

Report of 2008 Summer Project

Project to Develop Awareness and Understanding of NWMO and Adaptive Phased Management with Aboriginal Peoples

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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. The NWMO expects to engage citizens in a variety of ways, including:

- Workshops, roundtables and multi-party dialogues
- Public attitude research
- E-Dialogues
- Public information and discussion sessions.

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PROJECT REPORT

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Introduction

In 2002, the federal government passed the Nuclear Fuel Waste Act (NFWA). The NFWA required the nuclear energy corporations within Canada (Hydro-Quebec, Ontario Power Generation and New Brunswick Power) to establish a new corporation, the Nuclear Waste Management Organization (NWMO).

The Act required that the NWMO recommend an approach for the long-term management of used nuclear fuel. The Act further required that the NWMO consult broadly with the general public and in particular with Aboriginal peoples. In November 2005, the NWMO tabled its recommended approach, Adaptive Phased Management, with the Minister of Natural Resources Canada. In June 2007 the Government of Canada accepted the NWMO's recommendation, Adaptive Phased Management.

Throughout the Study Period, 2002-2005, the NWMO heard that dialogue and communication with Aboriginal communities will be best approached through recognition of their unique culture keeping in mind that each community may be different. The need for education and transfer of knowledge about the NWMO, APM and of long term management of used nuclear fuel was a strong theme. During the 2006 Issue Tables "*Developing Effective Communication between Canada's Aboriginal Community and the NWMO*" and "*Innovative Approaches to Natural Resources Management*" participants further clarified that communities need to learn about NWMO and APM in order to have a meaningful exchange of ideas and information. There was also a common theme that people involved will need to have full knowledge in order to make informed decisions.

Description of the NWMO 2008 Aboriginal Engagement Summer Project

In this 2008 summer project the NWMO sought to develop knowledge and understanding with Aboriginal people of the work of the NWMO and to learn of the experiences of Aboriginal Elders with large projects and receive their input.

The 2008 summer project was structured in two parts, 1) youth presentations; and 2) interviews with Elders to gain their thoughts with respect to four key areas of the NWMO's work.

Two students were hired to conduct the project along with NWMO Engagement staff. The project began with training for the students conducted by the NWMO on the different aspects of nuclear waste management and engagement skills. The summer students then attended training on Aboriginal Cultural Governance, Protocol and Practices conducted by Niigani Elders Donna Augustine and Mary Richard, as well as a workshop on developing strategic communication skills. Following the training, the two summer students toured the Bruce Power Nuclear Facility and Ontario Power

Generation's Western Waste Management Facility in Kincardine, Ontario to better understand nuclear power production and used nuclear fuel management.

Youth Presentations

The students provided a brief explanation of the history of used nuclear fuel and the current work of the NWMO. Included in the youth experience each youth group participated in a trivia challenge game to test their new knowledge. The ages of the youth varied among each group, however the majority fell between 9 and 17. The students visited the Youth Outdoor Wellness Conference in Ile-a-la-Crosse, SK, a science camp at First Nations University of Canada in Regina, SK, a computer camp at First Nations Technical Institute in Tyendinaga, ON and a youth gathering at Turtle Island, NB.

Interviews with Elders

Through the assistance and participation of NWMO Elders' Forum and Niigani Elders, sixteen Elders were interviewed as well as Elders attending an Elders gathering near Porcupine Plain, SK. In addition a meeting and discussion was held with the Environmental Department at the Assembly of First Nations. The interviews were held in the four nuclear provinces of Saskatchewan, Ontario, Quebec and New Brunswick.

The first section of this report contains the feedback received from the Elder interviews and the second section describes the four youth presentations and comments from the youth.

Elders' Interviews

The interviews focused on four key areas of the NWMO's work.

- Building awareness and understanding;
- Understanding community development and sustainability;
- Learning from Aboriginal Traditional Knowledge and its interweaving with large development projects such as Adaptive Phased Management; and,
- Understanding how the NWMO can continue to learn from Elders and involve them in the NWMO's work.

1) “NWMO is attempting to build awareness and understanding of Adaptive Phased Management with Aboriginal people. We are interested in learning from Aboriginal people about their experiences with projects and the effect on communities.”

