

Interweaving Traditional Knowledge

Indigenous Knowledge in Canada's Nuclear Waste Management Clay Rock Organization

Lateral Tunnel Approach

LEGEND

- 1. Surface Facilities
- 2. Main Shaft Complex
- 3. Placement Rooms
- 4. Ventilation Exhaust Shaft

Bentonite

Nuclear Waste Management Organization



NUCLEAR WASTE MANAGEMENT ORGANIZATION SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

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Lessons

- Prioritizing safety and security of the people and environment in the process of nuclear waste disposal
- An inclusive, open and transparent participatory approach
- Working on shared ethics identifying similarities and differences between Traditional sciences and Western sciences
- Acknowledging, Recognizing, Respecting, Honoring and Supporting Indigenous Knowledge, belief systems, culture, tradition, values, customs, stewardship, language
- Valuing Traditional and Western sciences equally Two-eyed approach Bridging the gap
- Opportunity to learn from Indigenous Knowledge
- Interdisciplinary approach workshops between technical staff and Indigenous peoples to help both understand/educate about each other learning from experiences
- Continuous revisitation of policies, concerns and issues helping in progress

Description

- Nuclear Waste Management Organization was established in 2002 under the Nuclear Fuel Waste Act (NFWA) and "is responsible for designing and implementing Canada's plan for the safe, long-term management of used nuclear fuel." ("NWMO")
- Safety of the people and environment is the top priority
- Guided by six values: Safety, Integrity, Excellence, Engagement, Accountability, Transparency
- Adaptive Phased Management as Canada's approach for long-term management of nuclear waste a technical method and a management system
- NWMO has been working closely with experts and public including Indigenous peoples, First Nations, Metis and Inuit peoples since its establishment "The NWMO is obliged under the NFWA to consult with Canadians and Aboriginal peoples throughout the implementation of Adaptive Phased Management (APM)." ("NWMO")
- Adopted policies that applies to all works of NWMO with Indigenous Peoples, First Nations, Metis and Inuit People Aboriginal Policy (2009), Indigenous Knowledge Policy (2016), Reconciliation Statement (2018), Reconciliation Policy (2019)

Policies of NWMO



MANAGEMENT

SOCIÉTÉ DE GESTION DES DÉCHETS ORGANIZATION NUCLÉAIRES

NWMO Aboriginal Policy

SEPTEMBER 2018



NWMO Aboriginal Policy. (2009). Retrieved from https://www.nwmo.ca/en/ABOUT-US/Who-We-Are/Our-Commitment/Code-of-Conduct-and-Policies



MANAGEMENT

NUCLEAR WASTE SOCIÉTÉ DE GESTION DES DÉCHETS

Indigenous Knowledge Policy

OCTOBER 2016



Reconciliation statement, July 2018



NWMO Board member Ron Jamieson (right) honored ahead of the signing of the Reconciliation Statement. (2018). Retrieved from https://www.nwmo.ca/en/More-information/News-and-Activities/2018/07/16/16/47/The-NWMO-issues-reconciliation-statement-collaboratively-with-Indigenous-Elders-and-youth

Reconciliation policy, October 2019



The NWMO Reconciliation Policy was formalized and blessed through an Indigenous Sunrise Ceremony in King City, Ont., that included members of the NWMO's executive team and Board of Directors, and the Nwmo Council of Elders and Youth. (2019). Retrieved from https://www.nwmo.ca/en/More-information/News-and-Activities/2019/10/16/15/03/The-NWMO-issues-Reconciliation-Policy-calls-on-corporate-Canada-to-join-discussion

Stakeholders

- Nuclear Waste Management Organization (NWMO)
- Minister of Natural Resources
- Nuclear Fuel Waste Bureau
- Ontario Power Generation (OPG)
- New Brunswick Power Corporation (NB Power)
- Hydro Quebec (HQ)
- Atomic Energy of Canada Limited (AECL)
- Canadian Nuclear Association (CNA)
- Canadian Nuclear Safety Commission (CNSC)
- Canadian Environmental Assessment Agency (CEAA)
- Natural Resources Canada (NRCan)
- Environment Canada,
- Fisheries and Oceans Canada
- Health Canada
- English River First Nation
- Pinehouse
- Creighton
- Ear falls
- Ignace
- Redrock
- Nipigon
- Schreiber

- Mantiouwadge
- Hornepayne
- White River
- Wawa
- Blind River
- Elliot River
- The North Shore
- Spanish

- Saugeen Shores
- Arran Elderslie
- Huron Kinloss
- Brockton
- South Bruce
- Central Huron

Organization

Governing Ministry

Governing Bureau

Waste owners and

Funding agencies

Regulatory or Policy agencies

Other Canadian agencies

Involved communities

Stakeholders (cont.)

