

Adaptive Phased Management Site Selection Process



Presentation to DGR - CCAG

March 24, 2009

nwmo

NUCLEAR WASTE
MANAGEMENT
ORGANIZATION

SOCIÉTÉ DE GESTION
DES DÉCHETS
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Adaptive Phased Management



A Technical Method

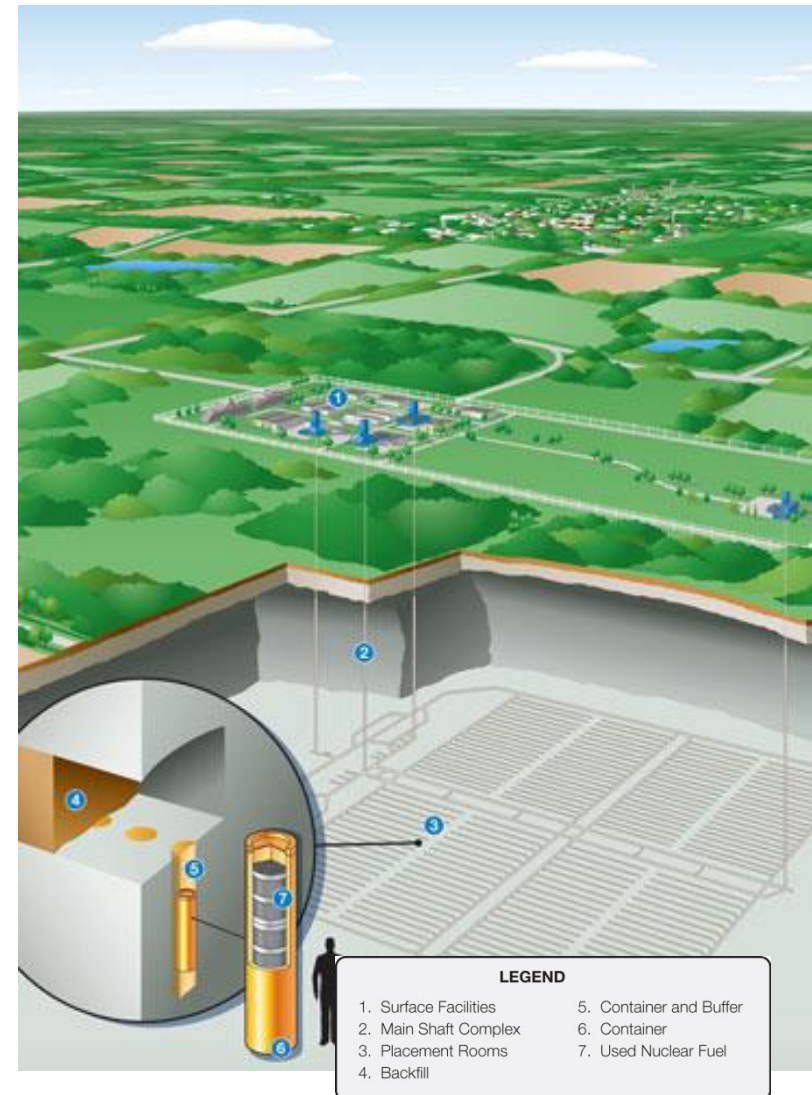
- » Centralized containment and isolation of used nuclear fuel in deep geological repository
- » Continuous monitoring
- » Potential for retrievability
- » Optional step of shallow underground storage

A Management System

- » Flexibility in pace and manner of implementation
- » Phased and adaptive decision-making
- » Responsive to advances in technology, research, Aboriginal Traditional Knowledge, societal values
- » Open, inclusive, fair siting process - seek informed, willing host community
- » Public engagement and site selection focused in 4 nuclear provinces (NB, ON, QC, SK)