Are you aware of any projects that have done a good job of building awareness and understanding of the project among Aboriginal peoples that the NWMO might look at as examples?

Elders were asked to offer their experiences and knowledge of projects that did a good job at building awareness. Very few Elders discussed projects that did a good job at building awareness, although the majority had knowledge of projects that did not build awareness and that consequently had negative impacts on the community. In fact, the majority of the Elders stated that this was the first time that they had been approached by an organization to gain insight from their experience.

One example of a project that received positive feedback was Plutonic Power near Powell River, British Columbia. This particular project was viewed as a good example because the corporation not only engaged with Aboriginal peoples, but also formed a partnership with three surrounding First Nations communities. The three communities were involved in the process from the beginning, which included the groundwork and preplanning. It was also recommended that the NWMO take a look at Syncrude, as well as Indian Oil and Gas in Alberta and their experiences working with local Aboriginal communities. In these instances the local communities have progressed from just supplying labour to a larger role in management of the resources. It was stressed by an Elder that opportunities for advancement and the potential for revenue sharing must exist when projects or developments occur within Aboriginal communities. He illustrated that projects often fail when community members are relegated to labourer positions and not given the opportunity to participate in the long-term management of the project.

Small projects on reserves, including health centers, entertainment centers and small businesses were described as being successful for involving youth. These businesses

involved the youth by holding job fairs at local schools and by holding social events throughout the community. These types of projects were viewed as important to the community, as they improve social interaction skills and provide stable employment for those finishing high school. The importance of ownership and autonomy was also stressed by the Elders. They offered examples of how Aboriginal communities have taken ownership and controlling interest of local projects, businesses and programs. Specific examples include an entertainment center and strip mall in St. Mary's First Nation in New Brunswick.

The Elders stressed that projects were not effective at building awareness. Most of the projects that were mentioned suffered for not attempting to build relationships with the surrounding communities. As such, the Elders all agree that building awareness is essential to forming relationships with communities in order to build trust and respect.

As for the best methods to build awareness in Aboriginal communities, some suggestions from Elders included word of mouth, posters, internet, radio and television. Each of these methods was described as effective because they possess the ability to reach a mass audience and are familiar to most people. It was also expressed that traditional methods such as feasts, gatherings, Powwow's and sharing circles were most effective at building awareness in Aboriginal communities. These methods are believed by the Elders to be most effective because they acknowledge Aboriginal culture, create equality by bringing everyone to the same level and encourage people to speak about how they feel and not just about what they know. On that note, classroom environments were said to be not as effective at communicating information as Aboriginal people do not feel comfortable communicating in this type of setting. It was also stressed by all of the Elders that incorporating culture is important when building awareness. This can be accomplished by speaking in native languages and seeking guidance from traditional ceremonies such as pipe ceremonies, shaking tent ceremonies and sweat lodges.

Education was a key theme throughout the interviews. Many thought that unfamiliarity with understanding nuclear waste management can lead to fear and therefore, they suggested educating as many Aboriginal people on the subject as possible. At the same time, it was strongly felt that in order to move ahead with a project like Adaptive Phased Management, the NWMO must understand the unique history and culture of Aboriginal people. One Elder felt strongly that Aboriginal people should be teaching western scientists and Canadian society about Aboriginal culture and history. Another Elder described a two-way information session she was familiar with, in which awareness was developed in the community and the community was also able to contribute their

knowledge to a project. The importance of understanding that different tribes have different views and different knowledge was also highlighted throughout the interviews.

Transparency and Accountability were important themes identified throughout the interviews. When citing bad experiences between Aboriginal peoples and major projects, openness and full disclosure were often lacking. Proper consultation and open dialogue were said to be very important, in conjunction with a discussion based upon all of the potential risks and uncertainties. It was also stressed that an organization should focus on the community as a whole rather than just on the community leaders such as chief and council. For instance, one Elder described how an agreement between a corporation and a Chief was later opposed by the grassroots community.

2) “NWMO is interested in understanding how a major project such as Adaptive Phased Management might assist communities in their development and sustainability. In the future, NWMO will need to work with Aboriginal communities that may be affected by the long term management of used nuclear fuel in Canada.”

