

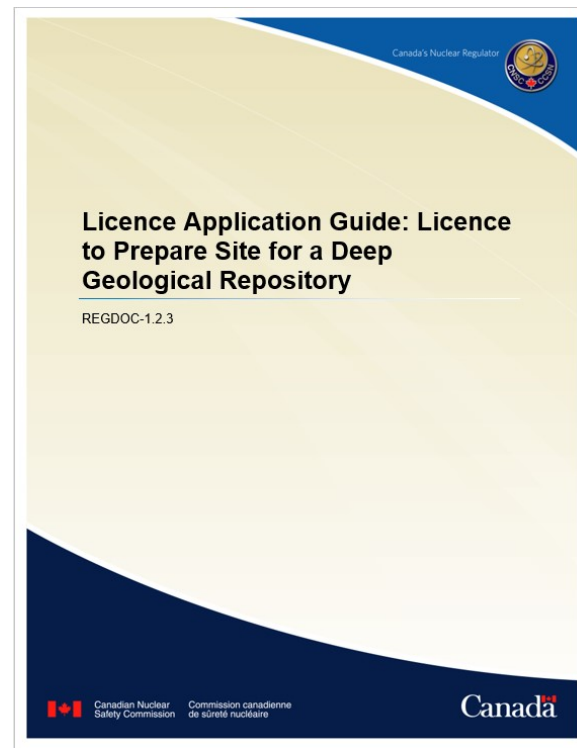


REGDOC- 1.2.3, *Licence Application Guide: Licence to Prepare Site for a Deep Geological Repository*

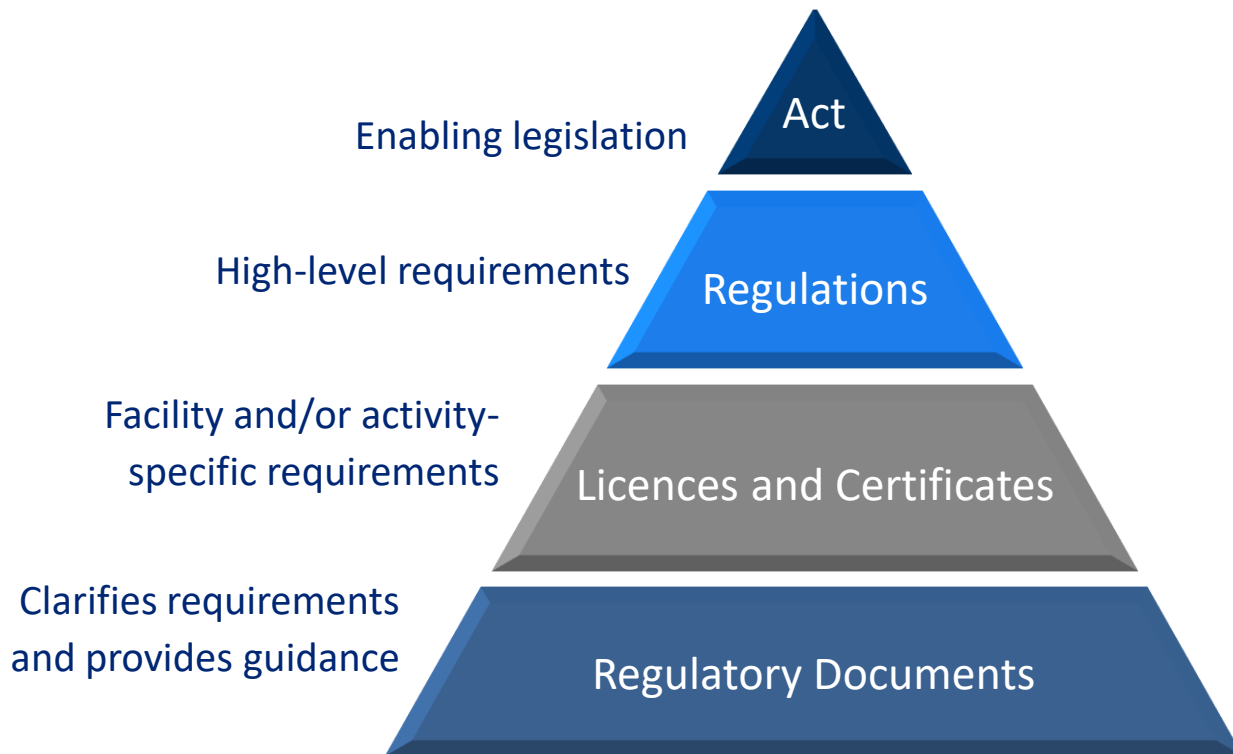
Commission Meeting
February 21, 2024



Request acceptance of:
REGDOC-1.2.3,
*Licence Application Guide:
Licence to Prepare Site for a
Deep Geological Repository*



