



Consultation Backgrounder

The Canadian Nuclear Safety Commission (CNSC) has released its regulatory document, [REGDOC-1.2.3, Licence Application Guide: Licence to Prepare Site for a Deep Geological Repository](#), for public consultation. The following information is designed to help Canadians participate in our public consultation. It provides an overview of all the important concepts associated with REGDOC-1.2.3.

Deep geological repository

A [deep geological repository](#) (DGR) is a facility where radioactive waste is placed in a deep, stable geological formation, usually several hundred metres or more below the surface. The facility is engineered to isolate and contain radioactive waste to provide long-term isolation of nuclear substances from the environment.

In Canada, no DGRs are currently under construction or operating. However, the Nuclear Waste Management Organization (NWMO) has been seeking a site for a DGR in Canada since 2010. Their DGR proposal is known as the [Adaptive Phased Management \(APM\) project](#).

Regulatory oversight

There are many organizations involved in major projects like a DGR. Several organizations have been talking to Canadians about proposed nuclear projects, and the role of various players may be unclear. The CNSC, as Canada's nuclear regulator, is responsible for ensuring that anyone who plans to conduct an activity under the *Nuclear Safety and Control Act* (NSCA) can meet all of their obligations under the Act and its regulations.

For any Canadian DGR, the process would begin with a request to license site preparation activities. The role of the CNSC is to make licensing decisions, based on a thorough evaluation that an applicant is qualified to carry on the licensed activity and will make adequate provision to:

- protect the environment, the health and safety of persons
- maintain national security and meet Canada's international obligations

This evaluation is done through the detailed review of technical documents and other submissions. Should a licensing decision be made to grant a licence, CNSC staff conduct inspections and use other compliance verification tools to ensure that licensees meet the commitments they've made to protect Canadians' health, safety and security as well as the environment.



Licence application guides

The CNSC publishes licence application guides to help applicants to better understand the licensing requirements and guidance associated with the NSCA and its regulations. Licence application guides identify relevant nuclear standards and technical guidance documents to which an applicant should refer to when preparing an application.

CNSC staff review all information in an application to ensure that the submission is complete and identifies how the applicant will meet all requirements before the submission is brought to the independent Commission for a decision.

Site preparation

Site preparation for a DGR is an activity that must be licensed under the NSCA. Site preparation activities are limited to establishing basic infrastructure to support the future construction and operation of a nuclear facility. The following table gives examples of types of activities that are permitted or prohibited under a CNSC licence to prepare site.

Permitted activities	Prohibited activities
<ul style="list-style-type: none"> ✓ clearing vegetation and grubbing ✓ levelling the land ✓ installing fencing and infrastructure, such as power supply and utilities ✓ establishing site access roads and parking ✓ erecting flood protection and erosion control measures ✓ building non-nuclear facility structures, systems and components, such as foundation structures 	<ul style="list-style-type: none"> ✗ transporting nuclear or hazardous materials, such as used nuclear fuel, to the site ✗ storing nuclear or hazardous materials on the site ✗ processing nuclear materials on site ✗ packaging used nuclear fuel on site ✗ building any DGR facility structures, systems or components on the site

If an applicant obtains a licence to prepare a site, it does not guarantee that they will receive a licence to construct or operate a facility. Those subsequent activities would require a new application.

Regulatory document

REGDOC-1.2.3 is a licence application guide for obtaining a licence to prepare a site for a DGR. It contains:

1. an introduction that sets the scope of the document
2. an overview of what's involved in site preparation



- 3. general administrative information
- 4. detailed technical requirements and guidance
- 5. an appendix that lists reference documents by CNSC's safety and control areas (SCA)

The CNSC groups its regulatory requirements and expectations for the safety performance of programs into 14 SCAs, on topics such as environmental protection, physical design and security. Learn more about the [CNSC's SCAs](#) at nuclearsafety.gc.ca.

Impact assessment

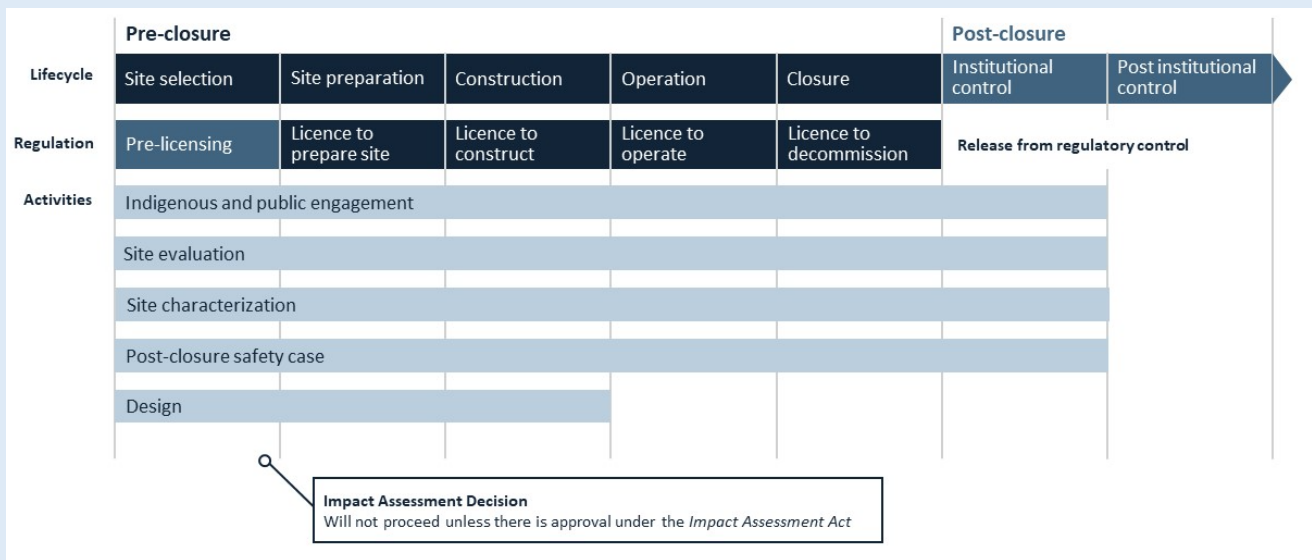
Major projects, like a DGR, have the potential to cause significant environmental, economic, social, and health impacts, as well as impacts to Indigenous peoples. Major projects in Canada must undergo a federal impact assessment* before any licensing decisions can be made.

*Replaces the former environmental assessment process under the *Canadian Environmental Assessment Act*.

Licensing

The licensing stages for the lifecycle of a DGR facility are illustrated below. While licensing decisions are made in sequence, some activities are continuously managed throughout the lifecycle of the DGR facility, such as site evaluation, site characterization and the development of the post-closure safety case, as well as engagement of Indigenous communities and the public.

Regulatory licensing stages and lifecycle activities





Public consultation

The CNSC has posted REGDOC-1.2.3 for public consultation on letstalknuclearsafety.ca. As part of the public consultation, the CNSC can only respond to comments about content in REGDOC-1.2.3.

Once the public consultation period closes, you will have a further opportunity to review all the comments we've received and provide more input during a feedback period. After the feedback period is complete, the CNSC will review all the comments received and update the REGDOC accordingly. Finally, REGDOC-1.2.3 will be presented to the Commission at a [public meeting](#).

The public consultation on REGDOC-1.2.3 is the opportunity for the CNSC to hear from Canadians about this document. Provide your feedback at letstalknuclearsafety.ca by May 23, 2023.