



## Notice of Violation (Corporation)

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**Date of notice: March 1, 2021**

**AMP number: 2021-AMP-01**

<b>Violation committed by:</b>  <b>Catalyst Paper Corporation</b>	<b>Amount of penalty:</b>  <b>\$ 2,000</b>
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### Violation

Failure to comply with provision 48(c) of *Nuclear Safety and Control Act*: Failure to comply with a condition of the licence.

Specifically: Failure to comply with Licence Condition 2052-3 of their CNSC licence: “*The licensee shall ensure that the entry into the vessel or hopper is performed in accordance with written procedures acceptable to the Commission or a person authorized by the Commission; and Prior to any entry, every radiation device on or in the vessel or hopper has had the source shielded or otherwise made safe, and, has been verified to be safe for a person to enter the vessel or hopper*”.

### Relevant facts

I, Karen Owen-Whitred, Director General of the Directorate of Nuclear Substances Regulation and designated officer authorized by the Canadian Nuclear Safety Commission (CNSC) to issue notices of violations, believe on reasonable grounds that Catalyst Paper Corporation committed the above violation on November 23 and 24, 2020. The facts relevant to the violation and the penalty calculation are as follows:

1. Catalyst Paper Corporation, located at 8541 Hay Road, Crofton, British Columbia, holds a CNSC licence (13394-1-24.2) to possess, transfer, import, use and store fixed gauges.
2. On November 25, 2020, Catalyst Paper Corporation notified the CNSC Licensing Specialist by email of an exposure to an open radiation source at the mill site. The CNSC Licensing Specialist requested the Radiation Safety Officer (RSO) to provide any follow up information and the final report no later than 21 days as required by Paragraph 29(2) of *General Nuclear Safety and Control Regulations*. On the same day, the RSO provided additional details about this event: During a maintenance shutdown at the mill, eight (8) workers were involved in a confined space entry incident where they were exposed to two unshielded radiation sources. Radiation measurements taken following this incident indicated that the highest exposure was negligible at 18.24 µSv (regulatory limit for a Non-Nuclear Energy Worker is 1 mSv). The use of an outdated form led to a failure to lock the sources in the shielded position prior to entering the vessel and an investigation was underway.



3. On December 7, 2020, the RSO from Catalyst Paper Corporation submitted the final event report to the CNSC Licensing Specialist as required by Paragraph 29(2) of *General Nuclear Safety and Control Regulations*.
4. On December 11, 2020, CNSC staff assessed a violation of Licence Condition 2052-3 of Catalyst Paper Corporation's nuclear substance licence : *"The licensee shall ensure that the entry into the vessel or hopper is performed in accordance with written procedures acceptable to the Commission or a person authorized by the Commission; and Prior to any entry, every radiation device on or in the vessel or hopper has had the source shielded or otherwise made safe, and, has been verified to be safe for a person to enter the vessel or hopper"*
  - a. The final event report confirmed the details of the initial incident report, namely that the shutters for two radiation devices were left open while the workers were working inside the vessel. The company lockout procedure for entering the vessel requires that the radiation device shutters be locked in the closed position prior to anyone entering the vessel.
  - b. Inadequate document control procedures resulted in the licensee using an outdated version of the lockout procedure for this vessel entry. The outdated procedure did not contain the instructions for radiation device lock out. The procedure used was a version that pre-dated the installation of the radiation devices, which were installed in September 2020. The same procedure was used on entry to the vessel on two consecutive days.
5. On December 16, 2020, DNSR Staff asked a CNSC Radiation Protection (RP) Specialist, to assess the dose calculated by the Catalyst Paper Corporation RSO. Based on the time spent inside the vessel and the distance between the workers and the radiation devices, the CNSC RP specialist confirmed the doses received were below the regulatory limit of 1 mSv for Non Nuclear Energy Workers (Non-NEWs).
6. CNSC staff also noted a non-compliance with Licence Condition 2917: *The licensee shall carry out the licensed activities in accordance with the documents in the appendix which is Crofton Division MTCE-058 Procedures for the safe handling of nuclear gauging devices, revision date, September 3, 2019:*
  - a. The Radiation Hazard Signs displayed at the vessel entry are not the signs provided in Appendix 2 of their manual (Radiation Hazard Sign).
7. There have been other examples of vessel entry violations in recent years throughout the industry. The prevalence of this violation provides a basis for ongoing concern across the industry:
  - a. On August 15, 2014, as a result of an unsafe entry into a vessel with radiation devices, an email (safety notice) was sent to all Canadian fixed gauge licensees by the Director of Nuclear Substances and Radiation Devices Licensing Division (NSRDLD) notifying the change of the licence condition 2052.
  - b. In September 2014, The CNSC amended the licence condition 2052 for all fixed gauge users to ensure the safety of workers entering the vessels.
  - c. On October 2, 2014, an email was sent to Catalyst Paper Corporation requesting a written request to amend their CNSC licence and requesting the related procedures for review.
  - d. On March 3, 2017, an information bulletin related to vessel/hopper entry was published and posted on the CNSC website.



