



Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Cameco Corporation

Subject Application for Revocation of Mining Facility
Removal Licence for the Dawn Lake Project

Date March 22, 2002

1. Introduction

Cameco Corporation (Cameco) has applied to the Canadian Nuclear Safety Commission for the revocation of its licence at its Dawn Lake Project. The Dawn Lake Project is currently subject to a Mine Facility Removal Licence (AECB-MFRL-180-0.1 – no expiry) that was issued by the former Atomic Energy Control Board (AECB).

The Dawn Lake Project is located in north-eastern Saskatchewan approximately 750 kilometres north of Saskatoon and covering an area of 20 to 50 kilometres west of Cameco's Rabbit Lake Mining Facility.

The Dawn Lake Project includes temporary work camps and drill sites which are demobilized at the end of each drilling season. Semi-permanent structures include a fenced core storage compound, garage, core logging building, two shacks and a fuel storage tank. Mineralized core and other contaminated materials are taken to the Rabbit Lake Mining Facility for management.

2. Decision

The Canadian Nuclear Safety Commission, in making its decision, considered information presented for a public hearing held on February 28, 2002 in Ottawa, Ontario.

Based on its consideration of the matter, as described in more detail in the following sections,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, revokes Cameco Corporation's Mining Facility Removal Licence AECB-MFRL-180-0.1 for the Dawn Lake Project.

3. The Public Hearing Process

The public hearing, conducted under the *Nuclear Safety and Control Act* and the *Canadian Nuclear Safety Commission Rules of Procedure*, was held in Ottawa, Ontario on February 28, 2002. The Commission received written submissions and heard oral presentations from CNSC staff (CMD 02-H3) and Cameco Corporation (CMD 02-H3.1 and CMD 02-H3.1A). The Commission also considered a written submission from an intervenor, the Saskatchewan Environmental Society (CMD 02-H3.2).

4. Issues and Commission Findings

4.1 Requirement for a CNSC Licence

Cameco, in its application, submits that the activities currently being carried out on the project, and for the foreseeable future, are strictly surface mineral exploration activities which are exempt

from licensing under the new *Nuclear Safety and Control Act* (NSCA)¹. Referring to **Subsection 2(2)** of the *Uranium Mines and Mills Regulations*, Cameco expressed the view that the current and proposed activities at the Dawn Lake Project are in respect of uranium prospecting and surface exploration and are not associated with the development, production or use of nuclear energy.

CNSC staff concurred with Cameco's interpretation of the licensing requirements and noted that, pursuant to subsection 2(2) of the *Uranium Mines and Mills Regulations*, a licence is not required for surface "exploration" activities. CNSC staff noted, however, that a licence would be required if the activities changed from exploration to the evaluation of an ore body. CNSC staff is of the opinion that the activities at the Dawn Lake Project consist only of exploration activities and, therefore, no licence is required. CNSC staff explained that a licence under the former *Atomic Energy Control Act* was required because of the possibility of accumulating more than 10 kilograms of uranium at the site. A similar requirement for a licence does not exist under the NSCA. Furthermore, the naturally occurring radioactive material in the drill cores at the Dawn Lake Project is specifically exempt from the provisions of the NSCA and its regulations pursuant to section 10 of the *General Nuclear Safety and Control Regulations*.

To clarify at what point a CNSC licence will be required at the Dawn Lake Project, or other potential uranium mine site, CNSC staff reported that it is consulting with stakeholders to better define what constitutes the "evaluation of an ore body" which is subject to CNSC licensing. In this regard, Cameco suggested that the CNSC consider the terms "*indicated resource*" and "*measured resource*" as defined by the Ontario Securities Commission (OSC). Cameco suggested that a CNSC licence could be required when a decision is made by a proponent to spend large amounts of money on delineation drilling to bring the knowledge of the deposit from an "*indicated resource*" to a "*measured resource*" in accordance with the OSC definitions.

The Commission appreciates Cameco's suggestion for a clear definition of the trigger for CNSC licensing at the ore body evaluation stage and notes that CNSC staff will take that suggestion into consideration in its planned broader consultations on, and consideration of the matter. The Commission observed that the OSC definitions proposed by Cameco are based on financial and economic criteria as opposed to explicit health, safety and environmental criteria and that this would need to be considered in the CNSC staff's assessment. CNSC staff indicated that its proposal for a defining guideline criterion, or an amendment of the regulations, could be available in approximately four to six months.

On the basis of the information presented for the hearing, the Commission is satisfied that, for the purpose of the current application, the activities at the Dawn Lake Project are "exploration" activities which do not require a licence by the CNSC.

¹ The *Nuclear Safety and Control Act* replaced the *Atomic Energy Control Act* in May 2000.

4.2 Other Regulation of Mineral Exploration

The Commission considered whether the exploration activities at the Dawn Lake Project, following a revocation of the existing AECB licence, would continue to fall under another regulatory regime that would provide adequate protection of people and the environment.

