

# Qualitative Testing: Regulatory Backgrounder

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**Pollara**

**nwmo**

NUCLEAR WASTE  
MANAGEMENT  
ORGANIZATION

SOCIÉTÉ DE GESTION  
DES DÉCHETS  
NUCLÉAIRES



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## **Nuclear Waste Management Organization**

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

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

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

## **NWMO Social Research**

The objective of the social research program is to assist the NWMO, and interested citizens and organizations, in exploring and understanding the social issues and concerns associated with the implementation of Adaptive Phased Management. The program is also intended to support the adoption of appropriate processes and techniques to engage potentially affected citizens in decision-making.

The social research program is intended to be a support to NWMO's ongoing dialogue and collaboration activities, including work to engage potentially affected citizens in near term visioning of the implementation process going forward, long term visioning and the development of decision-making processes to be used into the future. The program includes work to learn from the experience of others through examination of case studies and conversation with those involved in similar processes both in Canada and abroad. NWMO's social research is expected to engage a wide variety of specialists and explore a variety of perspectives on key issues of concern. The nature and conduct of this work is expected to change over time, as best practices evolve and as interested citizens and organizations identify the issues of most interest and concern throughout the implementation of Adaptive Phased Management.

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### Disclaimer:

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# POLLARA

## SUMMARY ANALYSIS

**To:** Nuclear Waste Management Organization  
**From:** Craig Worden, Senior Vice President (Moderator)  
**Date:** May 12, 2010  
**Re:** Qualitative Testing: Regulatory Backgrounder

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***Methodological Note:** This memorandum provides the key findings of a qualitative research study conducted on behalf of the Nuclear Waste Management Organization (NWMO). The primary objective of the study was to test reaction and receptivity to the NWMO Backgrounder on relevant regulations (“**The Canadian Nuclear Regulatory Framework**”). As a secondary objective, Pollara also tested reaction to NWMO Backgrounders on transportation (“**Ensuring Safe Transportation of Used Nuclear Fuel**”) and the long-term plan (“**Project Description of Canada’s Long-Term Plan for Used Nuclear Fuel Management**”) – as well as the principles, process, and contents of the Adaptive Phased Management (APM) plan itself.*

*This report is based upon four two-hour focus groups held in North York (May 3<sup>rd</sup>) and Kingston (May 6<sup>th</sup>) – two groups in each location. The focus groups in North York were intentionally recruited to only host adult residents of the Eastern GTA (i.e. eastern portions of Toronto and Durham Region). The Kingston focus groups were host to Kingston residents only. Overall, a good mix of genders, age brackets, and income brackets was attained. To promote participation, the groups were segmented into one female group and one male group in each location. Each group hosted 10 participants, with the exception of the male group in Kingston (8).*

*In an effort to test the materials among engaged individuals, all of the focus group participants were recruited to only include residents (a) who reported daily consumption of current affairs news media; and (b) reported involvement in civic organizations (charitable, volunteer, fraternal, or community service organizations) or behaviours that might be deemed activist or engaged in nature (circulating a petition, speaking at a public meeting, writing a letter or article for publication in current affairs print media, calling into a current affairs show on broadcast media, writing to or meeting with an elected representative). Overall, about half of the respondents in each group reported involvement in one organization or activity, and the remaining half reported involvement in about 2-3 groups or activities.*

*Note: Qualitative research does not hold the statistical reliability or representativeness of quantitative research.*

## OVERVIEW

Overall, participants exhibited a neutral-negative reaction to the Regulatory Backgrounder, as it failed to engage and received a moderately negative response. This response was largely based upon a nearly universal criticism that it was too densely “packed with complicated legalese and confusing information”. There is strong reason to believe that a Backgrounder on this subject matter – even if revised – will not engender a significant level of engagement or positive reaction. This is primarily due to the fact that the full regulatory framework is not a key point of interest on this subject. Secondly, a document discussing regulations does not easily lend itself to the simplistic language, more manageable volume, or narrative approach necessary to improve reader-friendliness. Nevertheless, through the adoption of some or all of the possible revisions discussed, the negative response to the Backgrounder may be reduced.

## BACKGROUND & CONTEXT

Overall, almost all of the focus group participants exhibited little-to-no evidence of pre-focus group engagement on the issue of nuclear waste, beyond superficial or rare considerations. Moreover, there was no specific awareness of the NWMO or its APM process and plan. Anticipating this, each group began with a short description of NWMO, the organization's consultative and planning development process from 2002 to the present, and the APM plan, principles, and process. Supplemented by NWMO's *Project Description* Backgrounder, the provision of this information was intended to share the necessary background and context regarding the APM project prior to testing and discussion of the *Regulatory Framework* Backgrounder.