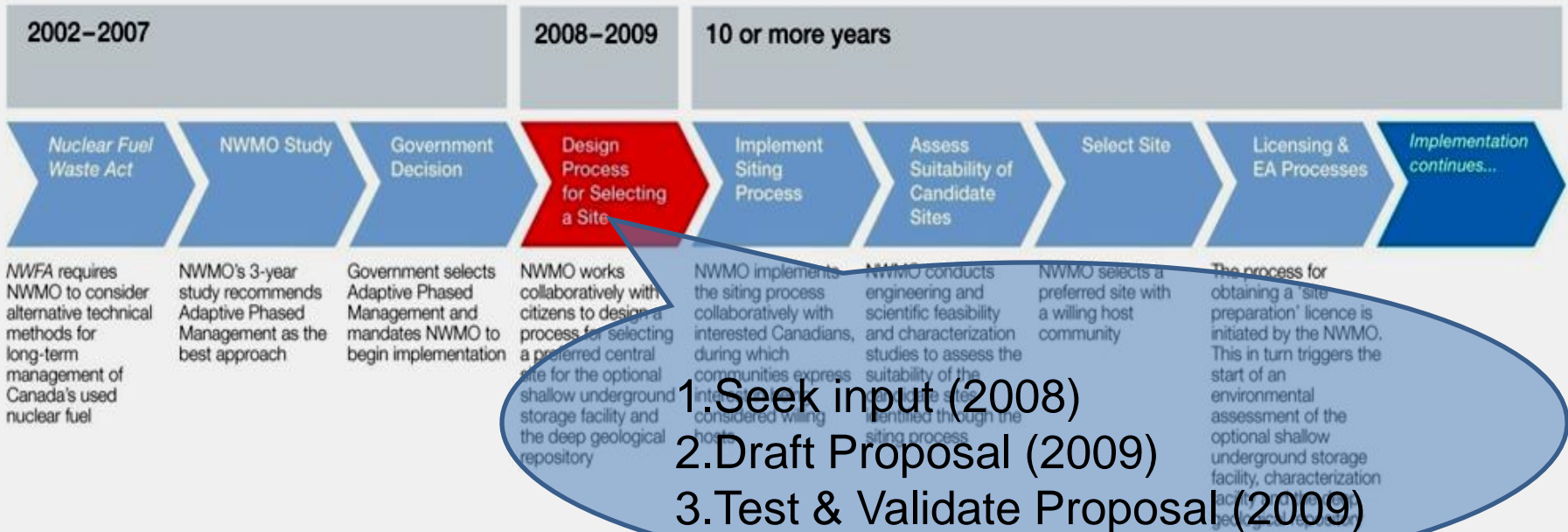
Canada's Deep Geologic Repository for Used Nuclear Fuel

- Isolation in suitable geologic formation
- Monitored and retrievable
- Multi-barrier system: defense in depth
- High technology, national infrastructure project
- Highly regulated – strict scientific, and technical criteria assure safety
- Investment of \$16-24+ billion
- Vision to operate as a centre of expertise
- Provide skilled employment for hundreds over many decades
- Long term partnerships between NWMO, community, government
- Implemented locally in an informed, willing community host
- Ensure community well-being



Designing a Process for Selecting a Site

Initial Stages of Implementation of APM – Timeline





What we heard in the 2008 dialogues



Present a clear description of this important national initiative ...

- How much land is required?
- What kinds of facilities will be built?
- What activity would the community see -- in the early years? in latter years?
- Articulate clearly the potential risks and impacts.
- What benefits might the community/region see over course of the project?

Transportation Options – 3 Possible Modes

Transportation also seen as important to APM Implementation

- Suggestions that limiting transport distance is desirable, as is remoteness
- How will transportation communities be involved in the site selection process?

1. Road

(i.e., truck)



2. Rail

(i.e., truck and train)

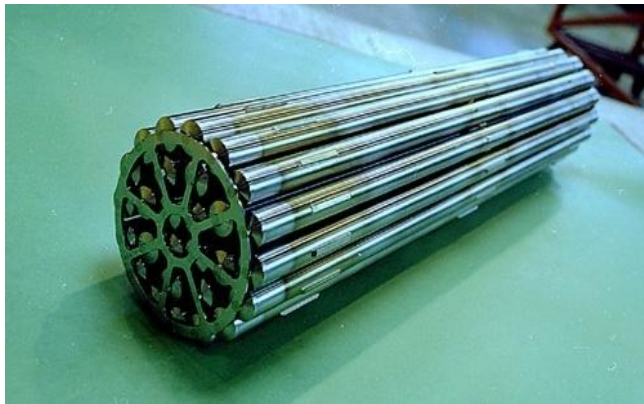
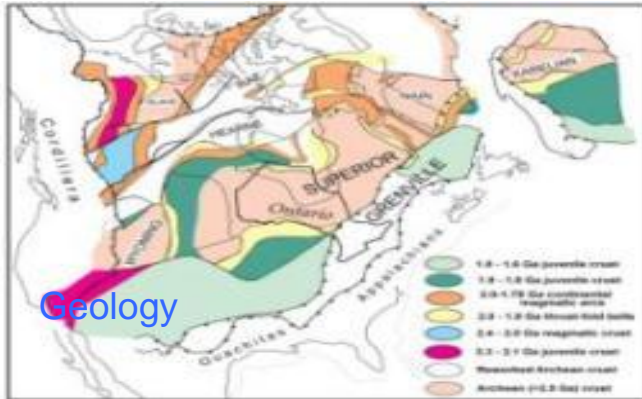