Are there organizations or projects NWMO might look to which have done a good job of working with communities which were affected by their work and what might be the key challenges for an Aboriginal community in working towards their vision of their community when involved with a large project which as nuclear waste management?

In this section of the interview, we heard about critical development and sustainability issues, long-term visions for a community when working with a project such as Adaptive Phased Management and key challenges that a community might face in working towards their long-term vision.

Critical development and sustainability issues identified by the Elders include the need for more education and capacity building within Aboriginal communities. An Elder stated that in order to benefit from a project, training and capacity development on the reserve are needed. He felt that if one dollar comes in to the community, it must circulate three or four times in order to benefit the community. From his experience, there is no benefit to the community when corporations are in and out quickly in a project. Community members are not involved in this type of process. The majority stated that projects affecting Aboriginal communities should create opportunities to educate and build capacity to address the lack of education and high unemployment rate within Aboriginal communities. The Elders also expressed that a lot of community members are dependent on social assistance and that development projects could address this in order to build capacity within Aboriginal communities. Many of the Elders expressed the importance of regaining control of resources among Aboriginal communities and forming flexible partnerships with outside organizations. Understanding the unique

governance structures that exist within Aboriginal communities was cited as being an important factor in working with Aboriginal communities. An example given was that due to the fact that chief and council terms are short, uncertainty with respect to lengthy projects can develop. Elders noted that decisions are sometimes made without the community being consulted but that involving the whole community could lead to better retention of information and potential for understanding and the decision-making which would be needed by a project taking place over a lengthy period of time.

Elders also talked about treaties, treaty rights and land claims and stressed the importance of adhering to these agreements. Some highlighted the fact that these agreements differ across geographic regions and that it is important for Aboriginal people to develop land resource maps.

All Elders spoke passionately about key challenges that Aboriginal peoples and communities continue to face in working towards their long-term vision. The Elders identified a number of issues: lack of communication within the community and outside the community, substance abuse, addictions, unemployment, maintaining language and identity, disinterest among youth, keeping up with nearby development and dependency on social assistance. These existing challenges have a negative impact on Aboriginal communities and may challenge an Aboriginal community to recognize and work towards their long term visions.

The Elders told us that the only way for a community to address social issues to help heal Aboriginal people is to incorporate the use of traditional medicines, traditional ceremonies and culture back into the community. Some Elders gave specific examples of how troubled youth have been rehabilitated through the use of traditional healing and many noted that the land is a major component of the entire healing process.

When describing long-term visions for a community, many expressed interest in seeing their communities reach a level of self-sufficiency to regain control of their community and culture. In doing so, they said that this will enable communities to fund their own programs and work towards sustainable economic development. Many commented on the potential for the NWMO to establish a scholarship for Aboriginal students that would continue for the duration of the project. Some articulated that Aboriginal communities have taken too much from the non-Aboriginal world, while others felt that keeping up with the non-Aboriginal world's development is important. When speaking about a community's long-term vision, one Elder spoke of a meeting held in Winnipeg in which prophecies were shared. The Elder described three petroglyphs; the first being a symbol for movement, the second was a picture of a woman looking backwards and the third was a picture of a bear. The Elder said that this meant Native women must look back at their culture in order to move forward. This was a strong message highlighting how important it is for Aboriginal people to look back and embrace their culture in order to move ahead.

Some Elders also spoke of potential benefits and agreements should a community eventually become involved with a project such as Adaptive Phased Management.

Elders stated that they thought there should be financial benefits for the host community and that a project such as Adaptive Phased Management should provide opportunity to help the community thrive. Others explained that revenue sharing should be in agreements and that the relationship between NWMO and affected Aboriginal communities should be ongoing. We also heard that the potential host community should be involved in any spinoff projects that might arise from the development and that the community should benefit if the waste is eventually retrieved to be recycled or reused.

3) “NWMO is working to understand the learning and practices of Traditional Knowledge that might be interwoven into decision-making to improve a project such as Adaptive Phased Management.”

Are there specific examples that you can think of that have done a good job of integrating or interweaving Traditional Knowledge into the decision-making of a project or policy?

