



AFN ENVIRONMENTAL STEWARDSHIP

RESPECTING AND PROTECTING MOTHER EARTH

USED NUCLEAR FUEL MANAGEMENT

There are currently no long-term management facilities for used nuclear fuel in Canada. In 2002, the Government of Canada brought into force the *Nuclear Fuel Waste Act (NFW Act)*. This Act requires owners of used nuclear fuel to be responsible for the development of long-term management approaches. The Act further requires major owners of used nuclear fuel to establish a waste management organization (the Nuclear Waste Management Organization). These major owners are responsible for financing trust funds for their long-term management responsibilities.

QUICK FACTS



- **There are 22 nuclear power reactors in Canada**
- **Ontario Power Generation - 20 Nuclear Reactors at Bruce, Pickering and Darlington**
- **Hydro Quebec - 1 Nuclear Reactor at Gentilly**
- **New Brunswick Power - 1 Nuclear Reactor at Point Lepreau**

Adaptive Phase Management (APM)

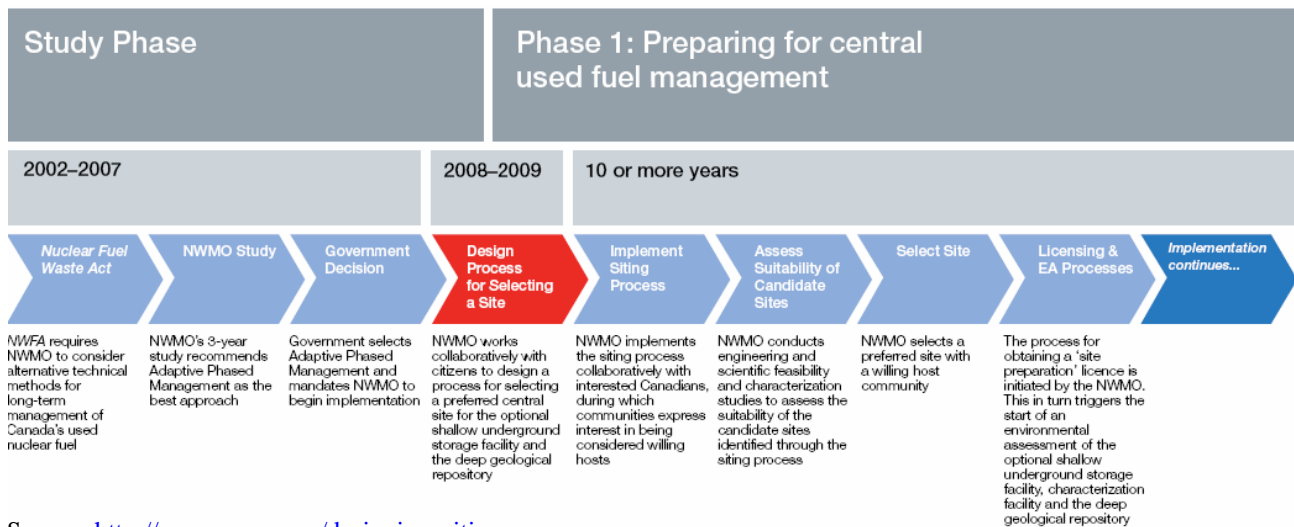
The Nuclear Waste Management Organization (NWMO) is required under the *NFW Act*, to recommend to the Government of Canada, a preferred approach for the long-term management of used nuclear fuel. In 2007, the Government of Canada selected **Adaptive Phase Management (APM)** as the preferred approach for dealing with used nuclear fuel. APM has as its end-point a deep geological repository, or storage facility, where the used nuclear fuel will be safely and securely contained and isolated.

Highlights of APM

- ☒ Centralized containment and isolation in a deep geological repository in suitable rock formations;
- ☒ Flexibility in implementation through a phased decision-making process with engagement of people and communities, including First Nations;
- ☒ Optional provision for an interim step, in the form of a shallow underground storage facility of used nuclear fuel at the central site;

- ☠ Site selection focused on provinces that currently benefit from the nuclear fuel cycle, that is Saskatchewan, Ontario, Quebec and New Brunswick, but does not exclude other regions;
- ☠ A willing and informed community to host the central facilities.

Adaptive Phase Management will be developed and implemented over many decades. It is likely to take a number of years before a suitable site within an informed and willing host community is found. NWMO will proceed with the design process for selecting a site, supported by a public engagement process. This engagement process will include dialogue with First Nations as there may be potential impacts for First Nations communities.



Source: <http://www.nwmo.ca/designingasitingprocess>

NEW

GET INVOLVED
DRAFT SITE SELECTION PROCESS PLAN - PUBLIC DIALOGUE – SPRING 2009
<http://www.nwmo.ca>

For more information on how to get involved, contact the Assembly of First Nations at 613-241-6789 or toll-free 1-866-869-6789 or send an email to environment@afn.ca