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Licensing Process for New Uranium Mines and Mills in Canada

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LICENSING PROCESS FOR NEW URANIUM MINES AND MILLS IN CANADA

Canadian Nuclear Safety Commission

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LICENSING PROCESS FOR NEW URANIUM MINES AND MILLS IN CANADA

PURPOSE OF DOCUMENT

Canada is currently the largest uranium producer in the world, and there is increasing demand for production. As a result, the Canadian mining community is conducting extensive exploration activities to identify new commercial sources.

With the potential for new uranium mining projects to come forward, the Canadian Nuclear Safety Commission has produced this document on the major steps involved in the established process for licensing a new uranium mine and/or mill. The document is aimed at a broad audience encompassing those involved directly in uranium mine development as well as those who have an interest in the federal regulatory regime that applies to uranium mining and milling. This is meant as a high-level introduction to the regulatory process; more detailed and technical sources are cited within.

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LICENSING PROCESS FOR NEW URANIUM MINES AND MILLS IN CANADA

EXECUTIVE SUMMARY

This information document provides an overview of the licensing process for new uranium mines and mills in Canada based on the requirements of the *Nuclear Safety and Control Act* (NSCA) and regulations made under the NSCA, and making reference to the *Canadian Environmental Assessment Act* (CEAA). It includes a non-technical summary of the information to be provided to the CNSC in licensing applications. Early communication with the CNSC is recommended to help the mine/mill applicant develop a good understanding of the regulatory requirements. This is particularly important in clarifying whether activities for evaluating a new uranium ore body are going to require a CNSC licence.

Under the CEAA, an application for a licence to prepare a site and construct a new uranium mine or mill requires an environmental assessment (EA) of the potential environmental impact of the proposed project. The options for conducting an EA are described, including the documents that are an integral part of this process.

If the EA results in a determination that the project is not likely to cause significant adverse environmental impacts, taking into account the appropriate mitigation measures, the CNSC staff review of the licence application can be completed. The conclusions and recommendations from that review are then presented to assist the Commission in rendering its decision.

A separate licence is required for the operation of the new uranium mine and/or mill. This involves the review of information on all aspects of the proposed operations, with conclusions and recommendations submitted to the Commission.

The final stage for such a mine and/or mill would be its shutdown and decommissioning, and the main elements of the separate decommissioning licence are described. Some information on this final stage must be included much earlier in the process to ensure that adequate provision is made for the eventual decommissioning. At all stages, the CNSC maintains a presence through activities designed to confirm that the operator complies with all licence conditions and regulatory requirements.

Finally, this document addresses the probable timelines involved in the licensing process, and describes the points at which interested parties including the public can provide their input in the decision making process.

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1. INTRODUCTION

The Canadian Nuclear Safety Commission (CNSC) is responsible under the *Nuclear Safety and Control Act* (NSCA) for regulating all nuclear facilities and nuclear-related activities in Canada. Before any person or company can prepare a site, construct, operate, decommission or abandon a nuclear facility, or possess, use, transport or store nuclear substances, they must obtain a licence issued by the CNSC.

In general, the licensing process for new uranium mines is initiated following the exploration stage to identify a potential ore body, and before the specific physical activities to evaluate the best approaches for the mining, ore processing, and milling for the ore body are carried out.

A potential ore body is considered to be a mineral deposit that can be economically extracted. A significant quantity of information from exploration and assessment of potential mining, ore handling, milling and waste management methods may be required to determine whether the mineral resource can be economically and safely extracted and processed. This assessment could require an understanding of the site geology, ore and waste rock mineralogy, ground water and many other factors. The collection of this information could require extensive surface exploration drilling or test pits and site assessments. These activities are associated with exploration and are under provincial or territorial government jurisdiction.

Once exploration activities are concluded and a potential ore body is identified, additional activities may be required to further define the mining, ore handling and milling processes for the economic and safe extraction of the ore body. These activities may involve the development of shafts and declines, test mining and milling activities and the installation and operation of more permanent site infrastructure such as effluent treatment facilities, waste storage facilities and headframes. These types of activities are considered to be evaluation activities and are subject to the CNSC licensing process.

This document provides an overview of the current process for licensing new uranium mines and mills in Canada, taking into consideration the requirements of the NSCA and associated regulations. The description of the process also takes into account a key prerequisite for a licence to be issued by the Commission, which is the completion with positive result of an environmental assessment (EA) pursuant to the *Canadian Environmental Assessment Act* (CEAA).

2. THE NUCLEAR REGULATORY FRAMEWORK IN CANADA

Regulation of nuclear energy and nuclear substances is a federal responsibility in Canada. The modern legislative framework for this regulation is provided by the *Nuclear Safety Control Act* (NCSA) that came into force in May 2000. The NCSA established the Canadian Nuclear Safety Commission (CNSC) as the independent agency that develops and implements the nuclear regulatory regime. Prior to the NSCA, the federal nuclear regulatory function had been conducted by the Atomic Energy Control Board, which had been established in 1946 by the *Atomic Energy Control Act*.

