



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Record of Determination with Reasons

In the Matter of

Applicant Cameco Corporation

Subject Request for Commission Review of Notice of
Violation, 2017-AMP-06, Issued on September
6, 2017

Hearing Date March 26, 2018

Date of
Decision May 22, 2018

RECORD OF DETERMINATION

Applicant: Cameco Corporation

Address/Location: 2121 11 Street West
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Purpose: Request for Commission Review of Notice of Violation,
2017-AMP-06, Issued on September 6, 2017

Request received: October 11, 2017

Date of review hearing: March 26, 2018

Location: Canadian Nuclear Safety Commission (CNSC)
280 Slater St., Ottawa, Ontario, Applicant and CNSC staff
on teleconference

Panel of Commission: M. Binder, Chair

Secretary: M. Leblanc

Recording Secretaries: K. McGee/M. Hornof

Senior General Counsel: L. Thiele

Licensee/Person Named in or Subject to AMP Represented By		Document Number
<ul style="list-style-type: none">• L. Mooney• D. Clark• D. Ingalls• D. Aldcorn		CMD 18-H100.1
CNSC staff		Document Number
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Determination: Cameco committed the violation

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1.0 INTRODUCTION

1. Cameco Corporation (Cameco) holds Canadian Nuclear Safety Commission¹ (CNSC) Fuel Facility Operating Licence (FFOL) FFOL-3631.00/2027. This licence authorizes Cameco to operate the Port Hope Conversion Facility (PHCF) in Port Hope, Ontario. The licensed activities carried out by Cameco at the PHCF include the conversion of uranium trioxide (UO₃) powder produced by Cameco's Blind River Refinery into uranium dioxide (UO₂) and uranium hexafluoride (UF₆).
2. Condition 2.1 of Cameco's FFOL requires that "The licensee shall implement and maintain a management system." Part II, Section 2 of the Licence Conditions Handbook (LCH) for the PHCF states that the Management System safety and control area (SCA) covers the framework that establishes the processes and programs required to ensure the licensee achieves its safety objectives, continuously monitors its performance against these objectives, and fosters a healthy safety culture. This section identifies the criteria used to verify that Licence Condition 2.1 is being met and provides guidance for meeting the requirements of the licensee's PHCF Quality Procedures. Cameco's licensing basis document "Notification and Safety Clearances" (CQP-028) is one such procedure in its quality assurance program.
3. On May 5, 2017, Cameco reported to the CNSC Duty Officer that there had been a hydrogen fluoride (HF) leak in the UF₆ plant at the PHCF. Cameco further reported that the leak took place while a junior Cameco instrumentation technician independently performed maintenance work on the HF transfer tank system. Cameco stated that the HF transfer tank was depressurized with an internal pressure slightly above atmospheric pressure, that an isolation valve was left in the open position and that, because the impulse line was not properly closed, HF gas was released.
4. On September 6, 2017, in accordance with subsection 65.05(1) of the NSCA, a CNSC Designated Officer (DO) issued a Notice of Violation (NOV) with an associated Administrative Monetary Penalty (AMP), 2017-AMP-06, in the amount of \$17,830.00 to Cameco. As stated in the NOV, an AMP was issued to the licensee for a failure to comply with Licence Condition 2.1.² Specifically, by failing to verify whether work was being performed correctly in accordance with its Quality Management Program and work process requirements, Cameco failed to meet the criteria for compliance with licence condition 2.1, as explained in section 2 of the Cameco PHCF's LCH.
5. On October 11, 2017, in accordance with section 65.1 of the NSCA, Cameco made a request to the Commission for a review of the facts of the violation (CMD-H100.1).
6. In its written submission, Cameco disputed the fact that a violation was committed and identified three points in issue. First, Cameco argued that the elements of the violation could not be enforced through the AMP process. Second, Cameco challenged the causal link between the evidence relied upon by the DO and the violation, as well as the

¹ 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.

² *Administrative Monetary Penalties Regulations (Canadian Nuclear Safety Commission)*, SOR/2013-139, Schedule, Part 1, Item 9, Category C Violation.

sufficiency of that evidence and the procedures followed by CNSC staff. Third, Cameco argued that the subject matter of the NOV included alleged actions that occurred outside the two-year limitation period for issuing the NOV specified in section 65.09 of the NSCA.

