p>Internal and external reviews identified opportunities for greater clarity on the regulator's role.</p> <p>Additional text was added to the first paragraph noting the Canadian Nuclear Safety Commission's (CNSC) mission. Additional paragraph was developed to clarify CNSC co-operation with other federal and provincial government departments and agencies.</p>
Page 9	<p>Questions were asked about the necessity of the temporary shallow storage option.</p> <p>A footnote was added to note the optional nature of shallow storage and that it is not currently included in implementation plans.</p>
Page 12	<p>There was a desire for further detail and clarity on the potential uses for land above the underground footprint of a repository.</p> <p>Revisions were made, and additional text was added to the 'Deep Geological Repository' section to enhance clarity and current understanding.</p>
Page 13	<p>It was suggested that youth be involved in collaboratively designing details of the Centre of Expertise.</p> <p>Refinements were made to note the importance of youth participation in this area, as well as in other areas related to the implementation of Adaptive Phased Management as noted throughout the plan.</p>
Page 14	<p>It was suggested that the strategic objective to 'Adapt Plans' recognize Aboriginal Traditional Knowledge as a source of insight.</p> <p>Refinements were made to the strategic objective to reflect the importance to the NWMO and the implementation of Adaptive Phased Management of the insight and guidance from the Aboriginal Traditional Knowledge shared with the NWMO.</p>
Pages 16 and 19	<p>The Advisory Council provided a statement to the NWMO to be incorporated in the Implementation Plan to communicate more clearly the sense of responsibility that guides the NWMO's work.</p> <p>This statement has been incorporated in the plan as a guiding statement, which will be further explored, as the NWMO continues to evolve the plan. In the revised plan, the statement was incorporated as follows: In building and sustaining relationships, the NWMO is mindful of its obligations throughout the conduct of its work. The NWMO has obligations to Canadians and Aboriginal peoples to manage used nuclear fuel over the long term. The NWMO has obligations to the local communities and Aboriginal peoples in potential host communities and regions to identify an appropriate site for a deep geological repository. The NWMO has obligations to communities and Aboriginal peoples along transportation routes and in transportation hubs to ensure that used nuclear fuel is transported responsibly and safely.</p>

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Page 18	<p>As the Implementation Plan evolves, commenters continue to reflect on NWMO activities in light of ensuring that communities involved in the site selection process have the resources they need to understand their interest, and act upon it in their decision-making. Important in this is access to information from third parties and not just the NWMO. It was suggested that the list of 2014 activities be reviewed to ensure it includes facilitating community access to the third-party experts who may be able to help communities explore their interest in hosting a deep geological repository.</p> <p>The NWMO continues to review and refine its program to ensure involvement of a broad cross-section of knowledge specialists and experts of all types in exploring the issues. It also continues to work with communities to understand how they might best access these specialists. In this regard, and based on experience with communities to date which has suggested that the NWMO should take a more active role in assisting communities in accessing third parties, refinements have been made to the resource program provided to communities. This is reflected in refinements made to the activity list which now references NWMO activity to facilitate community engagement with knowledge specialists who are able to help the community learn about the project.</p>
Page 20	<p>The NWMO continues to learn with experience how to implement a stepwise decision-making process collaboratively with communities involved in the site selection process. As communities proceed through the siting process, they have underlined the importance of learning, in real time, the results of assessment studies which may suggest the area is unlikely to meet the robust requirements of the project.</p> <p>In light of this direction, Step 3 of the site selection process is being conducted in two distinct phases, and Phase 2, itself, is designed to provide continual feedback to communities on the results of studies. This process refinement is reflected in this version of the plan.</p> <p>Revisions were made to the list of steps to make consistent with recent brochures. It now includes reference to Phase 1 and Phase 2 feasibility study work, and notes the launching of a Centre of Expertise in Step 4. Refinements were also made to the description of Preliminary Assessment of Potential Suitability (Step 3 in the Site Selection Process) in pages following.</p>
Pages 21 and 22	<p>As the Implementation Plan evolves, commenters continue to reflect on NWMO activities in light of ensuring that communities involved in the site selection process are aware of, and understand, the potential for negative effects associated with the project, as well as the potential to benefit from the project. Refinements were suggested to the description of activities in the plan to ensure that a very balanced approach underlies all NWMO activities with communities. In comments on the most recent draft Implementation Plan, it was suggested that the NWMO specifically note that regional studies will recognize and consider both positive and negative potential effects of the project on a community.</p> <p>Two refinements were made on this page to more clearly communicate the NWMO's commitment to ensuring communities are aware of potential negative effects, as well as positive effects. Other related changes to note both positive and negative effects were also made throughout the document.</p>