3. Water

(i.e., ship, train and/or truck)



What about safety and material storage?



- Establish scientific and technical requirements to assure safety of humans and environment
- Be clear about criteria and principles that will guide site selection decision-making
- Desire for some early screening based on exclusionary criteria
- Safety is preeminent consideration - ensure safety not compromised for willingness
- Explain used nuclear fuel bundles
- How much used fuel will go in the repository?
- How large is the repository?
- Provide for 3rd party review

Community-driven process, tools and resources



- Present a clear project description complete with quantities, economic benefits, and types of facilities
- Desirability on remoteness and to limit transport distances
- Willingness of community is essential
- Site selection should ensure community well-being
- Communities should be active participants in decision-making
- Communities will want to assess project against official plans & long-term visions
- Involve affected regions in broader assessment of impacts and opportunities
- Respect for rights of Aboriginal people and duty to consult
- Accessible information - plain language, clear
- Balanced information on risks and benefits
- Resources to help build capacity to make informed decisions



Collaborative Design of APM Site Selection Process



NWMO will seek informed, willing community to host the APM facilities.

Interested organizations and individuals are invited to contribute to the design of the process for site selection.

2008 :

Dialogues were convened to invite input into the siting process: discussion of principles, objectives, and suggestions.

2009:

Dialogues will focus on review of *Draft* Site Selection Process proposal – NWMO seeking confirmation of proposed process and suggested refinements.



Early 2009 (in progress)

- Development of *Draft* Site Selection Process proposal

Spring 2009 (current planning assumption)

- Publish *Draft* proposal for public review

Spring through Fall 2009

- Initiate broad-based engagement program to inform public and invite discussion on *Draft* proposal
- Seeking diversity of views
- Regional dialogues in Saskatchewan, Ontario, Quebec, New Brunswick

Late 2009

- Revise Site Selection Process with public input

Plans under consideration – dialogues and information sessions



Public Information Sessions (May-June 2009)

- Open house information sessions w/NWMO presentation
- Open to public, advertised, opportunity for comment
- Currently planning for regional hubs/economic centres
- 13 locations (7-Ontario; 2-Saskatchewan, 2-New Brunswick, 2-Quebec)

Citizen Dialogues (September 2009)

- Full-day facilitated sessions (1-2) in each nuclear province
- Randomly recruited citizens through research techniques

Multi-party dialogues (Fall 2009)

- Re-engage invited participants (100+) from 2008 dialogues (Saint John, Montreal, Toronto, Ottawa, Saskatoon)
- Invite multiple perspectives – community groups, municipal associations, Aboriginal groups, NGOs, researchers, industry
- Workshop format, working session (day long)

Aboriginal dialogues (May-July & August - October)

- Regional dialogues (up to 30) led by Tribal councils, Treaty organizations
- Designed with NWMO Elders Forum and NWMO Niigani group

Dialogues and briefings on request

- Example: CANHC, Municipal Forum (13 municipal associations)



Research

- Social research continues to track public opinion, best practices in engagement
- Technical focus on engineering designs, safety assessment, and geoscience.

Financial Surety

- Submitted proposed funding formula to NRCAN for approval; trust funds in place

Reviewing and Adjusting Plans

- Continue to review APM plans in light of external landscape, including potential new nuclear build
- NWMO web site includes watching briefs, projections, and related information

Building Relationships

- Continue to provide briefings on request to interested organizations
- Expand relationships with FCM & municipal associations in 4 nuclear provinces
- Continue protocols and collaborative work with Aboriginal organizations
- Continue briefings of officials and staff, MPs, MPPs, MLAs
- Seek opportunities to engage young people