Issue

7. Pursuant to subsection 65.14(1) of the NSCA, and as per the request made by Cameco, the Commission was required to determine whether Cameco committed the violation as stated in the Notice of Violation, 2017-AMP-06. Cameco requested to be heard orally on the review.

Commission Review

8. Pursuant to section 22 of the NSCA, the President of the Commission established himself as a Panel of the Commission to consider the request from Cameco. The Commission, in making its determination, considered written submissions and heard oral presentations from Cameco (CMD 18-H100.1) and the CNSC DO (CMD 18-H100). The DO was supported by CNSC staff at a Commission hearing held in Ottawa, Ontario on March 26, 2018. During the Commission review, the Cameco representative informed the Commission that Cameco's focus would be on the first and second written arguments and, therefore, no additional oral submission was presented regarding Cameco's third reason for its review request.

2.0 SUMMARY DETERMINATION

9. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Determination*,

the Commission, pursuant to subsection 65.14(1) of the *Nuclear Safety and Control Act*, determines that Cameco Corporation committed a violation within the meaning of section 2 of the *Administrative Monetary Penalties Regulations (Canadian Nuclear Safety Commission)*, specifically Item 9 of Part 1 of the Schedule, failure to comply with a condition of a licence contrary to paragraph 48(c) of the *Nuclear Safety and Control Act*. Cameco is therefore liable to the administrative monetary penalty of \$17,830.00 as set out in 2017-AMP-06.

3.0 ISSUES AND COMMISSION FINDINGS

10. In accordance with section 65.15 of the NSCA, if the facts of a violation are reviewed, the burden of proof is on the person who issued the NOV to show, on a balance of probabilities, that the person named in the NOV committed the violation described in the NOV. In this regard, the DO sought to establish the facts of the violation.

11. On March 26, 2018, the Commission conducted the review under section 65.12 of the NSCA, hearing from the DO who issued the NOV, other CNSC staff and Cameco.

Liability and Elements for an AMP Violation

12. The Commission notes that, in both its written and oral submissions, Cameco presented definitions of strict and absolute liability violations based on *R. v. Kurtzman*.³ These definitions include Cameco's views in respect of the unique licence condition compliance criteria to be communicated and applied by the regulator for each type of violation and an analysis of when qualitative assessments, standards or thresholds are essential to determining a violation. The Cameco representative added that a qualitative assessment was necessary in respect to this matter in order to evaluate the evidence and determine the violation described in 2017-AMP-06. Based on its assessment, Cameco concludes that the failure to comply with licence condition 2.1 was a strict liability violation not subject to the CNSC's AMP process.
13. In support of its characterization of the distinctions between absolute and strict liability violations, Cameco also described to the Commission its view on requirements for the assessment of the essential elements of a violation. First, Cameco described how a series of strict liability violations could not be combined to create an absolute liability violation. The Cameco representative also identified case law to support the requirement of strict adherence to procedures when assessing evidence and issuing a NOV. Cameco's submissions also explained that, while the CNSC's "Conducting an Inspection" document established the minimum procedural steps to be followed for the assessment of the essential elements of the violation, the process document had not been followed in this instance.
14. The Commission invited submissions on the matter of strict and absolute liability violations, and about the matter of the essential elements of a violation. The DO pointed to subsection 65.06(1) of the NSCA. This subsection states that a person named in a NOV does not have either a due diligence defence or a defence of showing that there was reasonable and honest belief in facts that, if true, would have exonerated the person named. The DO submitted that, pursuant to subsection 65.08(2) of the NSCA, an act considered to be a violation could not also be considered an offence under the NSCA. For additional clarity, the DO referenced subsection 2(1) and Schedule Part 1 of the *Administrative Monetary Penalties Regulations (CNSC)* that together provide the complete list of violations under the AMP process.
15. In respect of strict and absolute liability considerations, the DO further stated that violations under section 65 of the NSCA did not constitute an offence; that the AMP regime was different from the provisions under the NSCA related to offences; and therefore, strict and absolute liability issues did not apply in this matter. The DO also noted that the consideration of "proof of the essential elements of a violation" was a criminal offence standard whereas the required standard of proof in respect of a violation under section 65 of the NSCA was the belief on "reasonable grounds that a person has

³ *R. v. Kurtzman* (C.A.), 1991 (CanLII) 8059 (ON CA) at page 15.

committed a violation,” as set out in subsection 65.01(1) of the NSCA. In response to these submissions of the DO, the Cameco representative expressed disagreement with these points.