Overall, most participants agreed with the principles, process, approach, and plan associated with APM. However, many – women, in particular – also expressed a moderate level of concern or skepticism that the APM plan might only be “good on paper”. These participants were primarily motivated about concerns related to the “What If” or “You Never Know” Factor – that is, fears that the plan might contain an unforeseeable flaw (“I’m sure it was designed by smart people, but in 500 years we might realize we didn’t know as much as we thought.”) or be confronted by an unforeseeable event (“earthquake”, “terrorists”) that would compromise the storage site and harm the health of the host community and beyond (via groundwater, air currents, etc.). On this front, many participants suggested that sharing details on “emergency or disaster plans” and on “the long-term effects if it does go bad” might reduce these concerns.

However, at this stage, there appears to be little more that can be done to assuage these lingering concerns, as participants largely approved of the APM principles and process from a rational perspective – but many still held latent emotions of tentativeness or caution when considering “what happens when they actually do this”. Nevertheless, although these lingering concerns remained throughout the focus groups, many participants did express a slightly higher level of comfort about the plan at the conclusion of the groups than when it was first introduced – due to the various pieces of planning, regulatory, and transportation-related information shared.

Overall, there were some noteworthy overarching differences among the demographic and geographic sub-segments in the focus groups that were evident throughout all sections of the discussions:

- **Gender:** *In terms of gender differences, women were far more likely to express concerns about the safety and reliability of the project overall – often rooted in a personal and public health perspective and focused upon the “What If” Factor. Relatively few men were concerned about safety and reliability. Indeed, more men expressed concerns that costs of the project would “come back on us” than expressed concerns about safety.*
- **Region:** *As is typically the case with focus group participants from the Greater Toronto Area, respondents from the Eastern GTA were far more likely to express criticism and skepticism regarding the materials tested. Comparatively, Kingston residents were more likely to express positive assessments.*

## REACTION-TESTING: REGULATORY BACKGROUNDER

Overall, following a lengthy reading and assessment of the Regulatory Backgrounder, participants emerged with a neutral-negative reaction. That is, most respondents were largely un-engaged by, and expressed a moderately negative response to, the document. This response was largely based upon the nearly universal criticism that it was too densely “packed with complicated legalese and confusing information”. Although some participants did feel that “it seems like they have done their due diligence and covered all the bases”, the bulk of the commentary was neutral-negative and positive perceptions were often qualified with statements that it “sounds good on paper”.

The primary overarching criticisms can be summarized as follows:

- **Language:** *The language used in the document was not reader-friendly for this audience. Almost all respondents had a great deal of difficulty with the sophistication level of the language, often calling it “legalese” and requesting that it be “dumbed down”. Most respondents did not feel that they were the audience for this document, as they felt it was “written for someone else” –and because they would not seek out a Backgrounder on this subject matter. Moreover, they found the constant and “repetitious” references to regulations and organizations – and the “constant acronyms” – to be “very confusing” and “impossible to follow”.*
- **Volume & Vagueness of Content:** *Overall, the document contained “too much information” for this audience to digest and “make sense of”. Moreover, many participants felt that the references to regulations and organizations were too superficial and “vague”. Referring to these items “is not enough”, as these participants wanted detailed “plainspeak” descriptions and explanations of each.*
- **Lack of Consumer-Friendly Narrative:** *The document was seen to be a “laundry list of laws and acronyms” rather than a narrative explanation – which appeared to be the audience’s preferred approach to Backgrounders (“Lots of words without telling us much”). This, coupled with the difficult language, volume of content, and fact that respondents were interested in the “nuts and bolts” of the APM plan rather than the regulatory framework, resulted in the audience failing to engage with the document or view it in a positive manner. Moreover, those respondents who tended to question the short-term and long-term effectiveness/enforcement of regulations appeared less likely to view regulations credibly when this information was provided without details or a narrative. Further evidence of the audience’s overall preference for narrative rests in the fact that respondents responded far more positively to the first page than to the remainder of the document (especially references to environmental protection, public consultation, and federal government oversight).*

Overall, the Regulatory Backgrounder had a neutral-negative impact upon respondent's level of comfort and confidence in the APM plan. Most participants discounted the document as insufficient or inappropriate to their primary interests and information needs on the subject of nuclear waste. However, a few participants felt less confident, indicating that the dense listing of regulations and organizations – and the “vagueness” or lack of specific details regarding these items – raised concerns that the NWMO might be “hiding something” or “covering themselves”.