<http://nuclearsafety.gc.ca/eng/pdfs/nuclear-substances/vessel-entry-march-2017-ENG.pdf>

- e. Spring 2019, CNSC staff published, a newsletter regarding lessons learned from a confined-space event and reminded licensees that it is very important to ensure that their workers carefully follow their vessel entry procedures and encourages licensees that perform these entries to consider the radiation exposure along with all other hazards involves with confined space entry.

[https://www.nuclearsafety.gc.ca/pubs\\_catalogue/uploads/DNSR-Newsletter-spring-2019-eng.pdf](https://www.nuclearsafety.gc.ca/pubs_catalogue/uploads/DNSR-Newsletter-spring-2019-eng.pdf)

Based on my review of this matter, I am of the opinion that an administrative monetary penalty will deter recurrence of the above violation and promote future compliance with CNSC regulatory requirements. In consideration of the seven factors in section 5 of the *Administrative Monetary Penalties Regulations (Canadian Nuclear Safety Commission)*, the amount of the penalty was determined based on the following relevant facts:

1. Compliance history: Assessed score = 0

A compliance history review of Catalyst Paper Corporation, was conducted from January 2015 to December 2020. This review identified that one (1) inspection was conducted in November 2015. The inspection resulted in a conclusion by the inspector that vessel entries were conducted in a manner which met regulatory requirements, and therefore, there is no negative compliance history for this type of event.

2. Intention or negligence: Assessed score = +1

Catalyst Paper Corporation failed to comply with condition 2052-3 of their licence. Inadequate document control procedures resulted in Catalyst Paper Corporation using on two (2) consecutive days an outdated version of the lockout procedure for vessel entry. The use of an outdated form led to improper vessel entry, which allowed elevated radiation exposure from the sealed sources.

3. Actual or potential harm: Assessed score = +1

While radiation exposures associated with this incident were below regulatory limits, Catalyst Paper Corporation's failure to ensure that the shutters on source holders were closed presented an unreasonable risk, which led to the preventable and unnecessary exposure of workers inside the vessel. The potential harm increases with the time spent inside the vessel and the relative distance of the workers from the gauges.

4. Competitive or economic benefit: Assessed score = 0

The licensee does not appear to have derived any competitive or economic benefit due to the violation.



5. Efforts to mitigate or reverse effects: Assessed score = 0

The licensee undertook the basic efforts expected of any licensee to mitigate the effects of the violation.

6. Assistance to Commission: Assessed score = -1

The licensee provided all requested assistance to the Commission within the specified timelines. The final event report was submitted within the required timeline, and all follow up questions were responded to as requested.