The CNSC regulates the use of nuclear energy and materials to protect health, safety, security and the environment and to respect Canada's international commitments on the peaceful use of nuclear energy¹. It is an independent federal regulatory agency and quasi-judicial administrative tribunal. The CNSC is comprised of two components: a Commission tribunal and a staff organization².

The Commission has the responsibility to:

1. establish regulatory policies on matters relating to health, safety, security and the environment;
2. make legally binding regulations; and,
3. make licensing decisions based on laws and regulations.

CNSC staff review applications for licences according to regulatory requirements, make recommendations to the Commission, and enforce compliance with the NSCA, regulations, and any licence conditions imposed by the Commission.

On behalf of the Government of Canada, the CNSC implements the Safeguards Agreement and Additional Protocol between Canada and the International Atomic Energy Agency (IAEA) for the verification of Canada's commitments concerning the peaceful use of nuclear energy and materials. The CNSC also cooperates with other national governments to ensure compliance with the non-proliferation terms and conditions of Canada's bilateral nuclear cooperation agreements and in advancing multilateral nuclear non-proliferation arrangements.

With regards to uranium mines and mills, section 26 of the NSCA prohibits any person from preparing a site, constructing, operating, decommissioning or abandoning a nuclear facility without first obtaining a licence granted by the Commission. Section 24(4) of the NSCA further states that "no licence may be issued unless, in the opinion of the Commission, the applicant:

- is qualified to carry on the activity that the licence will authorize the licensee to carry on; and
- will, in carrying on that activity, make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed."

In making a licensing decision, the Commission considers the application, recommendations from CNSC staff, and any written or oral presentations from intervenors (including the public) made during public hearings. The *Canadian Nuclear Safety Commission Rules of Procedure* set out the process for participation in public hearings held by the Commission. Section 5 of this document provides additional information on public participation in the licensing process.

¹ The CNSC's mandate is set out in section 9 of the *Nuclear Safety and Control Act*.

² The Canadian Nuclear Safety Commission is referred to as the 'CNSC' when referring to the organization and its staff in general, and as the 'Commission' when referring to the tribunal component.

The regulations issued under the NSCA that apply to uranium mines and mills are set out in Section 3.2 of this document. These regulations provide licence applicants with general requirements, and list information which applicants must submit to the CNSC as part of the licence application. Applications for licences must be accompanied by licence fees, as set out in the *CNSC Cost Recovery Fees Regulations (2003)*.

In addition to the regulations issued under the NSCA, the CNSC regulatory framework includes regulatory documents on matters related to its mandate. Regulatory documents provide guidance to licence applicants on acceptable ways of complying with regulatory requirements, and form the basis for the assessment of licence applications. The main classes of regulatory documents developed by the CNSC are Regulatory Policies, Regulatory Standards, Regulatory Guides and Regulatory Notices. All regulatory documents are developed through a transparent consultative process with stakeholders, which include licensees, government, non-governmental organizations, and the general public, as well as First Nations and Aboriginal groups.

The CNSC regulatory framework draws upon Canadian and international standards and best practices, including the nuclear safety standards of the International Atomic Energy Agency (IAEA). Canada has been an active participant in the development of these IAEA standards, as well as the supporting technical documents which provide more specific technical requirements and best practices for the siting, design, construction, operation and decommissioning of new uranium mines and mills. This participation is based on Canada's experience as a world leader in mine safety and mining techniques. Canadians, therefore, can be assured that any new uranium mines and mills built in Canada will meet the highest standards for health, safety, security and environmental protection.

Other legislation enacted by Parliament with which applicants are required to comply includes, but is not limited to:

- the *Canadian Environmental Protection Act*;
- the *Fisheries Act*;
- the *Species at Risk Act*;
- the *Migratory Bird Convention Act*;
- the *Canada Water Act*, and
- the *Transport of Dangerous Goods Act*.

Licences granted by the Commission may contain specific conditions in addition to the licensee's responsibility for meeting the requirements of the NSCA and associated regulations. The information submitted by an applicant in support of its application for a licence may be referenced in the licence conditions, which the licensee is legally bound to comply with.

Any applicant must be aware that other provincial or territorial legislation may also apply in regards to their project, and it is the responsibility of the applicant to address this issue.

It is important to note that it is the responsibility of licence applicants to choose the mining and milling technology that best meets their particular needs, while satisfying all applicable standards for health, safety, security and environmental protection.

3. LICENSING PROCESS FOR NEW URANIUM MINES AND MILLS

The licensing process under the NSCA is initiated by an application sent by the proponent to the CNSC. As stated in the *Canadian Nuclear Safety Commission Rules of Procedure*, the application must be filed with the Secretary of the Commission.