Reliance on Facts and Links to Violation

16. The Commission examined the issues raised by Cameco in respect of the reasonableness of the procedural standards followed by CNSC staff for the collection and analysis of the facts supporting the NOV. In its submissions, Cameco relied on two decisions of the Federal Court of Appeal in *Maple Lodge Farms Ltd. V. Canadian Food Inspection Agency*, 2017 FCA 24⁴ (hereafter referred to as Maple Lodge) and *Doyon v. Canada*, 2009 FCA 152⁵ (hereafter referred to as Doyon), for the proposition that special scrutiny must be exercised by decision-makers in the AMP process.
17. The Commission asked Cameco for further submissions on the relevance of the Maple Lodge and, in particular, the Doyon decisions in respect of the review of the facts of the violation in this matter. The Cameco representative submitted that the Doyon case required that before a NOV was issued, an administrative tribunal must follow a specific procedural process to show an objective standard had been applied. Cameco added that the tribunal must apply special scrutiny when collecting and analyzing evidence; else, the reliability of the facts used in support of the violation could be undermined. The DO expressed disagreement with Cameco’s interpretation of the Doyon decision noting that an inspector’s information collection, observations and reporting to the DO were not subject to strict adherence to a specific process nor to a qualitative assessment of whether the non-compliance observed was severe enough to merit an AMP. The DO submitted that a qualitative assessment was outside the scope of a violation under subsection 65.02(1) and the objective standard of reasonable grounds to believe a violation had been committed under subsection 65.05(1) had been demonstrated.
18. The Commission enquired about the reactive, unplanned inspection that was carried out at the PHCF on May 11 and 12, 2017 as well as about the CNSC process document “Conducting an Inspection” and its application to the CNSC staff’s inspection and the DO’s collection and analysis of facts and issuance of 2017-AMP-06. The Cameco representative provided the Commission with its view about CNSC staff’s non-adherence to several of the procedures set out in the “Conduct an Inspection” document. The Cameco representative added that the lack of adherence to specific procedures for an inspection at the PHCF contributed to the CNSC’s collection of unreliable facts and reliance on incorrect assumptions.
19. In response, the DO explained that the NSCA did not impose mandatory adherence to the CNSC-established processes such as that described in “Conducting an Inspection.” The DO added that, pursuant to section 30 of the NSCA, in order to verify compliance a CNSC inspector may, at any reasonable time and in accordance with the inspector’s certificate, enter and inspect any nuclear facility. The DO submitted that, although the CNSC had a standard inspection process, that process did not fetter the powers granted to inspectors under the NSCA. The DO also stated that a review of the matter showed that

⁴ *Maple Lodge Farms Ltd. v. Canadian Food Inspection Agency*, 2017 FCA 45.

⁵ *Doyon v. Canada*, 2009 FCA 152 (CanLII), 312 D.L.R. (4th) 142.

the inspector had reasonable grounds to carry out a follow-up inspection in respect of the May 5, 2017 event and to collect information relating to Cameco's compliance with licence conditions.

20. The DO also addressed the Commission's enquiry regarding the impact of the description of the inspector's May 11-12, 2017 follow-up activities at the PHCF. The DO expressed to the Commission the view that whether the inspector's follow-up activity at the PHCF was correctly labeled an inspection or whether it should have been described as a site visit did not undermine the value of the facts relied upon for the DO's findings that there were reasonable grounds to believe that Cameco had committed the violation of the failure to comply with a licence condition in accordance with paragraph 48(c) of the NSCA. The Commission, while acknowledging that strict adherence to a CNSC process was not required under the NSCA, expresses its displeasure about the lack of procedural adherence during the inspection described in this matter. In the Commission's view, while it is not determinative of this matter, it would have been preferable for the reactive inspection to have followed the clear process.