CNSC staff explained that, at the surface mineral exploration stage, environmental permitting is regulated by Saskatchewan Environment and Resource Management (SERM) under Saskatchewan's *Mineral Industry Environmental Protection Regulations*. CNSC staff also noted that SERM employs its *Surface Exploration Guidelines for the Mining Industry* and that those guidelines cover all aspects of surface mineral exploration and related permitting process. CNSC staff further explained that Saskatchewan Labour monitors worker health and safety at exploration sites, including with respect to radiation protection where naturally occurring radioactive material is present. Saskatchewan Health also monitors camp conditions, such as in regard to food and potable water supplies.

The Commission questioned CNSC staff on how radiation exposures will be regulated by Saskatchewan Labour, specifically when people are working with the mineralized core samples. CNSC staff explained that Saskatchewan Labour employs guidelines for the control of doses from naturally occurring radioactive material (NORM). Those guidelines were prepared by a federal-provincial-territorial working group and published by Health Canada. CNSC staff explained that where radiation protection from NORM is warranted, the guidelines provide for levels of radiation protection similar to those provided for under the NSCA at licensed nuclear facilities.

An intervenor (Saskatchewan Environmental Society - SES) expressed concern that SERM may not have the resources and appropriate staffing to take on the additional responsibility of regulating the Dawn Lake Project. SES is of the view that SERM's Conservation Officers cannot be expected to add this to what SES considers to be an already overextended work load. SES requested that the Commission delay its decision on the licence revocation until a plan for the alternative regulation of uranium removal during exploration, including financial commitments, be made available for public review.

In response to the Commission's questions about the additional burden that the proposed licence revocation could place on the Province of Saskatchewan, CNSC staff indicated that the Province has always exercised its authority on the sites and therefore the revocation would not appear to cause an incremental regulatory burden for the Province. CNSC staff also indicated that due to the general low risk activities at the exploration sites, the level of regulatory effort is also generally correspondingly low. CNSC staff indicated that it had recently received letters from SERM and Saskatchewan Labour confirming their responsibilities for protecting the environment and worker safety at the Dawn Lake Project site.

CNSC staff also clarified during the hearing that the transportation of any core samples containing nuclear substances would remain subject to the CNSC's *Packaging and Transport of Nuclear Substances Regulations*. In response to questions from the Commission on the transportation risks, Cameco reported that it continues to comply with the CNSC regulations for

transportation of substances and that the geologists who handle and transport the core material are monitored and receive very low doses (i.e., approximately 0.03 mSv/a in excess of background).

CNSC staff noted that one change in the regulatory regime, following revocation of the AECB licence, would involve the existing \$60,000 letter of credit for ensuring proper remediation of the site under the AECB licence. CNSC staff explained that retention of that guarantee would not be required by SERM.

CNSC staff also expressed the opinion that, based on recent experience and good cooperation with the owners/operators of unlicensed locations, the revocation of the licence would not result in a failure to achieve conformity with international obligations to which Canada has agreed respecting International Atomic Energy Agency (IAEA) safeguards.

In summary, CNSC staff expressed the opinion that the public's welfare, and worker health and safety are well protected by the above-described provincial regulatory regime during mineral exploration.

The Commission concludes from this information that the exploration activities at the Dawn Lake Project are currently being regulated, and will continue to be regulated by the Province of Saskatchewan.

4.3 Past Performance of the Licensee

The Commission also considered the past operational and regulatory history of the Dawn Lake Project. In that regard, CNSC staff reported that from its most recent inspection of the operation (February 2000), the licensee was found to be in full compliance with the licence requirements. Cameco reported that the average annual radiation exposures of workers has been very low (0.03 mSv external gamma dose and very low estimates from radon exposure in enclosed buildings). Cameco also reported that, during the licence period, there was only one lost-time accident at the site (injured knee) and that there were no reportable environmental incidents.

In response to a question from the Commission on the environmental restoration of the drilling sites, Cameco confirmed that all drill holes that are either artesian or that intersect radioactive mineralized rock are sealed and that this is subject to verification inspections by SERM.

4.4 Canadian Environmental Assessment Act

CNSC staff expressed the view that an environmental assessment under the Canadian Environmental Assessment Act (CEAA) is not required before the Commission is able to make a decision on the proposed licence revocation. This is because the proposed activities do not constitute a "project" as defined under the CEAA.

The Commission concurs with the CNSC staff's interpretation of the application of CEAA to the licensing action and concludes that an environmental assessment under the CEAA is not required.

5. Conclusion

The Commission has considered the information and submissions of CNSC staff and all participants as set out in the material available for reference on the record, as well as the oral and written submissions provided or made by the participants at the hearing.

The Commission therefore revokes, pursuant to section 24 of the *Nuclear Safety and Control Act*, Cameco Corporation's licence AECB-MFRL-180-0.1 for the Dawn Lake Project.

Marc A. Leblanc
Secretary,
Canadian Nuclear Safety Commission

Date of decision: February 28, 2002

Date of release of Reasons for Decision: March 22, 2002