Most of the Elders were not familiar with projects that have done a good job of interweaving Traditional Knowledge with a project or policy. Examples of projects that were mentioned during the interviews that incorporated Traditional Knowledge with western science included Restorative Justice Programs, the construction of the McKenzie Valley Pipeline and the work of the Sustainable Forest Management Network.

Restorative Justice was the main project that was mentioned for interweaving two separate viewpoints that might be looked at for guidance. Restorative Justice incorporates western society’s law and criminal justice system but uses traditional ways of seeking rehabilitation of a convicted criminal. In this process, Elders and the court are brought together, along with all parties to the offence, to work together to find an appropriate solution. The program uses key components of First Nations culture to provide healing for all parties involved. Some examples of the key components are sweat lodges and healing circles where the parties join together to resolve the issue(s). This method according to the Elders interviewed has proven to be effective with some communities.

One elder stated that Traditional Knowledge was used during the construction of the McKenzie Valley pipeline. He explained that they tried to make the pipeline less intrusive to the migration of the caribou so traditional life could be maintained. He said it is very important that Adaptive Phased Management develop understanding of Traditional Knowledge of the area where the facility will be located, but also recommended speaking with the community’s Chief and council and the senate of Elders before proceeding with development.

One elder mentioned the Sustainable Forest Management Network at the University of Alberta, where work is being done on the amalgamation of Traditional Knowledge and Western Science with respect to caribou recovery.

Most elders that were interviewed expressed interest in the development of such a project as Adaptive Phased Management. There was concern with fairness and trust on the sharing of Traditional Knowledge because Elders want to ensure the protection of any Traditional Knowledge, so that it is not exploited.

The key area of Traditional Knowledge that must be incorporated into a project is the protection of special geographical locations, such as burial grounds, medicine picking grounds, sacred water sites, cultural grounds, traditional healing grounds, food gathering grounds, hunting- trapping grounds and migratory areas. The Elders talked about Aboriginal existence and stated the importance of eating traditional foods, continuing traditional healing and maintaining a respectful relationship with Mother Earth. All felt that the land must be protected to maintain this way of life.

Many Elders reported that in order to fully understand the strong relationship to the land that Aboriginal people have it is paramount to participate in various traditions. One Elder recommended that scientists participate in a fast, which could help in understanding Aboriginal people's special relationship to the land. There was consensus that Traditional Knowledge positively affects community well being. An example given was that Traditional Knowledge contributes to healthy lifestyles through the eating of traditional foods. Most of the Elders voiced concerns that a project such as Adaptive Phased Management has the potential to cause environmental damage, especially with respect to affecting the community's drinking water, land, animals and air. Recommendations were made for independent Aboriginal oversight on scientific testing to avoid potential biases.

4) "NWMO would like to continue to benefit from the wisdom of Elders in the conduct of its work."

From your experience, what might the NWMO do to continue to learn from Elders and respectfully involve them in the development of plans?

At this point in the interview, the Elders offered advice on what the NWMO might do to respectfully involve Elders in the development of future plans.

The majority expressed that they were content with the work of the NWMO's Elders' Forum and Niigani. Some stated that the Elders' Forum should involve Elders from all regions across Canada as this is a National issue and that all are impacted by the long-term management of used nuclear fuel. It was also recommended that NWMO continue to work with different Elders because Traditional Knowledge varies across different areas. Some felt that a better understanding of the selection process for Niigani and the Elders' Forum would be helpful. One Elder spoke of the reality that some members might have to be replaced and that one of the benefits in the plan for this process would be bringing in new knowledge. Another Elder suggested that the Elders' Forum members bring a mature or middle-aged person to the meeting rather than a youth to ensure continuity as the mature assistant could step in the Elders place should anything happen, thus creating future Elders that have sufficient experience and knowledge of the project to participate at a later time.

Further to these suggestions, some of the Elders suggested that the NWMO should engage with Aboriginal people in other parts of Canada such as British Columbia, Alberta and the North West Territories as this would build awareness and there may be potential learning from those Aboriginal people's experiences with projects and their unique Traditional Knowledge. One Elder also noted that it is important that the Elders involved with the NWMO process are well respected as Elders by their communities.