Limitation Period and Violation

21. The Commission asked for additional information regarding Cameco's "failure to verify" that its employees were performing work activities correctly and in accordance with approved procedures, and how this related to the finding of a failure to comply with licence condition 2.1 of Cameco's operating licence, as described in the NOV. The Cameco representative stated that the issue of Cameco's failure to verify was never raised by CNSC staff before the NOV was issued. The Cameco representative noted examples of its verification of work procedures, including its internal audit, corrective action and leadership on the floor programs. In response, the DO explained to the Commission that the NOV was issued on the basis that, specifically, Cameco had failed to implement and maintain its management system on or about May 5, which was a failure to comply with licence condition 2.1. The DO further highlighted examples of Cameco's failure to verify whether work was being performed correctly and according to approved procedures by referencing both Cameco's own initial investigation of the May 5, 2017 HF leak and the subsequent Notice issued by Cameco to all PHCF staff in that regard. The DO stated that this Cameco Notice to staff included management's disappointment that its staff had not followed Cameco's Notification and Safety Clearances Procedure (CQP-028) requiring completion of specific safe work clearances before maintenance work can start.
22. The DO further distinguished between the information substantiating the facts relied on in the NOV that were subject to the limitation period set out section 65.09 of the NSCA and the facts outlined as the "Compliance History" in the NOV. The DO's references to compliance history included certain Action Notices arising from CNSC Type II Augmented Inspection, conducted at the PHCF from December 15-19, 2014,⁶ a CNSC

⁶ CNSC Augmented Type II Inspection Report No. NPDF-Cameco-PHCF-2014-12-19, February 13, 2015, Action Notices NPDF-PHCF-2014-12-19-AN-04 and NPDF-PHCF-2014-12-19-AN-06.

planned Type II Inspection at the PHCF from June 9-12, 2015⁷ and a CNSC Compliance Inspection conducted at the PHCF from February 14-15, 2017.⁸

23. Noting Cameco's assertions that it had in fact verified work activities at the PHCF, the Commission asked Cameco why it had not offered proof to the CNSC of its verification of work activities following its receipt of the NOV. The Cameco representative replied that at no time did CNSC staff specifically ask for information on verification of work activities; that the NOV lacked details on the nature of the verification activities being sought by the CNSC; and that Cameco was not clear what an appropriate response would be or what information was still outstanding in the context of the AMP process. In response, the DO stated that Cameco's PHCF LCH provided specific compliance verification criteria for the Management System SCA, including the quality assurance program and how it related to licence condition 2.1. The DO added that, during a meeting with Cameco in the summer of 2017, Cameco was informed by the CNSC that an AMP was being considered in response to the findings from the CNSC May 2017 inspection. However, at no time did Cameco refute the facts of the non-compliance with licence condition 2.1 related to the May 5, 2017 event and as described by the CNSC inspector or outlined in the Cameco all-staff Notice. The DO further stated that, at that same summer 2017 meeting, Cameco received information on the nature of work verification activities that were required to be carried out to ensure compliance with its licence and LCH and how to most effectively apply them. The DO noted several subsequent telephone conversations with Cameco when questions in this regard could have been raised by the licensee.

4.0 DETERMINATION

24. In the course of its review, the Commission has considered the information and submissions from Cameco and the DO and determines that the DO has met the burden of proof in accordance with section 65.15 of the NSCA. On the basis of the information provided for this review, the Commission determines that Cameco Corporation committed a violation within the meaning of section 2 of the *Administrative Monetary Penalties Regulations (Canadian Nuclear Safety Commission)*, specifically Item 9 of Part 1 of the Schedule, contrary to paragraph 48(c) of the *Nuclear Safety and Control Act*.
25. Specifically, the Commission is of the view that the evidence presented for the Commission's review of 2017-AMP-06 showed that Cameco failed to meet licence condition 2.1 of FFOL-3631.00/2027 for the PHCF by failing to verify whether work was being performed correctly and according to approved procedures. Before the work started on May 5, 2017, Cameco staff did not issue a daily notification clearance to the worker, did not obtain a special safety clearance and did not comply with the maintenance plan. These requirements, elements of Cameco's Quality Assurance Program, are detailed in Part 2, section 2 of the LCH for the PHCF and are part of the licensing basis and verification criteria for compliance with licence condition 2.1. The licence, together with

⁷ CNSC Type II Inspection Report No. NPF-D-Cameco-PHCF-2015-06-12, August 11, 2015, Action Notice NPF-D-Cameco-PHCF-2015-06-12-AN-02.

