



Date: 2021-04-20

File / dossier : 6.02.04

Edocs pdf : 6542924

Supplementary Information

Renseignements supplémentaires

Presentation from the Nuclear Waste Management Organization (NWMO)

Présentation de la Société de gestion des déchets nucléaires (SGDN)

Implementation of Adaptive Phased Management (APM)

Mise en œuvre de la Gestion adaptative progressive (GAP)

Commission Meeting

Réunion de la Commission

April 27, 2021

Le 27 avril 2021

nwmo

NUCLEAR WASTE
MANAGEMENT
ORGANIZATION

SOCIÉTÉ DE GESTION
DES DÉCHETS
NUCLÉAIRES

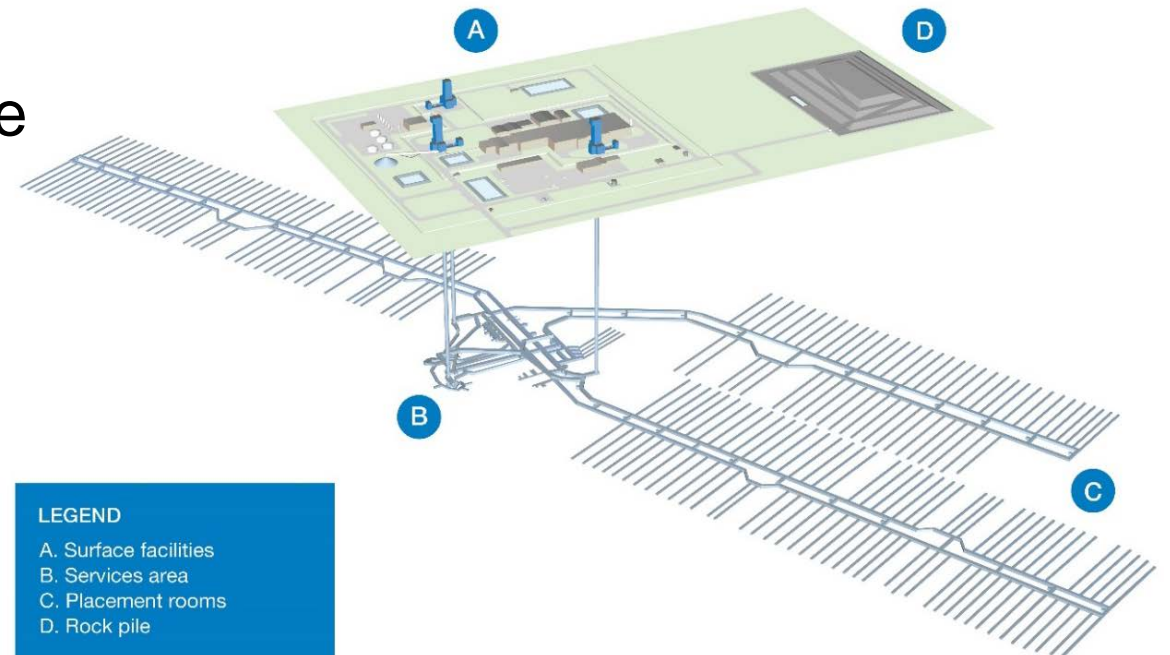


Implementing Adaptive Phased Management: Building on Our Achievements

NWMO Presentation to the Commission
April 27, 2021
Commission Meeting
Ottawa, ON

The Plan for Canada's Used Nuclear Fuel

- Internationally accepted
- Protection of health, safety and environment for generations to come
- Advanced technology
- Strongly regulated
- Long-term partnership between NWMO and community
- Lifecycle Investment ~ \$23 B
- Operational flexibility



Key Achievements

- Reconciliation Policy
- Screened down from 22 siting areas to 2 siting areas
- Started the dialogue on transportation
- Started the partnership discussion
- Started our field investigations
- Advanced our design
- Adapted to address Covid-19
- On track to make the site selection decision in 2023