Youth Events Description

The summer project sought to transfer knowledge to youth through presentations at various youth gatherings in the four nuclear provinces. The youth involved were between the ages of 9 and 17 years.

Four youth presentations were given over the course of the summer. These presentations took place at the Youth Outdoor Wellness Camp in Ile-a-la-Crosse SK, Health and Science Camp at the First Nations University of Canada in Regina SK, Science Camp at the First Nations Technical Institute in Tyendinaga First Nation ON, and to a Youth Social Group in Indian Island First Nation NB. Each presentation received positive feedback from the youth and supervisors.

The presentations were brief but covered a large amount of information. The youth presentations educated youth on the history of NWMO, nuclear fuel characteristics, how used nuclear fuel is stored today, NWMO's study, Adaptive Phased Management, ongoing Aboriginal engagement and NWMO's upcoming work.

Large laminated slides were used for the presentation which included many different pictures and diagrams of a CANDU reactor, the nuclear fuel cycle, CANDU fuel bundles, used nuclear fuel storage sites in Canada, storage containment, a graphic of a Deep Geological Repository site diagram and DGR containers, Niigani pictures and mission statement. The time length of the presentation was approximately 30 minutes.

Following, the presentation youth were engaged through playing an interactive learning game called the "Nuclear Waste Trivia Challenge", which consisted of 20 trivia questions all taken directly from the presentation. The groups were divided into two teams, this tactic proved to work very well. Both teams received prizes for participating.

The youth actively engaged in the presentation and were eager to win the trivia game. The youth grasped the information very quickly and were able to answer all the questions correctly. They were very interested in the topics discussed, felt comfortable to ask questions and give their comments and concerns about used nuclear fuel. Safety for people, environment and water and security of the facility were the most frequently identified questions and concerns raised by youth.

Conclusion

The summer project found that four general themes emerged. These general themes are education, incorporating culture and Traditional Knowledge, economic development and community sustainability, and the need to address critical issues that face Aboriginal communities.

Education covered a large number of topics such as training, cultural awareness for not only Aboriginal peoples but also the non-native population and creating educational opportunities for youth. Incorporating culture and Traditional Knowledge were important themes in all areas of the interviews, this included using cultural traditions for building awareness, interweaving Traditional Knowledge with western science and keeping Aboriginal culture alive. Economic development and community sustainability include recognizing Aboriginal governance structures, building partnerships and the recognition of treaties, treaty rights and land claims. Critical key challenges identified within Aboriginal communities include a wide array of social issues and communication difficulties.

In conclusion, the 2008 Summer Project benefited from the opportunity to meet with Elders and to explore the questions and interests of Aboriginal youth. This project helped build awareness and understanding of the NWMO and Adaptive Phased Management and was a valuable opportunity for the NWMO to continue to learn from the wisdom and experience of Aboriginal people.

List of Participants in 2008 Elder's Interviews

1) Gordon Williams	Ottawa, Ontario
2) Dan Smoke & Mary Smoke	Ottawa, Ontario
3) Albert Dumont	Ottawa, Ontario
4) Assembly of First Nations, Environmental Stewardship Stuart Wuttke Donald Sharp Byrin Louis	Ottawa Ontario
5) Donna Augustine	Elsibogtog , New Brunswick
6) Josie Augustine	Elsibogtog , New Brunswick
7) Joseph John Sanipass	Elsibogtog, New Brunswick
8) Anne Barlow	Indian Island, New Brunswick
9) Gwen Bear	Fredericton, New Brunswick
10) Alma Brooks	St. Mary's, New Brunswick
11) Phil Atwin	Kingsclear, New Brunswick
12) Stanley Paul	St. Mary's, New Brunswick
13) Juanita Paul	Oromocto, New Brunswick
14) Billy Two Rivers	Kahnawake, Quebec
15) Francis Nippy	Porcupine Plain, Saskatchewan
16) Elders Gathering: 1. Alex Hugh 2. Raymond Tony 3. Don Keesh 4. Steven Moose 5. Norman Moose 6. Jonny Moose	Porcupine Plain, Saskatchewan
17) Lawrence Tobacco	Kawacatoose, Saskatchewan
18) Jim Sinclair	Regina, Saskatchewan