- National level Organizations
 - Assembly of First Nations (AFN)
 - Congress of Aboriginal Peoples (CAP)
 - Inuit Tapiriit Kanatami (ITK)
 - Metis National Council (MNC)
 - Native Women's Association of Canada (NWAC)
 - Pauktuutit Inuit Women's Association
- Local/Regional Level Organizations
 - Atlantic Policy Congress of First Nations Chiefs (APC)
 - Eabametoong First Nation, Fort Hope, Ontario
 - East Coast First People's Alliance
 - Federation of Saskatchwen Indian Nations
 - Northern Saskatchwen
 - Ontario Metis Aboriginal Association (Ontario affiliate of CAP)
 - Sakitawak Metis Society, Northwestern Saskatchwen
 - Union of New Brunswick Indians
 - Western Indian Treaty Alliance (WITA)
 - Prince Albert Grand Council
- Sweden, Switzerland, Finland, France, Korea, Japan, and the United Kingdom
- Nuclear Energy Agency (NEA) of the Organization for Economic Co-operation and Development (OECD)
- International Atomic Energy Agency (IAEA)

Indigenous, First Nations, Metis and Inuit community organizations

International Partners

Timeline

Reconciliation Statement finalized

2019 – Reconciliation Policy issued

2002 – Nuclear Fuel Waste Act was passed
Nuclear Waste Management Organization was established
Advisory Council includes Indigenous representation
2003 – Traditional knowledge workshop
2005 – Adaptive Phased Management (APM) was proposed
Ethical and Social Framework was adopted
Elders Forum was formed. Working group was named Niigani
2007 – APM was accepted by the Canadian government as Canada's long-term approach to manage nuclear waste
Board of Directors includes Indigenous representation
2008 – Traditional Knowledge Project
2009 – Memorandum of Understanding between Natural Resources Canada (NRCan) and NWMO
Funding formula approved by the Minister of Natural Resources
Aboriginal Policy
2010 – NWMO launched a nine-step approach - Siting process initiated
2012 – Elders Forum renamed as Council of Elders
2014 – Council of Elders adds Youth
2015 – NWMO's Director of Nuclear Design and Transportation Chris Hatton receives Innovation Achievement Award from Canadian Nuclear Society
2016 – Indigenous Knowledge Policy
Declaration of the Keepers of the Land signed by Council of Elders and Youth
2017 – Consultation on borehole drilling
2018 – NWMO Environmental Policy

Natural/Cultural Heritage

Natural Heritage

Ecologically sensitive areas and areas of local significance will be avoided in the site selection process Preserving Biodiversity - Selecting a (safe and isolated) site with the concern for safety and security of the people and environment for the safe and isolated disposal of used nuclear fuel

• Cultural Heritage

Values, traditions, customs and rights of Indigenous Peoples, First Nations and Metis communities are acknowledged, respected, recognized and supported in the sharing of Traditional Ecological Knowledge/Aboriginal Traditional Knowledge/Indigenous Knowledge in the process of site selection and in all future processes

Sustainability

Environmental Sustainability

Achieving livability through balanced growth with major focus on health and safety of the community and environment

Adopted an Environmental Policy

Environmental Assessment teams to assess the sites under consideration

Socio-Cultural Sustainability

Working on shared ethics

Respecting and Sustaining values, customs, beliefs and traditions of Indigenous peoples

Integrating Indigenous Knowledge in decision-making process

Economic Sustainability

Funding involved communities

Compensation for affected communities – creating job opportunities is one among them

• Sustainable Development Goals

SDG 11 (Sustainable cities and communities)

SDG 12 (Responsible Consumption and Production)

SDG 17 (Partnerships for the goals)

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