Ultimately, there is strong reason to believe that a Backgrounder with this subject matter focus – even if revised – will not engender a significant level of engagement or positive reaction from this audience. The primary driver behind the neutral-negative reaction to this document is the fact that the respondents were far more interested in consuming details about the “nuts and bolts” of the APM plan, particularly as it related to siting and transportation, than reading information about regulations. The secondary driver of the neutral-negative reaction is the nature of the subject matter. Even with revisions aimed at “dumbing down” the language, the content will remain fairly sophisticated – although reducing the volume of regulations referenced or altering the layout/increasing the number of pages may assist in increasing the reader-friendliness of the document in this regard.

### ***Possible Revisions***

Nevertheless, a critical assessment exercise and investigative probing revealed a number of possible revisions – which, if employed, may assist in increasing engagement and reducing negative reaction as regards the Regulatory Backgrounder:

#### **General**

- **Language:** *As discussed, the language throughout the document may be “dumbed down” – where possible – to increase reader-friendliness and accessibility. In addition, the reliance on acronyms may be reduced for similar effect.*
- **Detailed Narrative:** *As discussed, respondents expressed a demand for a more narrative and detailed explanatory approach to the various regulations. This would increase the length of the document.*
  - **FAQ:** *Related to the suggestions above, a couple respondents requested that a Frequently Asked Questions (FAQ) section be included in the documents to improve accessibility. This inclusion could also assist in improving accessibility and addressing the language and narrative issues discussed.*
- **Layout:** *Related to the points above, the layouts of the Project Description and Transportation Backgrounders were received far more favourably and were clearly preferred over the densely-packed layout of the Regulatory Backgrounder. Most participants felt that improving the layout of the document – and making it similar to the other Backgrounders – would make it easier to read and comprehend. Specifically, participants called for the inclusion of visual images, more white space, a greater*

reliance on bullet points, and a single-column approach – even if it resulted in an increased number of pages.

- **Additional Information:** Some participants indicated that they would require detailed information about enforcement, emergency/disaster plans, and impacts under a “What If” scenario in order to feel greater confidence in the regulatory framework.

### Specific Content Points

- **Independent Oversight:** When reading about the NWMO and its component organizations on Page 2 - Column 1, some participants question the credibility of the organization and process. This might be prevented by emphasizing the level of oversight exerted by government (or any independent) bodies.
- **Privatization:** This discussion about the composition and operations of the NWMO led some participants to fear that “managing the waste is going to be privatized”. These participants were steadfastly opposed to private sector-led management of used nuclear fuel. Thus, readers of this type would be comforted by a greater emphasis on the public sector’s role and oversight in the process.
- **“Polluter Pays” Principle:** This terminology created confusion and raised concerns about how the energy generators/waste producers “will download those costs to us” or – more importantly – “not manage this right because they’ll want to do it cheap”. We recommend revisiting the language as well as the presentation of this principle with the intent of providing the framework and assurances necessary on both fronts.
- **Emphasize CNSC:** Related to the points above, it is noteworthy to highlight that among the most positively-received sections of the document was the section dedicated to explaining the CNSC’s mandate. The language and content in this section – and the overall role ascribed to the CNSC – provided greater comfort and confidence to many respondents. It may be beneficial to put a greater emphasis on the CNSC in this document, particularly as it relates to the desire for independent oversight.
  - **“Abandonment”:** However, within the CNSC section of the document, there was found the one of the greatest points of negative preoccupation and distraction for readers. The use of the word “abandonment” regarding nuclear substances conjured alarming images for readers – that is, images of nuclear waste being haphazardly disposed. We highly recommend changing this specific word.
- **Legislation Dates:** Many participants became preoccupied with the “old” dates associated with the various Acts mentioned in the document, expressing concern that “our regulations aren’t up-to-date”. Providing an explanatory assurance will reduce the negative distraction created by this artifact of legislation.

- **Provincial Laws:** *This section was a point of confusion and contentiousness, as some respondents preferred that provincial laws supersede federal laws and others questioned adherence and enforceability due to the following specific language: “these provinces have largely adopted the federal standards”. We recommend revising this wording and providing greater clarity and assurances in order to reduce the negative distraction presented by this section.*
  
- **Transportation:** *There was mixed reaction to this reference under “Federal Laws of General Application” on Page 3. Those who indicated that it raised concerns, might be less likely to raise questions about these regulations if there was greater explanation and a reference to the Transportation Backgrounder.*
  
- **Basic Insurance:** *In the “Regulatory Requirements” section on Page 2 - Column 2, the use of the word “basic” in relation to the insurance requirements for nuclear operators raised concerns for a few participants. We recommend changing the wording to something more impactful such as “mandatory”.*
  