The *Uranium Mines and Mills Regulations* set out the requirements for the following phases in the life-cycle of a uranium mine or mill:

- (1) a licence to prepare a site and to construct;
- (2) a licence to operate;
- (3) a licence to decommission; and
- (4) a licence to abandon

The initial licence application may be much more oriented to site preparation than to subsequent construction work, depending on the applicant's capacity, plans and understanding of the potential ore body. It is therefore essential for the applicant to have discussions with the CNSC staff on the level of information that will be needed in the initial application.

The CNSC staff's assessment of information submitted by proponents in support of their application is carried out with input from other federal and provincial/territorial government departments and agencies responsible for regulating health and safety, environmental protection, emergency preparedness, and the transportation of dangerous goods.

The above listed licences are normally granted for each phase and issued in sequence. However, applications to operate components of the facility, while continuing with the construction of a new uranium mine or mill, can be assessed and approved under one licence based on the scope and proposed activities of the application. Additional information on the licensing process under the NSCA is provided in section 3.2 of this document.

Prior to any licence being granted pursuant to the NSCA and its regulations, the CNSC must meet its obligations under the *Canadian Environmental Assessment Act (CEAA)*. Section 5(1)(d) of that Act stipulates that an environmental assessment (EA) must be carried out to identify whether a project is likely to cause significant adverse environmental effects, taking into account the appropriate mitigation measures. Only when such a determination has been made can any federal authority issue a permit or licence, grant an approval, or take any other action for the purpose of enabling the project to be carried out in whole or in part. More information on EAs is available in the next section.

3.1 A PREREQUISITE FOR APPROVALS: ENVIRONMENTAL ASSESSMENT DETERMINATION UNDER THE CEAA

An Environmental Assessment (EA) is a planning tool used in certain projects by federal authorities – ministers, departments and agencies of the Government of Canada – to identify the possible significant environmental effects of a proposed project and determine whether those effects can be mitigated before the project is allowed to proceed.

Federal obligations and responsibilities, as well as the federal EA process, are detailed and defined in the Canadian Environmental Assessment Act (CEAA) and related regulations³. Please note that certain jurisdictions may be governed by separate EA legislation. Early communication with the CNSC can help the applicant develop a good understanding of the regulatory requirements for the EA. Here we will describe the CEAA process as the most generally applicable case. Under the CEAA, an EA must be conducted before a federal authority “enables a project to be carried out” by:

- proposing and committing to a project;
- providing financial assistance to a proponent (an applicant);
- selling, leasing or otherwise transferring the control or administration of federal land; or,
- providing a licence, permit or an approval.

In the context of a new uranium mine or mill, the application to the CNSC for a licence would require the CNSC to initiate an EA before making a decision on the application. The same mining or milling proposal might also trigger EAs by other federal or provincial/territorial departments, depending on the elements of the proposal. The separately triggered EAs would be coordinated and harmonized as a single EA process, to avoid duplication for the proponent.

There are two different tracks possible for federal environmental assessments of new uranium mines or mills: the screening track, and the comprehensive study track. Either track of EA could be referred to a mediator or to a review panel if public concerns warrant it, or if it is determined that the project would have significant adverse environmental effects that cannot be mitigated.

Each project requires its own specific determination of which EA track will be used. For modifications to existing facilities and some expansions of current projects, the screening EA would be applicable. New projects would most likely trigger a comprehensive study.

For the purposes of this document, a description of the Comprehensive Study process has been chosen as an example EA process.

Comprehensive Study Process

The projects that follow the track for comprehensive studies are defined in CEAA under the *Comprehensive Study List Regulations*, and this includes, for example, the proposed construction of a "uranium mine" or "uranium mill" that is not within the boundaries of an existing licensed mine or mill.

When conducting a comprehensive study, the CNSC first develops a draft EA Guidelines document that identifies the scope of the project, and scope of the factors to be included in the EA, including the identification and assessment of possible mitigation measures for adverse environmental effects.

³ For more information, check the Canadian Environmental Assessment Agency’s website: <http://www.ceaa-acee.gc.ca>

At the same time that the EA Guidelines document is being developed, CNSC is also preparing a Comprehensive Study Track Report (CSTR), which also describes and discusses:

- public concerns in relation to the project;
- the potential of the project to cause adverse environmental effects; and
- the ability of the comprehensive study to address issues relating to the project.

The two documents, the EA Guidelines and the CSTR, are drafted by CNSC staff, issued for public review and comment, and submitted to the Commission tribunal for its consideration and decision at a One-Day Hearing.

The Commission then submits the CSTR and its recommendations to the Minister of Environment to assist the Minister in making a determination whether to continue the environmental assessment by means of a comprehensive study, or to refer the project to a mediator or review panel.

