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Update from CNSC Staff

Mise à jour du personnel de la **CCSN**

Follow up from June 28, 2023 **Commission Meeting**

Suivi à la suite de la réunion de la Commission du 28 juin 2023

Update from CNSC staff on radon in certain private residences in Elliot Lake, ON (Action Item # 30589)

Mise à jour du personnel de la CCSN au sujet du radon dans certaines résidences privées à Elliot Lake (ON) (Suivi # 30589)

Commission Meeting

Réunion de la Commission

February 21, 2024

Le 21 février 2024



File: 4.12.01 e-Doc: 7210347 GEN-006472

BRIEFING NOTE FOR THE COMMISSION

ISSUE OR PURPOSE

This briefing note is to provide the Commission with an update to information reported during the June 28, 2023, Commission meeting, on the topic of radiation at certain homes in Elliot Lake, Ontario. The minutes of that meeting [1] placed an action on CNSC staff to provide an update on the topic. This memo is intended to fulfill that action.

BACKGROUND

There were multiple uranium mines and mills around Elliot Lake, Ontario, all of which have been safely decommissioned. Several tailings management areas remain and these are licensed and inspected by the CNSC. The licensees for these sites are Rio Algom Limited and Denison Mines. An overview of uranium mining and decommissioning in the Elliot Lake area can be found here: https://www.cnsc-ccsn.gc.ca/eng/waste/uranium-mines-and-millswaste/

In June 2023, the CNSC received several pieces of correspondence expressing concerns regarding levels of radiation on private properties in Elliot Lake. This included a June 13, 2023 letter from the Canadian Environmental Law Association (CELA) on behalf of four Elliot Lake homeowners [2]. These homeowners expressed concerns related to levels of radon gas in their homes and the radiation dose rate in certain areas of their properties, which they attributed to the presence of mine waste rock from former Elliot Lake uranium mines.

On June 20, 2023, CNSC staff responded to CELA's letter – CNSC staff's response can be found here: https://www.cnsc-ccsn.gc.ca/eng/resources/news-room/letters/response-cela/. In this reply, CNSC staff reiterated the CNSC's position that clean waste rock is exempt from regulation by the CNSC under Section 10 of the *General Nuclear Safety and Control Regulations*, as it contains only naturally occurring nuclear substances and was never intended to form part of the fuel cycle. At the Commission Meeting of June 28, 2023, CNSC staff provided a verbal update on these matters. In paragraph 70 of the minutes of meeting, the Commission placed an action on CNSC staff to provide an update on BHP's investigation.

DISCUSSION

On July 20, 2023, three of the four Elliot Lake homeowners from CELA's June 13, 2023 letter initiated a judicial review process against the Attorney General of Canada in relation to the CNSC's letter of June 20, 2023. This process is ongoing.

In December of 2023, BHP Canada Inc. (BHP), which owns Rio Algom Limited, provided an update to CNSC staff regarding their investigation into the four properties referenced in the June 13, 2023 CELA letter. BHP confirmed that as of that time, all four homes had functioning radon ventilation systems, which ensure the safety of persons living in those homes. CNSC staff understand that one of these systems is newly installed by BHP.

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CONCLUSION

CNSC staff will continue to engage constructively in the judicial review process until its completion and will continue to verify the safety of CNSC-licensed sites in Elliot Lake, Ontario. CNSC staff will continue to report to the Commission on regulatory oversight of Elliot Lake licensees via the Regulatory Oversight Report on Uranium Mines and Mills. As low-risk sites, these updates are delivered once every three years, with the update covering the 2021-2023 calendar years to be delivered in December, 2024.

Health Canada and the Algoma Health Unit both have extensive online content related to radon safety¹ which provides useful information on obtaining radon tests, guidelines for safe levels of radon in air, and measures that homeowners can take to reduce radon levels in a home. CNSC staff encourage all Canadians to be aware of the radon conditions in their homes, and to take appropriate measures if relevant Health Canada guidelines are exceeded.

Prepared by: Patrick Burton, Director, UMMD

Reviewed by: Luc Sigouin, Director General, DNCFR

Approved by: Karen Owen-Whitred, Acting Executive Vice President, ROB

Date: February 06, 2024

REFERENCES

[1] Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held on June 28, 2023 (e-Doc 7123934). Available on the CNSC website at: https://api.cnsc-ccsn.gc.ca/dms/digital-medias/Minutes-June-28-2023-Commission-Meeting-e.pdf/object?subscription-key=3ff0910c6c54489abc34bc5b7d773be0.

[2] Letter, Canadian Environmental Law Association and Blaise Law to CNSC President Velshi, June 13, 2023 (e-Doc 7210554).

¹ https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/radon.html https://www.algomapublichealth.com/environment-inspections/environmental-health/radon/