- **Emphasize International, Emphasize the West:** *Many participants did indicate that participation in, and adherence to, international best practices provided greater comfort and confidence in the project. However, this benefit is only realized if it is specified that Canada is working with reputable, Western countries. For a sizeable minority of participants, vague references to international cooperation raise questions as to whether less reputable countries (with lower standards) are involved.*
  
- **Antarctic Treaty:** *Another common point of criticism that represented a negative distraction from the document’s main message was this section on the final page. Specifically, the fact that Canada was a “non-consultative party” to the Treaty irked many participants. This bullet point should be removed or explained.*
  
- **Points-of-Contact:** *When testing the presentation of a contact person in the document, most participants indicated that they had noticed this information. A sizeable minority of Eastern GTA residents indicated that they would feel comfortable contacting the person listed via phone or email, whereas almost all Kingston residents would not. However, almost all participants indicated willingness and comfort with visiting the website listed. When testing the appropriateness of the contact person’s title (Director, Communications), respondents provided a mixed reaction – with some feeling it was the “right one to talk to, a communicator” and others feeling that “he’s a spin doctor, a P.R. guy”.*

## SUPPLEMENTARY TESTING: TRANSPORTATION BACKGROUNDER

During the course of the focus group discussion of the APM plan and the nuclear regulatory framework, a few participants in each group raised questions and concerns about the transportation of nuclear waste. Specifically, respondents were concerned about the safety of such transport as it related to the proximity of the routes to traffic and communities, the mode of transport, the timing/schedule of transport, security and terrorism, container/package reliability, necessary training, and relevant emergency plans. Respondents indicated that answers and assurances regarding these questions would put them more at ease – although the dominant demand on this front remained a request for information about emergency plans and the impacts of a “What If” scenario.

Following the discussion of transportation concerns, participants were provided a brief summary explanation of the NWMO’s Transportation Backgrounder and a short allotment of time to skim the document. Thereafter, most participants exhibited a notable level of engagement with the piece and the subject matter and expressed a moderately positive reaction to the document – particularly in Kingston. Many participants felt somewhat more confident in the APM project, as the document “impressed” with the detailed comprehensiveness of the transportation guidelines and the following items, in particular:

- **Visuals & Layout:** *Respondents found the Backgrounder engaging, partially due to the use of visual images – both the package and the modes of transport images – and the layout in general. Indeed, participants had a positive response to the generous white space, reliance on bullet points, and clear use of headings. Most participants indicated that the Regulatory Backgrounder should follow this template.*
- **Possible Revision Point:** *For some participants, the photograph of the **boat** on Page 6 raised concerns, as these particular participants were opposed to using this mode of transport for the shipment of nuclear waste.*
- **Safety Records:** *Actual examples of accidents where zero radiation leakage occurred are very effective at increasing confidence in this element of the project.*
- **Possible Revision Point:** *However, the **presentation of these two points** in the document could be improved for greater impact. As they are now presented, they can be missed and ineffectual. In addition, it should be noted that the American example is far more impactful than the theoretical 12-accident example on Page 6. Both examples would benefit from a more emphatic, clear, and attention-grabbing presentation. And, presenting these two safety record points together, within a highlighted presentation (i.e. a sidebar box or table), may reduce the less effective nature of the theoretical example.*
- **Package Design & Testing:** *The visual and description of the construction/components of the transportation package impressed most participants, and contributed to greater comfort and confidence*

- **Possible Revision Point:** *Although most participants were also impressed by Table 1 regarding package testing requirements, a sizeable minority questioned the **difficulty of some of the tests** – especially the 0.3-metre free drop and the 1-metre penetration tests. Once these doubts were raised, many of the other participants also raised concerns. Thus, the strength of the Backgrounder would be bolstered by inserting rationales and assurances on this front.*
- **Measurements:** *In addition, a few participants requested that both imperial and metric measurements be provided for greater accessibility.*

In addition to the possible revision points discussed above, some participants indicated that – although favourable towards the contents of the Transportation Backgrounder – they would need the following dimensions addressed in order to increase their level of comfort and confidence in the project:

- **Emergency Plans & Impacts:** *As discussed, this segment of participants remained focused on obtaining information about emergency plans and the potential impacts of a “What If” scenario.*
- **Security & Terrorism:** *For many participants, the Backgrounder was lacking in security information. Specifically, participants were interested in learning about security procedures in terms of transport escorts, policing, and identification guidelines for the vehicles. In this regard, participants were most concerned about the possibility that a terrorist or “crazy person” might attack these shipments – much more so than they were concerned about an unintentional traffic accident.*
- **Explosiveness:** *Related to the points above, there is a need to educate readers as to the (non-)explosiveness of nuclear waste.*