If it is decided that the EA will continue as a comprehensive study, the CNSC delegates the completion of the technical studies and preparation of the draft EA Study Report to the proponent. The proponent must then provide all of the information necessary to satisfy the approved EA Guidelines. The proponent's Study Report is continually reviewed and analyzed by technical specialists at the CNSC and other federal authorities who use the information to prepare the draft Comprehensive Study Report (CSR). In practice, a number of exchanges of information and details occur between the proponent and the CNSC staff as the CSR reaches the final drafting stage.

The CSR is then submitted to the Minister of Environment, with public consultation on it being conducted on behalf of the Minister by the Canadian Environmental Assessment Agency. The Minister of Environment will issue a statement on whether the proposed project is likely to cause significant adverse environmental effects, taking into account the appropriate mitigation measures and follow-up program, before returning the project proposal to the CNSC. If the decision is that there would not be significant adverse environmental effects, the Commission may proceed with the licensing process.

Note that there may be a need to harmonize the federal EA process with provincial/territorial requirements and coordinate EA activities where possible. Given the potential for overlapping EAs, the CEAA allows the federal Minister of the Environment to enter into agreements with provincial and territorial governments relating to the EA of projects where both governments have a statutory EA requirement. These agreements provide guidelines for the roles and responsibilities of each government in the assessment of such projects.

3.2 LICENSING PROCESS UNDER THE NUCLEAR SAFETY AND CONTROL ACT

The process that the CNSC follows for the assessment of a licence application under the NSCA is depicted in the process map in Figure 1, and follows the *Canadian Nuclear Safety Commission Rules of Procedure*. This process map shows key activities carried out by the applicant, CNSC staff and the Commission. Information to be provided by the applicant when applying for a

licence for site preparation and construction, operation or decommissioning of a new uranium mine or mill is specified in:

- Section 3 of the *General Nuclear Safety and Control Regulations*;
- Sections 3 through 7 of the *Uranium Mines and Mills Regulations*;
- the *Nuclear Security Regulations*;
- the *Radiation Protection Regulations*;
- the *Packaging and Transport of Nuclear Substances Regulations*;
- the *Nuclear Non-Proliferation Import and Export Control Regulations*; and,
- the *Nuclear Substances and Radiation Devices Regulations*.

Licence applications must contain all of the information specified in the regulations mentioned above. This information should be thorough and complete for the scope of the activities being proposed at the time the application is submitted, so that the CNSC staff's assessment of the application can be as effective and efficient as possible, and so that any concerns can be identified and addressed at the earliest possible time. This, in turn, will minimize the time needed by CNSC staff to prepare recommendations regarding the application for consideration by the Commission.

The *Uranium Mines and Mills Regulations* require information on decommissioning plans for the new uranium mine or mill in the licensing process. The Commission may require financial guarantees for decommissioning and long-term management of the waste rock, tailings and other wastes from the facility (the financial guarantees are updated for each stage of the licensing process). Such financial guarantees may be specified in a licence condition. Follow-up programs from the EA may also be added to the licence by the commission.

Early communication with the CNSC can help the applicant develop a good understanding of the regulatory requirements for new uranium mines and mills, the licensing process and the information to be submitted in support of a licence. Early communications also enable the CNSC to plan for the regulatory review, including making sure that qualified staff are available to carry out the assessment.

3.2.1 Site Preparation and Construction

The Commission cannot issue a site preparation or construction licence unless a positive decision has been made on the EA as required by Section 5(1)(d) of the CEAA (as discussed above in Section 3.1).

As set out in Section 24 (4) of the NSCA, the Commission must be satisfied that the proponent is qualified to design, construct and operate the facility on the proposed site in a manner that will meet all health, safety, security and environmental protection requirements before it issues a licence. The *Uranium Mines and Mills Regulations* detail the information to be supplied in order for the Commission to reach a decision. Information required in support of the application to prepare a site and construct a new uranium mine or mill includes, for example:

- a description of the proposed design for the new uranium mine or mill and its waste management system, taking into consideration physical and environmental characteristics of the site;
- environmental baseline data on the site and surrounding area;
- for mines, a description of the site geology, ground support structures, and ground water regime (local and regional);
- the anticipated quantities and grade of ore and waste rock that will be removed and their proposed storage and disposal locations;
- a description of the proposed mining and milling methods, and their associated programs;
- results of the process-hazard analysis, and the proposed quality assurance program for the design of the mine or mill;
- a proposed commissioning plan for the components, systems and equipment to be installed in the mine or mill;
- measures to mitigate the effects on the environment and health and safety of persons that may arise from the construction, operation or decommissioning of the facility;
- information on the potential releases of nuclear substances and hazardous materials, and proposed measures to control them; and,
- programs and schedules for recruiting and training operations and maintenance staff.

Specific information required to obtain a licence to prepare a site and construct a uranium mine or mill site is listed in Sections 3, 4 and 5 of the *Uranium Mines and Mills Regulations* (available at <http://laws.justice.gc.ca/en/n-28.3/sor-2000-206/154580.html>).