7. Attention of Commission: Assessed score = -2

The licensee informed the CNSC of failure to comply with a condition of the licence as required by Paragraph 29(1)(a) of General Nuclear Safety and Control Regulations.



## Penalty calculation:

(See *Administrative Monetary Penalties Regulations (Canadian Nuclear Safety Commission)* SOR/2013-139)

**(a) Category of violation**

Category A                       Category B                       Category C

**(b) Penalty range**

Category	Minimum	Maximum	Maximum – minimum
A	\$1,000	\$12,000	\$11,000
B	\$1,000	\$40,000	\$39,000
<b>C</b>	<b>\$1,000</b>	<b>\$100,000</b>	<b>\$99,000</b>

**(c) Determining factors**

Factors	Scale of regulatory significance	Assessed score
1. Compliance history	0 <input checked="" type="checkbox"/> +1 <input type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/> +4 <input type="checkbox"/> +5 <input type="checkbox"/>	0
2. Intention or negligence	0 <input type="checkbox"/> +1 <input checked="" type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/> +4 <input type="checkbox"/> +5 <input type="checkbox"/>	+1
3. Actual or potential harm	0 <input type="checkbox"/> +1 <input type="checkbox"/> +2 <input checked="" type="checkbox"/> +3 <input type="checkbox"/> +4 <input type="checkbox"/> +5 <input type="checkbox"/>	+1
4. Competitive or economic benefit	0 <input checked="" type="checkbox"/> +1 <input type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/> +4 <input type="checkbox"/> +5 <input type="checkbox"/>	0
5. Efforts to mitigate or reverse effects	-2 <input type="checkbox"/> -1 <input type="checkbox"/> 0 <input checked="" type="checkbox"/> +1 <input type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/>	0
6. Assistance to Commission	-2 <input type="checkbox"/> -1 <input checked="" type="checkbox"/> 0 <input type="checkbox"/> +1 <input type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/>	-1
7. Attention of Commission	-2 <input checked="" type="checkbox"/> -1 <input type="checkbox"/> 0 <input type="checkbox"/> +1 <input type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/>	-2
<b>Total</b>		<b>-1</b>
÷ 29 <sup>(1)</sup> [rounded to 2 decimal points]=		<b>0.00</b>
<b>X 99000</b>		
[total] =		<b>0</b>
<b>+ \$ 1000</b> [minimum for the category] =		<b>1,000</b>
<b>X 2 Days</b> [Violations committed or continued on more than one day constitutes a separate violations for each day on which it is committed or continued as per Section 65.07 of the Nuclear Safety and Control Act] =		<b>\$2,000</b>

<sup>(1)</sup>29 being the maximum value of regulatory significance



## To request a review

As a person subject to an administrative monetary penalty, you have the right to request a review of the amount of the penalty or the facts of the violation, or both. Your request must be made in writing indicating the reasons why you are requesting a review and providing supporting information.

If you choose to request a review, you must do so in writing by April 7, 2021 to:

Canadian Nuclear Safety Commission  
c/o Marc Leblanc  
Commission Secretary  
P.O. Box 1046, Station B  
Ottawa, ON K1P 5S9

Fax: (613) 995-5086  
Telephone: (613) 995-6506  
Email: [cnscc.interventions.ccsn@canada.ca](mailto:cnscc.interventions.ccsn@canada.ca)

## Payment

You may pay this administrative monetary penalty by sending a cheque to:

Receiver General for Canada  
c/o Canadian Nuclear Safety Commission  
Finance Division  
P.O. Box 1046, Station B  
Ottawa, ON K1P 5S9

For other payment methods and further instructions, please refer to the attached notice of payment due.

**Should you neither pay the penalty nor exercise your right to a review, you will be considered as having committed the violation and will be liable to the penalty set out herein.**



## Issued by

*K Owen-Whitred*

March 1, 2021

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Karen Owen-Whitred

\_\_\_\_\_  
Date

Directorate of Nuclear Substance Regulation

Designated Officer

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