



Notice of Violation (Corporation)

Date of notice: April 30, 2018

AMP number: 2018-AMP-02

Violation committed by: 20/20 ND Technology Inc.	Amount of penalty: \$ 9,190
--	--

Violation

Failure to immediately make a preliminary report to the Commission of a specified situation and of actions taken by the licensee in violation of subsection 29(1) of the *General Nuclear Safety and Control Regulations*.

Relevant facts

I, Colin Moses, Director General of the Directorate of Nuclear Substance Regulation and designated officer authorized by the Canadian Nuclear Safety Commission (CNSC) to issue notices of violations, believe on reasonable grounds that 20/20 ND Technology Inc. committed the above violation. The facts relevant to the violation and the penalty calculation are as follows:

1. On or about December 18, 2017, during industrial radiography activities, the sealed source failed to return to the shielded position in the exposure device. As a result 20/20 ND Technology Inc. implemented their contingency plan.
2. Paragraph 29(1) (d) of the *General Nuclear Safety and Control Regulations* (GNSCR) states that:

29 (1) Every licensee who becomes aware of any of the following situations shall immediately make a preliminary report to the Commission of the location and circumstances of the situation and of any action that the licensee has taken or proposes to take with respect to it:

(d) a situation or event that requires the implementation of a contingency plan in accordance with the licence;

3. On January 9, 2018, approximately three weeks following the incident, 20/20 ND Technology Inc. reported the incident to the CNSC, contrary to Paragraph 29(1)(d) of the GNSCR.



- Paragraph 30(1)(c) of the *Nuclear Substances and Radiation Devices Regulations* (NSRDR) states that:

30 (1) *Every licensee who possesses, uses or produces an exposure device shall*

(c) return a dosimeter referred to in paragraph (3)(c) to the dosimetry service that issued the dosimeter, within 10 days after the end of the period referred to in subsection 31(2).

- On January 18, 2018, CNSC staff visited 20/20 ND Technology Inc.'s location and discovered that the dosimeters worn in the incident involving the contingency plan had not been sent for processing, contrary to Paragraph 30(1)(c) of the NSRDR.
- The result of the readings from one dosimeter indicated a potential exceedance of a dose limit that required additional testing to verify the actual dose received by the worker. The subsequent testing determined that the dose was non-personal.
- On February 12, 2018, 20/20 ND Technology Inc. reported that they had failed to notify the CNSC of six instances of exceedances of action levels as per the requirements outlined in their documentation since October 1, 2015, contrary to paragraph 6(2)(c) of the *Radiation Protection Regulations*.

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*, the amount of the penalty was determined based on the following relevant facts:

- Compliance history: Assessed score = +1

20/20 ND Technology Inc. has failed to make other reports as required by the *Nuclear Safety and Control Act* and the Regulations under the Act, notably the requirement to notify the CNSC of exceedances of an action level.

- Intention or negligence: Assessed score = +1

The individual involved in the implementation of the contingency plan was the radiation safety officer of 20/20 ND Technology Inc. and as the person responsible for implementation of the licensee's radiation protection program, demonstrated a degree of negligence in not respecting regulatory reporting requirements.

- Actual or potential harm: Assessed score = +2

As a result of the event which required the implementation of the contingency plan, there was the potential for a high radiation exposure. Since 20/20 ND Technology Inc. did not report the event as required, and in addition did not process the dosimeter promptly following the incident, there was the potential for harm from an unrecognized overexposure.

- Competitive or economic benefit: Assessed score = 0

There was no apparent competitive or economic benefit from the failure by 20/20 ND Technology Inc. to make the required report.



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

20/20 ND Technology Inc. implemented corrective actions, however the delay in sending the dosimeters for processing limited the effect of any efforts to mitigate or reverse the effects of the event.

6. Assistance to Commission: Assessed score = +1

20/20 ND Technology Inc.'s delayed reporting and failure to submit the dosimeters for processing as required by regulation hindered the ability of CNSC staff to promptly assess and respond to this incident.

7. Attention of Commission: Assessed score = +1

Although 20/20 ND Technology Inc. did notify the CNSC of the event, the initial report was received several weeks after the occurrence



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
C	\$1,000	\$100,000	\$99,000

(c) Determining factors

Factors	Scale of regulatory significance	Assessed score
1. Compliance history	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
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"/>	+2
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 type="checkbox"/> 0 <input type="checkbox"/> +1 <input checked="" type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/>	+1
7. Attention of Commission	-2 <input type="checkbox"/> -1 <input type="checkbox"/> 0 <input type="checkbox"/> +1 <input checked="" type="checkbox"/> +2 <input type="checkbox"/> +3 <input type="checkbox"/>	+1
Total		6
÷ 29 (1) [rounded to 2 decimal points]=		0.21
x \$39,000.00		
[total] =		\$8190
+ \$ 1000 [minimum for the category] =		\$9,190

⁽¹⁾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 June 1, 2018 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

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

Colin Moses, Director-General, DNSR
Designated Officer

2018/04/30

Date

Telephone: (613) 993-7699

Email: colin.moses@canada.ca