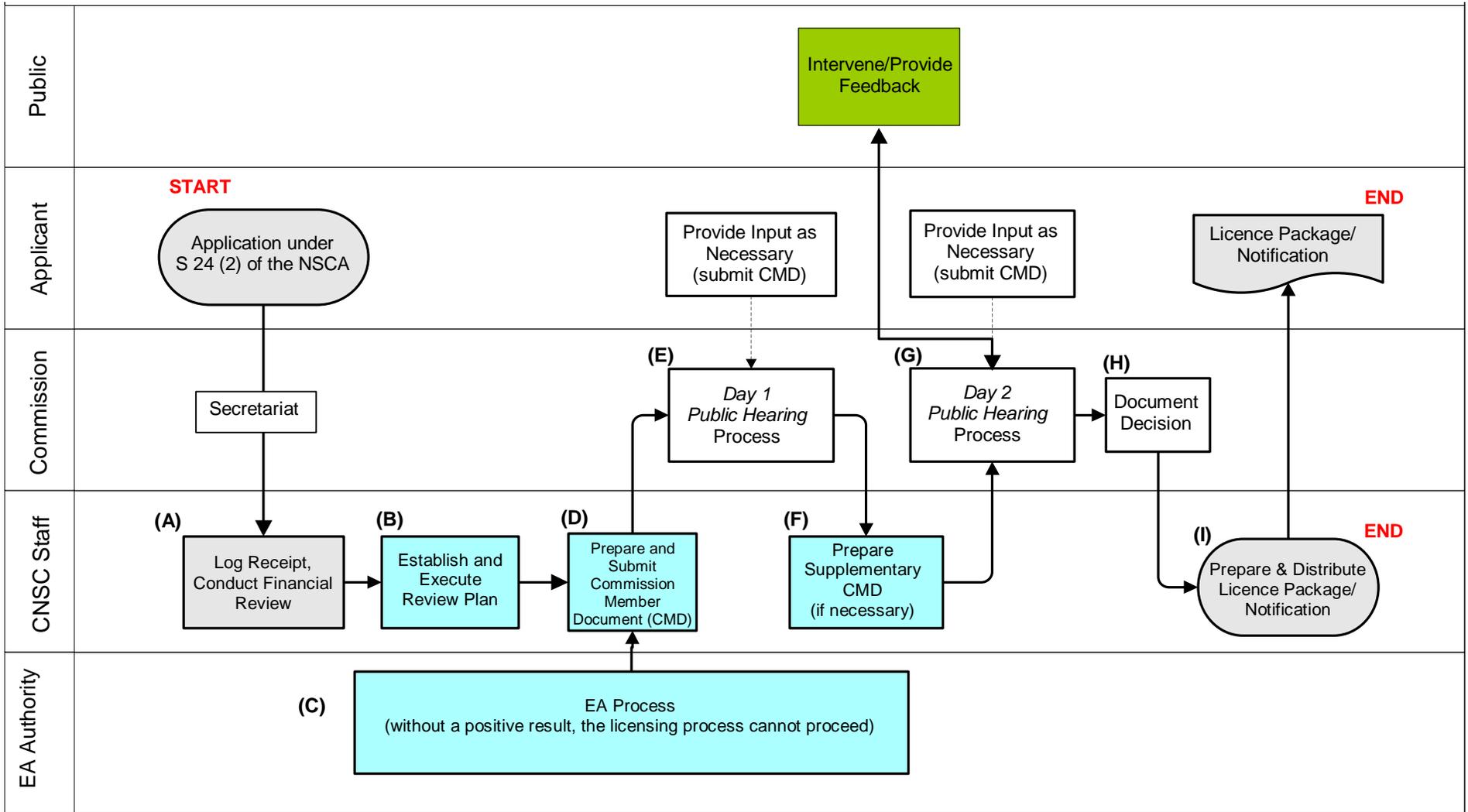
The technical information arising from consideration of external events, site specific characteristics and supporting safety assessments, are used as input into the design of the new uranium mine or mill, and must be included in the application.

Upon receipt of a licence application to prepare a site for and construct a uranium mine or mill, the CNSC performs a thorough assessment of the design documentation, process-hazard analysis, and other information required by the regulations. The assessment focuses on determining whether the proposed design and safety analysis, along with other required information, complies with regulatory requirements. This review involves both rigorous engineering and scientific analyses, taking into consideration the CNSC's experience and knowledge of best practices in uranium mine and mill design and operation gained from existing facilities in Canada and around the world.

CNSC staff's conclusions and recommendations from these reviews are documented in reports submitted to the Commission. Based on these reports and all other information presented, and following a Commission Hearing(s), the Commission then makes the final decision on whether to issue a licence to prepare a site and construct a uranium mine or mill. As noted earlier, the Commission may not issue a licence unless it is satisfied that the applicant will make adequate provisions to protect health, safety, security and the environment, and to implement international obligations to which Canada has agreed. As such, it is the responsibility of the applicant to show that there are no major safety, environmental, or security issues outstanding.