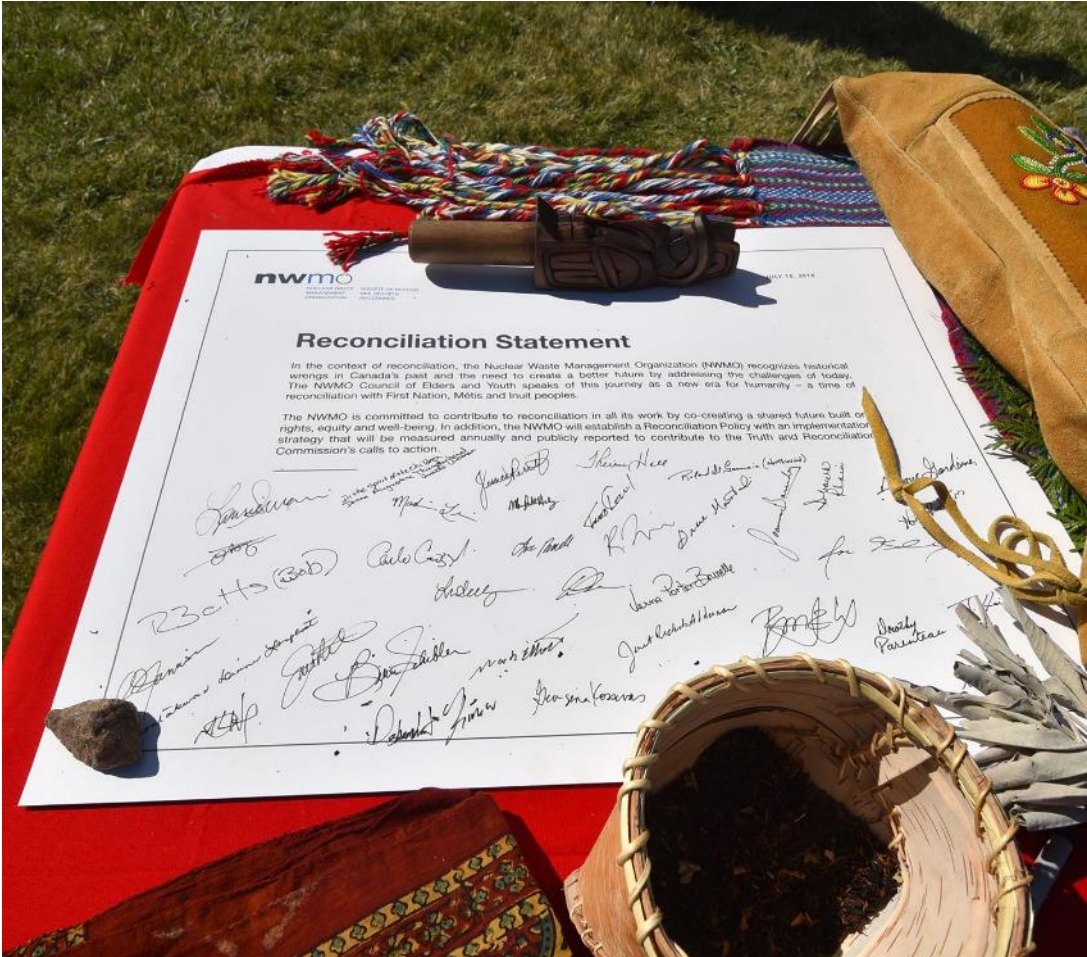
Safety Culture



Our People



Reconciliation



Integration of Indigenous Knowledge and Western Science



Elder Fred Kelly shares Indigenous water symbolism with NWMO staff.

Factors for Selecting a Preferred Site



WILLING COMMUNITY

- Potential for partnership
- Informed Community
- Community decision

SAFETY

- Study Geology
- Evaluate project environment effects
- Preliminary Safety Statement

TRANSPORTATION

- Establish transportation modes and means
- Engage communities along route
- Potential for socially acceptable route

Transportation Safety



A robust, tested and certified transportation package



Requirements are met for commercial vehicle and railroad safety and security



A Transportation Security Plan is in place



An Emergency Response Plan is in place



Requirements are met to obtain a licence to transport



Periodic reviews and audits are planned



High-quality and well-trained workers and vehicle operators



Safe operating practices, including protocols for bad weather and road conditions, safe parking, and route control



