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Update from CNSC Staff

Mise à jour du personnel de la CCSN

Follow up from December 8, 2020
Commission meeting

Suivi suite à la réunion de la
Commission du 8 décembre 2020

Update from CNSC staff to provide clarifications on licensing requirements applicable to the transport of natural UF₆ in Canada

Mise à jour du personnel de la CCSN pour fournir des précisions au sujet des exigences réglementaires applicables pour le transport de l'UF₆ naturel

Commission Meeting

Réunion de la Commission

June 8, 2021

Le 8 juin 2021



To Marc Leblanc
Commission Secretary

A **CC:**
Ramzi Jammal – *Approved by email*
Executive Vice-President and Chief Regulatory
Operations Officer

From Karen Owen-Whitred
De Director General
Directorate of Nuclear Substance Regulation

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Subject Clarification on information provided at the December 8th, 2020 Commission Meeting
Objet

ISSUE

To clarify the licensing requirements applicable to the transport of natural UF₆ in Canada.

PURPOSE

The purpose of this memo is to provide the Commission and the public with the requirements applicable to the transport of UF₆ from Cameco’s Port Hope Conversion Facility (PHCF).

DISCUSSION

CNSC staff noted, when reviewing the transcript of the December 8th, 2020 public meeting on the Regulatory Oversight Report on Uranium and Nuclear Processing Facilities in Canada: 2019, that some information provided in response to a question from the Commission could be misinterpreted. The matter under discussion was the requirements surrounding the transport of UF₆ cylinders from Cameco’s PHCF. As such, CNSC staff would like to clarify the transport licensing requirements applicable in such instances.

During the proceeding, the following question was asked by Member Lacroix: “Dr. Demeter raised his concern about the safety of the UF₆ packages. And what about the security of these packages? This a highly strategic substance, and I would like to hear from staff. There must be some security surrounding the shipment of these containers.”(p. 170 of [REF 1])

In the course of their response, CNSC staff introduced the subject of Category I, II or III material as defined in the *Nuclear Security Regulations*. A further part of the answer provided by CNSC staff included the following: “Such type of materials is controlled under nuclear material requirements, and so they are -- every licence -- sorry, every shipment requires a licence” (p.171 of [REF 1])

While this answer was intended to convey the requirements specifically for Category I, II or III material, it would be reasonable for someone to read “such type of materials” as referring to UF₆. If such an interpretation was applied, this would lead to two inaccuracies; specifically, that all form of UF₆ is controlled under nuclear material requirements and that every shipment of UF₆ requires a licence. In order to prevent any potential confusion, CNSC staff are taking the opportunity to clarify this statement.

The requirements for a transport licence are set out in section 6 of the [Packaging and Transport of Nuclear Substances Regulations, 2015](#). The transport of UF₆ from Cameco’s PHCF does not meet any of the requirements for a transport licence. In particular, the natural uranium produced and shipped from Cameco’s PHCF does not meet the definition of Category I, II or III nuclear material as defined in the [Nuclear Security Regulations](#). A licence to transport would be required if the UF₆ contained uranium enriched above the natural level of 0.72% ²³⁵U and in a corresponding quantity associated to the applicable category of nuclear material.

As a further clarification with respect to the security of certain transportation activities, an application for a licence to transport Category I, II or III nuclear material must contain a written Transportation Security Plan that has been reviewed and accepted by CNSC staff. A threat assessment must be performed and the transport security plan assures that the nuclear material to be transported will receive adequate physical protection against any threats that may arise during its transport. The Transport Security Plan contains details on security measures, contingency plans, routes and alternate routes. As such, it is considered as prescribed information. However, as noted in schedule 1 of the [Nuclear Security Regulations](#), any quantities of natural uranium, such as that contained in the UF₆ shipments from Cameco’s PHCF, is protected in accordance with prudent security practices during transport and therefore does not require a separate Transport Security Plan.

During the course of their compliance activities, CNSC staff verify that Cameco remains in compliance with the regulations and that any material is transported safely and securely.

REFERENCES

[REF 1] [Transcript of December 8, 2020](#) Commission Meeting (e-doc #6450800)