During the site preparation and construction phase, the CNSC staff carry out compliance activities to verify that the licensee is complying with the NSCA, associated regulations, and its licence. Such compliance activities focus on confirmation that facility preparation and construction is consistent with the design, and that quality assurance requirements are being met. In addition, some commissioning activities may be allowed in order to demonstrate that the facility has been constructed in accordance with the approved design, and that the systems, structures and components important to safety are functioning reliably. All relevant commissioning tests must be satisfactorily completed and documented before an operating licence is issued.

Figure 1: The Process for Obtaining a Licence under the *Nuclear Safety and Control Act*



3.2.2 Operation

When applying for a licence to operate a new uranium mine or mill, it is the responsibility of the applicant to demonstrate to the CNSC that it has established the safety management systems, plans and programs that are appropriate to ensure safe and secure operation. Information required in support of the application for a licence to operate includes, for example:

- a description of the structures, systems and equipment at the uranium mine or mill, including their design and operating conditions;
- the results of any commissioning work; and
- proposed measures, policies, methods and procedures for:
 - commissioning systems and equipment;
 - operating and maintaining the nuclear facility;
 - handling nuclear substances and hazardous materials;
 - controlling releases of nuclear substances and hazardous materials into the environment;
 - waste management systems;
 - preventing and mitigating the effects on the environment and health and safety resulting from operation and decommissioning of the facility;
 - ground control measures for mines;
 - assisting off-site authorities in emergency preparedness activities, including assisting off-site authorities to deal with an accidental off-site release; and
 - nuclear security.

A more complete listing of the specific information required to obtain a licence to operate a new uranium mine or mill is found in Section 6 of the *Uranium Mines and Mills Regulations*.

In addition to assessing the information included in the application to operate the new uranium mine or mill, the CNSC staff also verifies that any outstanding issues from the site preparation and construction stage have been resolved.

CNSC staff's conclusions and recommendations from these reviews are documented in reports submitted to the Commission. Following the Commission Hearing(s), the Commission makes the final decision on the issuance of the operating licence.

The licence to operate will enable the operator to mine the ore or begin final commissioning of the mill circuits. The purpose of the commissioning activities is to demonstrate that the facility has been constructed in accordance with the approved design, and that the systems, structures and components important to safety are functioning reliably. All relevant commissioning tests must be satisfactorily completed before the operating licence is issued. Subsequent changes to the facility would require approval prior to being commissioned.

During subsequent operation of the facility, CNSC staff carries out compliance activities to verify that the licensee is complying with the NSCA, associated regulations and its licence,

including any Follow-up Program requirements from the EA. If the compliance activities identify a non-compliance or an adverse trend, there is a range of possible enforcement actions that the CNSC can take.

3.2.3 Decommissioning

As noted above, information on decommissioning plans and financial guarantees will be taken into account at all stages of licensing (site preparation, construction, and operation). At the end of a uranium mine or mill's useful life, it will be necessary to decommission the facility. This will require a separate EA and licence from the Commission. Factors taken into account when evaluating an application to decommission a uranium mine or mill include, but are not limited to:

- the major components and systems within the facility;
- the design features that will facilitate the decommissioning activities and reduce the spread of contamination during operation;
- the expected levels of activation and contamination within the facility following the end of operation;
- the long-term management of some of the nuclear materials on site (e.g., uranium tailings, special waste rock, residues and sludges, contaminated equipment that can not be released from site); and
- the quantities or volumes of all other wastes (radioactive and hazardous) expected during the decommissioning activities.

A listing of the specific information to be provided in support of an application to obtain a licence to decommission a uranium mine or mill is found in Section 7 of the *Uranium Mines and Mills Regulations*.

In addition, the licensee must show that they have sufficient funds to decommission the mine or mill and provide for the long-term management of waste materials. This final stage may also consider the means by which long term institutional controls could apply, if applicable.

4. CONSIDERATIONS REGARDING THE TIMEFRAME FOR LICENSING NEW URANIUM MINES AND MILLS IN CANADA

The regulatory effort required for new uranium mine or mill licensing, from receipt of the initial application to commercial operation, can be divided into three stages:

- environmental assessment;
- licence to prepare the site and to construct; and
- licence to operate.

Figure 2 shows the process map for licensing a new uranium mine or mill, including the EA, work carried out by the CNSC to assess applications, key decision points in the process and activities performed by the applicant. Figure 2 separates the assessment for a site preparation licence from that for a construction licence because the Commission's assessment may result in a

step-wise approach being authorized with “hold points” for CNSC review stipulated in the licence. Although licensing is sequential, it is noted that the EA must consider all “undertakings” associated with the project (i.e. all phases of the project).