Training and joint exercises with provincial and community emergency responders



Informed and engaged public during planning and operating phases



APM program evaluation and improvement process



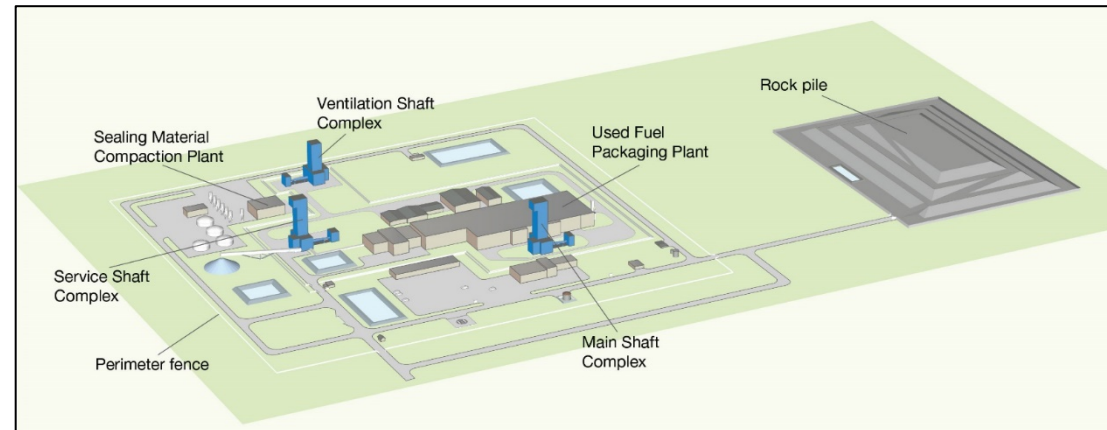
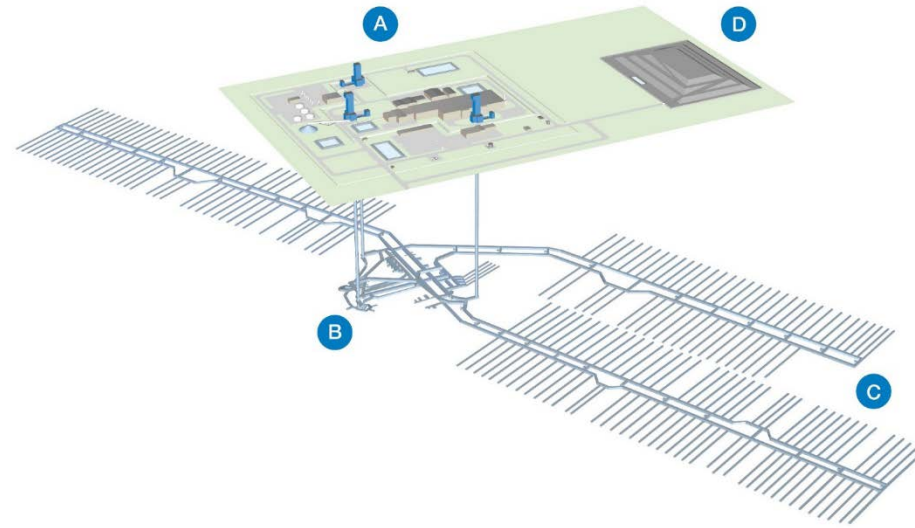
Transportation Dialogue