- ➔ CNSC's Regulatory Framework and Licence Application Guides (LAGs)
- ➔ REGDOC-1.2.3 Overview
- ➔ Results of public consultation
- ➔ Conclusion and recommendation



All parts of the regulatory framework work together to articulate objectives to be met to prevent unreasonable risk to the environment, health and safety of persons and national security.

1.0 Regulated Facilities and Activities

- 1.1 Reactor Facilities
- **1.2 Class IB Facilities**
- 1.3 Uranium Mines and Mills
- 1.4 Class II Facilities
- 1.5 Certification of Prescribed Equipment
- 1.6 Nuclear Substances and Radiation Devices

2.0 Safety and Control Areas

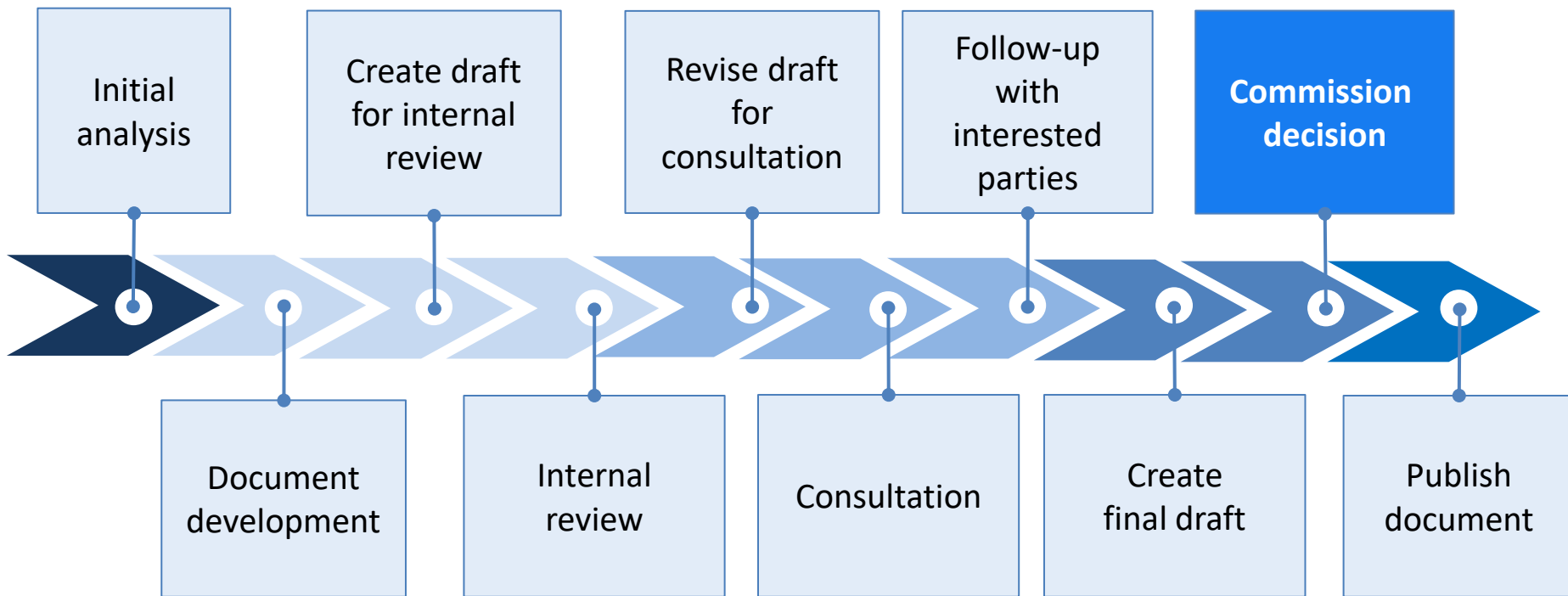
- 2.1 Management System
- 2.2 Human Performance Management
- 2.3 Operating Performance
- 2.4 Safety Analysis
- 2.5 Physical Design
- 2.6 Fitness for Service
- 2.7 Radiation Protection