⁸ CNSC Compliance Inspection Report, Inspection No. CAMECO-PHCF-2017-01, April 26, 2017, Action Notices CAMECO-PHCF-2017-01-AN-01 and CAMECO-PHCF-2017-01-AN-02.

the LCH, provide Cameco with the clarity and details necessary to ensure compliance and the Commission has no difficulty finding that, with regard to the May 5, 2017 event, Cameco failed to verify work process adherence contrary to the requirement to implement and maintain a management system.

26. The Commission determines that the DO had reasonable grounds to conclude that the evidence collected following the May 5, 2017 event supported the decision to issue the NOV and none of the challenges to the CNSC's processes presented for this review justify rejection of that evidence. The Commission is satisfied that the facts as presented support on a balance of probabilities that Cameco committed the violation of a failure to comply with its licence condition 2.1. This did not, and does not, require a qualitative assessment in order to so conclude.
27. The Commission finds that Cameco failed to follow required management system safety processes before the start of maintenance work on May 5, 2017. The Commission concludes that the information presented for this review demonstrates that Cameco only became aware of the failure to follow safe work clearance processes as a result of its post-event investigation. No facts were presented to confirm adequate maintenance of the management system processes as it related to the May 5, 2017 event.
28. Based on the evidence submitted for this review, the Commission also makes the determinations detailed in the following paragraphs.

Liability and Elements for an AMP Violation

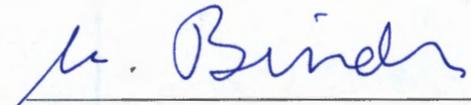
29. Since violations under the AMP process are not offences, the Commission determines that the question of strict versus absolute liability is not applicable to the AMP process established under the NSCA. In this review, the Commission has scrutinized what facts were relied upon by the DO, and has found that on an objective standard, Cameco failed to comply with its licence condition respecting the maintenance of its own management system.

Reliance on Facts and Links to Violation

30. The Commission determines that none of the facts in support of the violation and none of the steps taken by the CNSC staff to carry out a review following the May 5, 2017 HF leak diminish the DO's assessment of facts or decision to issue the NOV. The factual foundation for the NOV was, and remains, clear and Cameco has provided no convincing basis on which to either question the facts relied on by the DO, or come to a different conclusion on this review. The Commission acknowledges that the formal steps for information sharing outlined in the CNSC's "Conducting an Inspection" document were not followed in relation to the May 11-12, 2017 inspection and instructs CNSC staff to identify other ways to share summaries and observations that might be helpful to a licensee. This instruction is entirely separate to the Commission's conclusions respecting the NOV, in respect of which there was no required inspection process.

Limitation Period and Violation

31. The Commission determines that the facts of the violation identify that Cameco's failure to verify compliance with the Notification and Safety Clearances Procedure (CQP-028) occurred on or about May 5, 2017, while the references in the NOV to *events* prior to that date are provided solely for compliance history related to the penalty calculation and are not a description of collective nonconformance forming part of the violation.
32. The Commission is of the view that compliance verification designed to determine if work is performed correctly and according to approved procedures must include licensee verification activities that are undertaken on a regular basis during day-to-day operations as well as verification activities and programs triggered following an event.
33. With this determination, in accordance with subsection 65.14(4) of the NSCA, the Commission directs Cameco Corporation to submit payment for the 2017-AMP-06 in the amount of \$17, 830.00 within 30 days of the date of this determination.
34. In accordance with subsection 65.14(5) of the NSCA, this determination is final and binding.



Michael Binder
President
Canadian Nuclear Safety Commission

MAY 22 2018

Date