Supportive and Resilient Partnerships



Repository Engineering & Facility Design



Geoscience Assessment



Environmental Characterization



Testing and Research



Safety Assessment

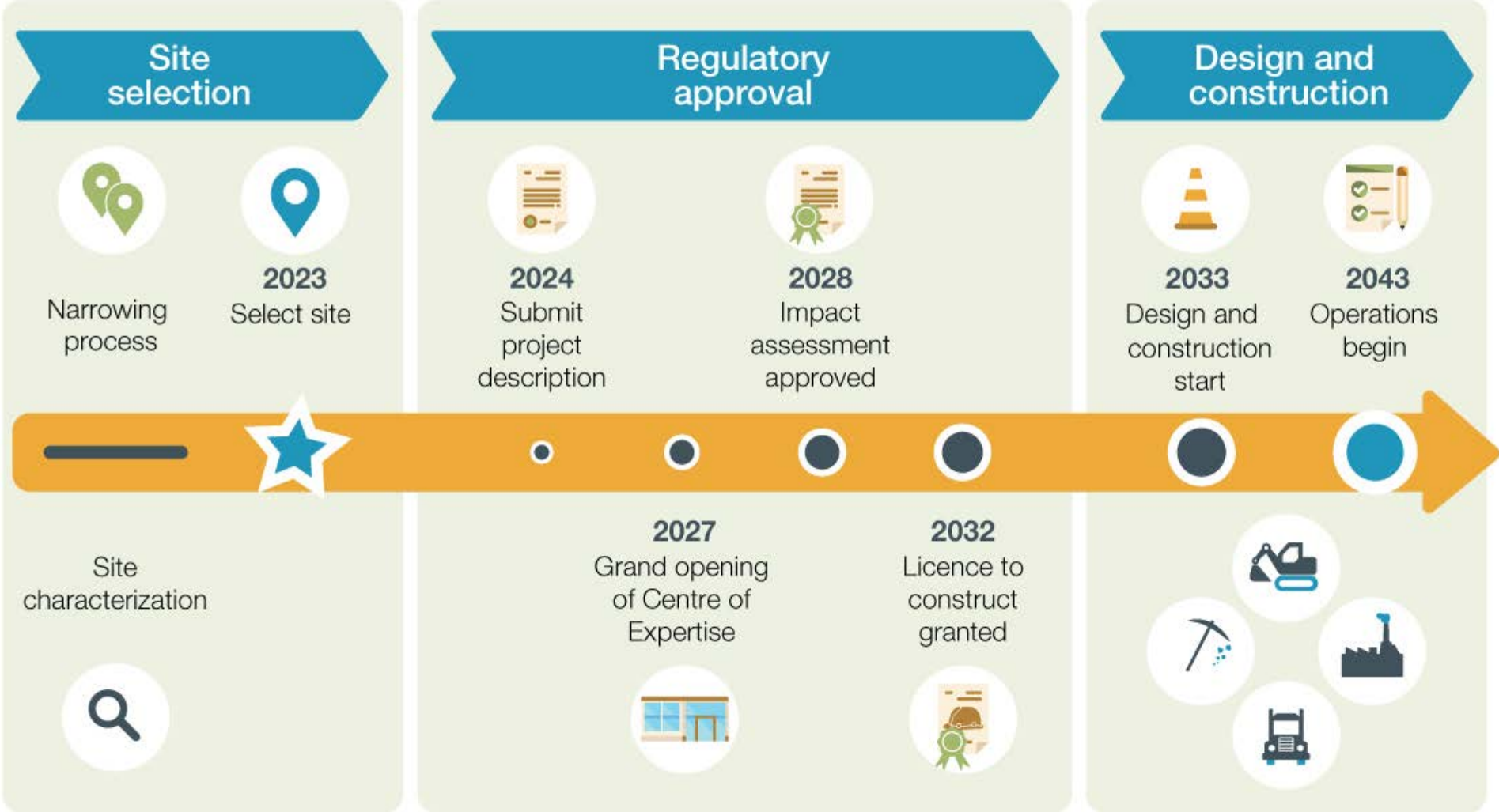
Considers the entire life cycle of the project

- Construction
- Operation
- Transportation
- Long-term safety

Considers normal and “what if” scenarios

- Normal scenarios:
Repository systems assumed to function as designed
- Worse case (unlikely) scenarios

Licensing



Mobilization



An artist's rendering portrays one example of how the Centre of Expertise could look. The final design will be developed collaboratively with those living in the area.

Hearing from Canadians



External Guidance

Multiple levels of external guidance including:

- Program guidance
- Indigenous guidance
- Technical guidance



National & International Collaboration

International Organizations



Canadian Universities



National Labs



Integrated Strategy on Radioactive Waste Engagement



A NEXT STEP

Part of Canada's
Radioactive Waste Review

Summary

- Working with potential communities on the site selection process, including discussions on partnership
- Pursuing site characterization, design, safety and environmental assessments to develop a safety case
- Undertaking technical and engagement activities on the transport of used nuclear fuel, including the development of a transportation planning framework in collaboration with Canadians
- On track to complete site selection by the end of 2023



Thank you!