Factors that may influence the duration of the licensing process include:

- the EA process, which could take up to 36 months, depending on whether the EA is carried out as a comprehensive study or by a review panel, and depending on the amount of time required by the licence applicant to prepare the necessary and complete documentation (e.g. Environmental Assessment Study Report, providing additional information requirements). This is an estimate based on past experience;
- the information accompanying the application, which should be submitted in a comprehensive and complete package so that the assessment of the application can be carried out in an effective, efficient and timely manner;
- the time required for the applicant to carry out the work necessary to obtain the licence (i.e. prepare the site, and construct and commission the new uranium mine or mill);
- whether there are any major safety issues that require resolution before CNSC staff can prepare their recommendations to the Commission; and
- whether the CNSC has the resources to carry out its review in a timely manner.

Given these factors, it is difficult to specify the overall duration of the licensing process.

5. PUBLIC INVOLVEMENT IN THE LICENSING PROCESS

The CNSC is committed to operating with a high level of transparency. This includes engaging stakeholders, and First Nations and other Aboriginal groups, through a variety of appropriate consultation processes, effective information sharing and communications.

An EA for a new uranium mine or mill, conducted either at the comprehensive study or panel review level, provides significant opportunities for public participation. This includes commenting on draft Environmental Assessment Guidelines and the CSR. Comprehensive studies and panel reviews also include provisions for funding to assist participants in preparing for and participating in the review. These funds are provided and administered by the Canadian Environmental Assessment Agency.

Consideration of licence applications for new uranium mines and mills by the Commission follows the public hearing process as set out in the *Canadian Nuclear Safety Commission Rules of Procedure*, which are available on the CNSC’s Web site at www.nuclearsafety.gc.ca. Typically, public hearings for licensing applications for uranium mines and mills take place over two hearing days within a ninety-day period, with public intervenor submissions taking place on the second hearing day. Public hearings give affected parties and members of the public an opportunity to be heard before the Commission. The timelines for both one-day and two-day hearings, based on the *Rules of Procedures*, are shown in Figure 3.

Following Hearing Day 2, the Commission members deliberate and render their decision. Typically, the Record of Proceedings and Reasons for Decision are published within six weeks after the close of the hearing.

In addition to the formal licensing process, the CNSC encourages licence applicants to undertake pre-application communications activities, such as public consultations, regarding their plans for new uranium mines and mills. The CNSC has issued a regulatory guide which provides general information to licensees on the regulatory requirements for public information programs. This document is titled *Licensee Public Information Programs* and is available at the CNSC website (see http://www.nuclearsafety.gc.ca/eng/regulatory_information/documents/current_docs.cfm, document G-217).

6. HARMONIZED REGULATORY APPROACH

The CNSC utilizes a harmonized or joint regulatory approach for provincial or territorial participation in the CNSC's assessment, licensing and compliance programs for uranium mines and mills. For example, in Saskatchewan an Administrative Agreement signed in 2003 between the provincial departments of Saskatchewan Environment and Saskatchewan Labour, and the CNSC, details a harmonized regulatory framework to address the respective needs, responsibilities and jurisdictions of the federal and provincial agencies. This agreement, entitled "CNSC-Saskatchewan Administrative Agreement for the Regulation Of Health, Safety And The Environment at Saskatchewan Uranium Mines And Mills.", is available on the CNSC web site at http://www.nuclearsafety.gc.ca/eng/regulatory_information/other/.

