

# Long-Term Management of Canada's Used Nuclear Fuel





## **Presentation**



» Nuclear Waste Management Organization

» Canada's Plan

» Progress Update

### NWMO: Who we are



- » NWMO Mission statement: The purpose of the NWMO is to develop and implement collaboratively with Canadians, a management approach for the long-term care of Canada's used nuclear fuel that is socially acceptable, technically sound, environmentally responsible and economically feasible
- » Values: Integrity, Excellence, Engagement, Accountability, Transparency
- » NWMO is a corporation that operates as a not-for-profit organization



## **Our mandate**

- » Federally-mandated under *Nuclear Fuel Waste Act* 
  - » Established in 2002
  - » Funded by waste owners
- » Long-term management of Canada's used nuclear fuel
  - » Study options, propose an approach
  - » Implement the approach selected by Government





## **NWMO Study of Alternatives (2002-2005)**



- » NWMO three-year nation-wide study:
  - 18,000 Canadians including 2500 Aboriginal people
  - Contributions from 500 experts

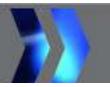


- Safety and security is top priority
- Take action now
- International standards
- Approach must be adaptable





## Canada's Plan: Adaptive Phased Management



Plan emerged from dialogue with citizens and experts – best met key priorities

#### **A Technical Method**

# )) Isolation in deep geological repository

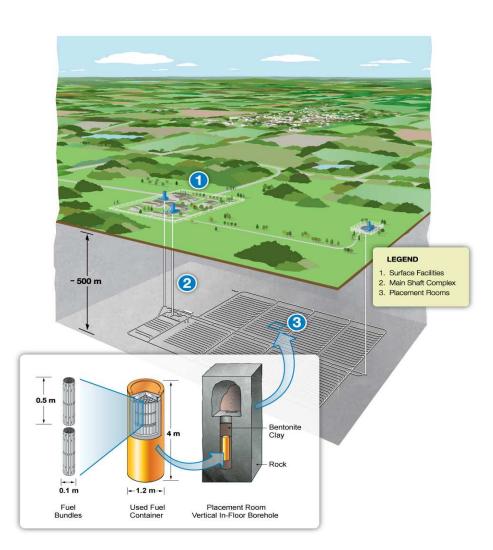
- Continuous monitoring
- Potential for retrievability

#### **A Management System**

- )) Flexible implementation
- Responsive to new knowledge
- Siting process: open, inclusive, fair
- » Sustained engagement

## **National Infrastructure Project**

- » Protect health, safety and environment
- » High technology
- » Strongly regulated
- » Informed, willing host community
- Long-term partnership betweenNWMO and community



# **Collaborative Development of a Site Selection Process**



#### » 2008

What is important for a site selection process?

#### » 2009

Review of proposed process

#### » 2010

Initiated siting

Invitation to communities to Learn More

#### » Foundation of process:

- Safety
- Community-driven process
- Informed, willing host community



## **Guiding Principles**

- » Focus on Safety
- » Meet or exceed regulatory requirements
- » Informed and willing host community
- » Focus on the nuclear provinces
- » Right to withdraw
- » Siting process led by interested communities
- » Respect Aboriginal rights, treaties and land claims
- » Shared decision-making
- » Inclusiveness
- » Support capacity building
- » Informing the process
- » Community well-being
- » Ongoing engagement of governments

People said the siting process needs to be grounded in principles that reflect their values, concerns and priorities.

## Communities Engaged in Learning More





- » 21 communities engaged in learning about the project
  - » 18 have requested Preliminary Assessments (Step 3)
  - 3 considering interest in proceeding on (Step 2)

"Expressions of Interest" phase suspended in September 2012

2013-02-06

## **Multiple Stages of Assessment and Dialogue**



#### **Initial Screening (complete)**

~ 3 months



#### **Preliminary Assessment:** Phase 1 (Desktop) (in progress)

~ 18 months



#### **Preliminary Assessment: Phase 2 (Field Work)**

Multi-year work (with short list of communities) (may begin 2014)

**Engagement, Dialogue,** Mutual Learning, Collaboration...

## **Detailed Site** Characterization

~ potentially 3-5 years

(followed by regulatory approvals)



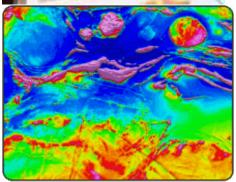
## **Preliminary Assessments**



1. Potential to find a safe site?

- 2. Potential to foster well-being of community?
- 3. Potential for citizens' continued interest?





4. Potential to foster well-being of surrounding area?

## Implementation of the Plan Continues



» Technical repository design

» Continued research, and confidence building, international collaboration

- » Ongoing advice and guidance
  - » NWMO Advisory Council
  - » Council of Aboriginal Elders
  - » Municipal Association Forum

# Engagement, Transparency, Accountability

### » Involving Canadians in decision-making

- Local communities in siting process
- Aboriginal people
- Surrounding areas, regions
- Municipal associations
- Nuclear host communities
- All levels of government
- Diversity of interests

#### » Five-year Strategic Plan

Developed through engagement and revised through annual public review

#### » Regular reporting on progress

Annual and Triennial Reports submitted to Minister of Natural Resources, and made public

## **Dialogue Continues**