- 2.8 Conventional Health and Safety
- 2.9 Environmental Protection
- 2.10 Emergency Management and Fire Protection
- 2.11 Waste Management
- 2.12 Security
- 2.13 Safeguards and Non-Proliferation
- 2.14 Packaging and Transport

3.0 Other Regulatory Areas

- 3.1 Reporting Requirements
- 3.2 Public & Indigenous Engagement
- 3.3 Financial Guarantees
- 3.4 Commission Proceedings
- 3.5 CNSC processes and practices
- 3.6 Glossary of CNSC terminology

REGDOC DEVELOPMENT PROCESS



REGDOCs are developed through an iterative development process

1

Provides clarity on information needed before an application is submitted

2

Points to relevant aspects of the regulatory framework

3

Does not introduce any new requirements

4

Is streamlined and focused

5

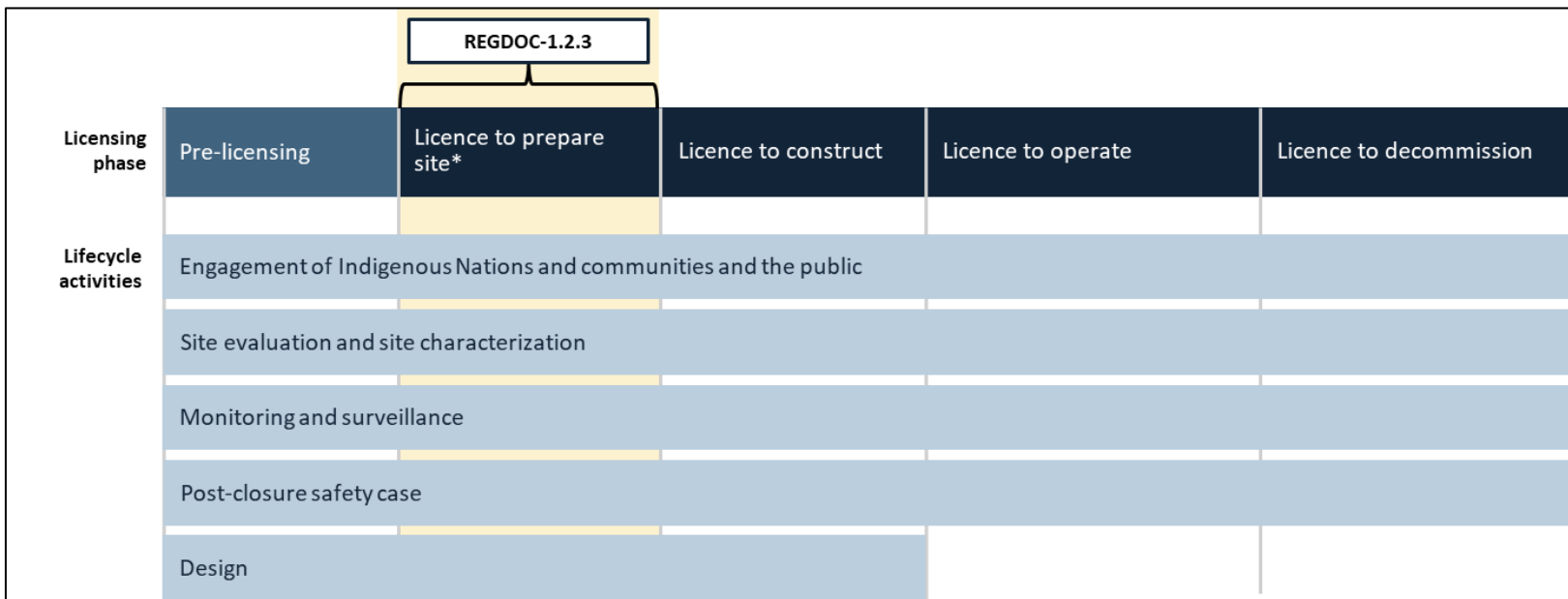
Does not replace pre-licensing discussions with CNSC staff

Licence Application Guides are a roadmap to the CNSC's Regulatory Framework

- A licensed activity under the NSCA
- Site preparation activities include establishing basic infrastructure to support the future construction and operation:
 - examples include clearing vegetation, grading, fencing, establishing infrastructure and site access
- The focus of site preparation is to ensure that the site will be suitable for a facility's full life cycle

Licensing stages and select lifecycle activities for a deep geological repository

*Before a licensing decision is made, the project must undergo an environmental review under the current federal environmental legislation.