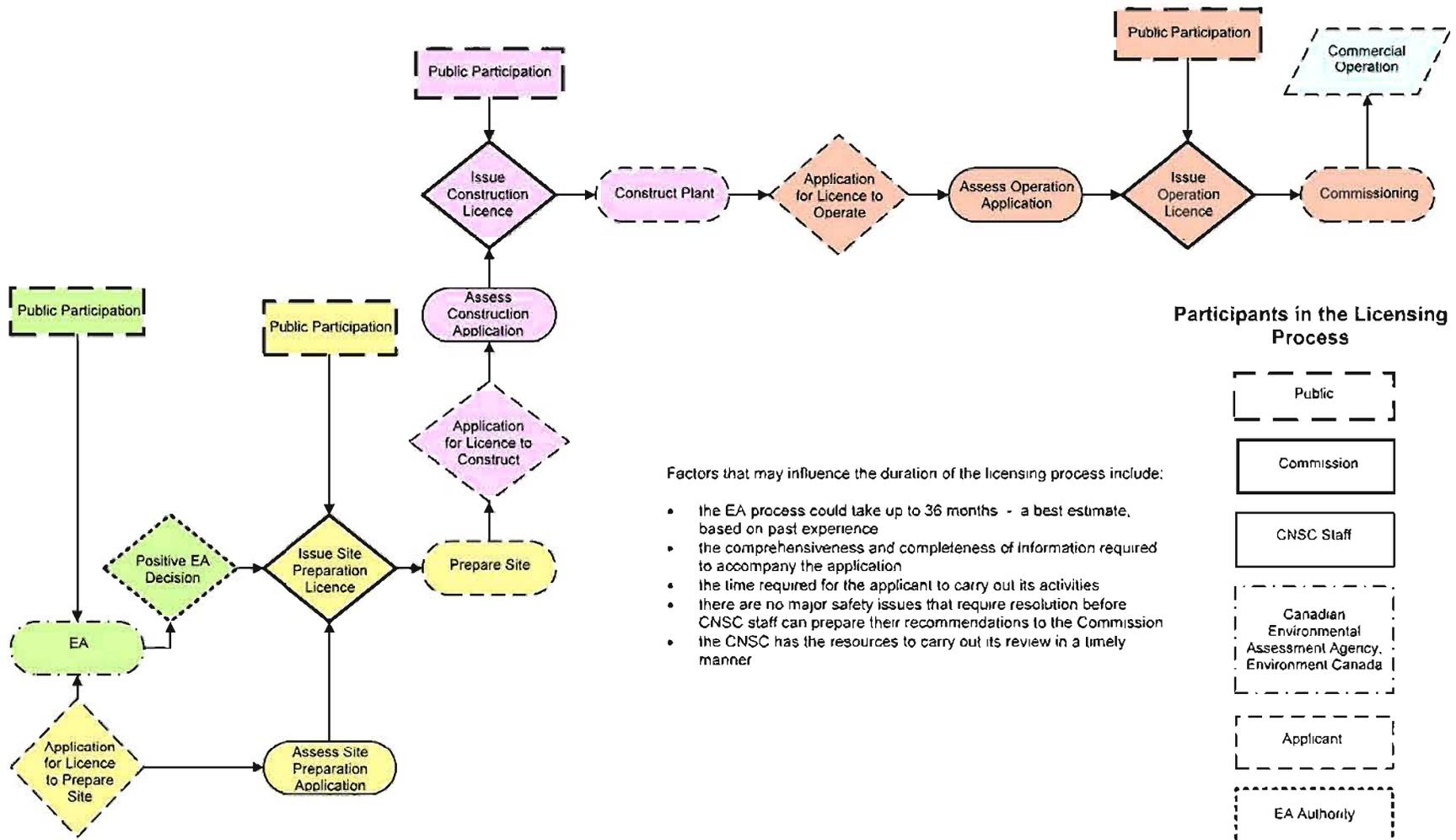
Similar approaches are envisioned across Canada as the interest in siting and constructing new uranium mines and mills continues.

In addition, a joint regulatory approach has also been undertaken with the federal departments of Environment Canada, Fisheries and Oceans, and Indian and Northern Affairs, for example. The overall approach is to:

- rely on defence in depth through the respective regulatory regimes;
- harmonize where practical;
- avoid regulatory delays, confusion, or contradictions;
- maximize efficient stakeholder participation without duplication; and,
- avoid unnecessary or inefficient regulatory overlap.

As such, the CNSC is the main federal point of contact concerning nuclear safety for all Canadian uranium mines and mills.

Figure 2: Licensing Process for a New Uranium mine or mill in Canada (Decommissioning phase not shown)

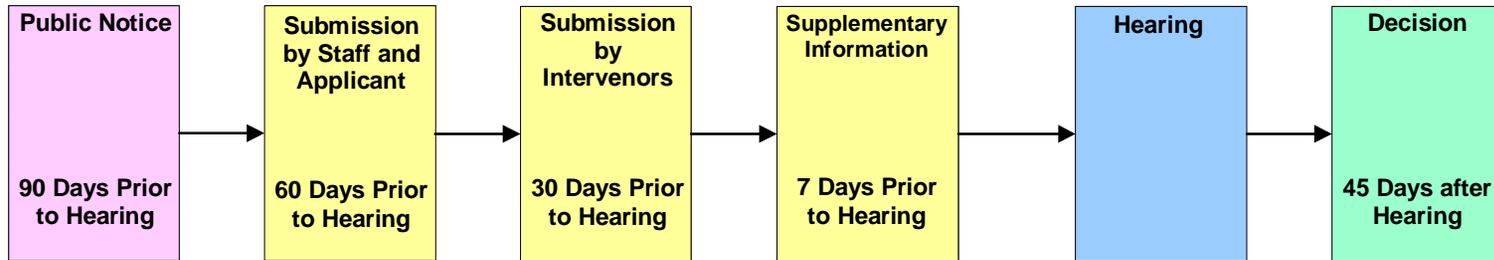


Factors that may influence the duration of the licensing process include:

- the EA process could take up to 36 months - a best estimate, based on past experience
- the comprehensiveness and completeness of information required to accompany the application
- the time required for the applicant to carry out its activities
- there are no major safety issues that require resolution before CNSC staff can prepare their recommendations to the Commission
- the CNSC has the resources to carry out its review in a timely manner

Figure 3: Timelines for One-Day and Two-Day Hearings

One-Day Hearing (~ 5 Months)



Two-Day Hearing (~ 6 Months)