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Pages 21 and 22	<p>A number of commenters suggested that greater clarity is needed on how the concept of “willingness” is defined.</p> <p>The NWMO acknowledges the importance of advancing understanding in this area as communities advance in their learning about the project and in the site selection process. In response to comments, advancing understanding in this area is now identified as an important objective during the planning period.</p> <p>Other refinements were made throughout this section to reflect the iterative narrowing down process which is a component of Step 3, Phase 2 assessments, and planned work to develop the kind of partnership that will be needed to implement the project which involves the interested community, Aboriginal communities in the area and surrounding communities.</p>
Page 25	<p>Commenters continue to reflect on NWMO activities in light of ensuring that engagement appropriately includes those who may be affected by the project in general, and in particular, that First Nations and Métis people be appropriately involved. Commenters continue to review the program to ensure that the assessment is comprehensive; some commenters suggested that review of impact on property values be specifically referenced.</p> <p>Refinements were made to the plan to specifically include activities designed to refine and enhance approaches to assessment and ensure appropriate involvement of Aboriginal peoples in decision-making.</p>
Page 26	<p>Greater clarity was requested regarding the timeline for launching Centres of Expertise in the 2014–2018 period.</p> <p>Refinement was made to the text to increase clarity.</p>
Page 27	<p>Greater clarity was requested concerning the option of shallow underground storage in the description of the project.</p> <p>Refinements were made to the text to indicate that the shallow underground storage of used fuel at the central site, described as an optional Adaptive Phased Management step prior to final placement of used fuel in a deep repository, is not expected to be required and not a focus of current work.</p>
Page 29	<p>Commenters continue to review the plan for the scenarios that are being considered in the design and safety case development work. Recent comments included specific suggestion to clearly address the potential for package failure.</p> <p>This is an important part of ongoing NWMO work, and refinements were made to the text to clearly acknowledge this.</p> <p>Commenters continue to review the plan to ensure there is appropriate emphasis shown across activities for the health and safety of the public and workers. Recent comments suggested that a stronger and more explicit acknowledgment be made.</p> <p>Refinements were made to the text to explicitly discuss the health and safety of the public and workers as an objective of the plan and how work activities are directed to ensure this objective is met.</p>

Page Number (Refined Plan)	Comment Received and Refinements Made
Page 30	<p>Commenters continue to review the plan to ensure the NWMO is clear on mechanisms in place to ensure sufficient funds are set aside to fully fund the project and that these funds are protected for this specific use.</p> <p>Refinements were made to discussion in this section, and in particular to clearly communicate the provisions that are included in the <i>Nuclear Fuel Waste Act</i>.</p>
Page 33	<p>It was suggested there are additional opportunities for continuous learning to support the implementation of Adaptive Phased Management which should be referenced in the plan. This includes learning lessons from: (1) the NWMO’s work on the Ontario Power Generation’s Deep Geologic Repository Project for Low and Intermediate Level Waste (L&ILW); and (2) from the tragic rail accident in Lac Mégantic in July 2013.</p> <p>Refinements were made to the discussion in this section to acknowledge these as potential learning opportunities for the implementation of Adaptive Phased Management.</p>
Page 34	<p>Commenters continue to review the plan for the treatment of the ethical considerations involved in the long-term management of used nuclear fuel.</p> <p>In response to comments, a review and update of the social and ethical framework that was developed during the NWMO Study and that informs the NWMO’s work will be conducted, and emerging and potential challenges will be examined in the planning period.</p> <p>It was suggested that the NWMO engage Aboriginal contractors to ensure Aboriginal Traditional Knowledge is appropriately incorporated in assessments.</p> <p>The NWMO has made this commitment, and specific reference has been added to the text.</p>
Page 35	<p>It was suggested that the first paragraph be revised to state more clearly that a construction licence would follow a <u>successful</u> environmental assessment.</p> <p>Text was revised as suggested.</p>
Page 36	<p>It was suggested that the Geoscientific Review Group be noted for their work on Peer Reviews.</p> <p>Text was revised as suggested.</p> <p>It was noted that the NWMO’s conformance with CSA N286-12 Management System Requirements for Nuclear Facilities has yet to be formally assessed by the regulator.</p> <p>Text was clarified in light of comments.</p>

Input on Key Challenges

The NWMO received comments about the ongoing challenges and issues that will need to be addressed in the next five years as part of implementing Canada's plan and that will need to be considered in the development of future plans. Comments on challenges are briefly described below.

- » **Build confidence in the safety of transporting used fuel:** Interest and awareness about the issue of transporting used nuclear fuel continues to grow as the NWMO has engaged residents of interested communities. Although the Implementation Plan does address this topic, we receive many requests for supplementary information often related to the risks and challenges associated with transportation. In response to the growing interest and requests, the NWMO has developed an information brochure on the transportation of used nuclear fuel, and a mobile transportation exhibit that has begun to visit communities, and has added a new module to its interactive exhibit about the transportation plans and robust international experience. Engaging communities along potential transportation routes, and addressing their questions and concerns, continue to be noted as a challenge that will need to be addressed going forward.
- » **Ensure understanding of the project:** A number of commenters highlighted the importance of building broad public awareness and understanding of Adaptive Phased Management. The complex nature of this area is noted as a challenge, as is ensuring that plain and simple language is used to clearly address issues.
- » **Gain social acceptance for the project:** The challenges associated with ensuring public support within a potential host community, and measuring this support or "willingness," were highlighted in comments received. The project's long implementation times are identified as a potential challenge to gaining and sustaining social acceptance.
- » **Appropriately and effectively involve Aboriginal peoples:** Some commenters have suggested that incorporating Aboriginal Traditional Knowledge into decision-making will be challenging as it will require the development of new processes and the building of relationships of trust and mutual respect.
- » **Organizational and community governance:** Some commenters identified as an important challenge sustaining the involvement of communities and multiple levels of government throughout the long implementation of Adaptive Phased Management.

The NWMO also received comments related to areas beyond the NWMO's mandate. Several commenters suggested that attention be directed to reducing the amount of used nuclear fuel produced in Canada and that efforts be made to support the development of alternative energy. Although beyond the NWMO's mandate, these comments are acknowledged here in the understanding that, for some people, they are context for the NWMO's work.

Dialogue Continues

The NWMO invites comments and suggestions about its work programs and plans, even after the close of the official comment period for the 2014 to 2018 Plan. All comments are welcome as the NWMO continues to develop and adapt its plans.



NUCLEAR WASTE MANAGEMENT ORGANIZATION SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

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