Section 1

Establishes the regulatory basis, clarifies requirements and provides guidance on information needed under *Nuclear Safety and Control Act*

- Underlines the regulatory significance of:
 - developing the safety case
 - documenting the conditions of the site and surrounding region
 - demonstrating that technologies will withstand conditions imposed on facility
- Sets boundaries on the REGDOC's scope:
 - not intended to provide guidance on finding or selecting a site
 - does not apply to disposal facility types other than DGR facilities
 - does not apply to surface facilities and other ancillary facilities
 - does not replace federal impact assessment requirements

Section 2

Lays out key considerations for site preparation, including site evaluation, site characterization, monitoring and surveillance and post-closure safety case

Section 3

Outlines the CNSC's technical references, including applicable REGDOCs/CSA standards, organized by the CNSC's safety and control areas and other regulatory areas, including reporting and engagement

Section 4

Summarizes the CNSC's administrative application requirements.

- Public consultation ran from February 22 to June 8, 2023, on "Let's Talk Nuclear Safety"
- A Consultation Backgrounder outlined the key concepts
- Staff held a public webinar on March 22, 2023, where they answered questions about physical design, site characterization, safety analysis and the licensing process
- Staff reached out to Indigenous Nations and communities located in geographic areas that are currently considering hosting a future DGR

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.

The Consultation Report (CMD 24-M6) provides a summary of the comments received from 20 respondents, on the following themes:

1

Applicability

2

Technical topics

3

Engagement

1 **Applicability:** References, scope, graded approach, specific requirements/SCAs

What we heard	How we addressed it
<ul style="list-style-type: none"> • Lack of supporting references or sufficient explanation • Technical codes and standards not applicable for site preparation 	<ul style="list-style-type: none"> • References were reviewed for relevance and applicability to site preparation
<ul style="list-style-type: none"> • Relevance of regulatory requirements (reactor vs. waste disposal facilities) • Applicability of surface facilities 	<ul style="list-style-type: none"> • Information on graded approach added • Applicability of different facility types was clarified in section 1.2
<ul style="list-style-type: none"> • Guidance vs. requirements • Applicability of certain SCAs during site preparation 	<ul style="list-style-type: none"> • Changes were made to improve clarity, in particular to section 1.3 Management systems

2

Technical topics: Site characterization, monitoring, exclusion zone, facility lifecycle

What we heard	How we addressed it
<ul style="list-style-type: none">Concerns related to the level of detail required with respect to site and baseline characterization, and monitoring	<ul style="list-style-type: none">Revisions and new text were added to further clarify the role of monitoring and surveillance, site evaluation and site characterization
<ul style="list-style-type: none">Establishment of exclusion zone and monitoring of the zone	<ul style="list-style-type: none">Exclusion zone requirements reflect current regulatory framework.
<ul style="list-style-type: none">Uncertainty on suitability for a facility's full lifecycle, post-closure safety case and a plan for decommissioning	<ul style="list-style-type: none">Minor changes were made to ensure clarity on pre-closure and post-closure periods, licensing stages and lifecycle activities

3

Engagement: Indigenous knowledge, community involvement, public disclosure

What we heard	How we addressed it
<ul style="list-style-type: none"> Potential impacts on Indigenous peoples and their ability to exercise their rights Uncertain use of Indigenous knowledge Role of <i>United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) Act</i> 	<ul style="list-style-type: none"> Clarified the importance of early and ongoing engagement and Indigenous knowledge Ongoing work on REGDOC-3.2.2, <i>Indigenous Engagement</i> and with the Government of Canada to implement the <i>UNDRIP Act</i>
<ul style="list-style-type: none"> Inclusion of requirements related to the disclosure of an applicant's project records 	<ul style="list-style-type: none"> REGDOC-3.2.1, <i>Public Information and Disclosure</i>, is already referenced in Section 3.16.

- REGDOC 1.2.3 provides information to applicants for requesting a licence to prepare a site for a DGR by:
 - guiding application content
 - proposing application structure
- The draft was revised according to consultation feedback

CNSC staff recommend:

The Commission accepts

REGDOC-1.2.3, *Licence Application Guide: Licence to Prepare Site for a Deep Geological Repository* for publication and use



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Thank You! Questions?



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