Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

CMD 25-H9.16

Date: 2025-10-24

Written Submission from Peter Prebble

Mémoire de Peter Prebble

In the matter of

À l'égard de

Denison Mines Corporation

Denison Mines Corporation

Licence Application to Prepare Site and Construct for Denison Mines' Wheeler River Mine and Mill Project

Demande de permis pour la préparation de l'emplacement et la construction du projet de mine et d'usine de concentration d'uranium Wheeler River de Denison Mines

Commission Public Hearing

Audience publique de la Commission

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Canada

Dear CNSC Commissioners,

Thank you for the opportunity to express my concerns about the proposed Wheeler River uranium development being put forward by Denison Mines.

I have several serious reservations about this project.

1. Whenever assessing a proposed new uranium mine project, it is always advisable to examine the proponent's previous operating record. As you are all aware, Denison Mines mined uranium in the Elliot Lake region of Ontario from 1957 until 1992. During that period, the company released large amounts of radioactive and acidic tailings into the Serpent River Watershed, causing a great deal of contamination. This shameful record in my view should mean that the company should now be required to go to great lengths to demonstrate that it deserves to be trusted with a controversial approach to uranium mining that has not been tried in northern Saskatchewan before, namely in-situ mining using the injection of sulfuric acid. Moreover, a high level of transparency and accountability to the public should be required.

2. Sulfuric acid injection in in-situ uranium mining is controversial because it poses numerous environmental hazards. In addition to successfully dissolving uranium, it will at the same time mobilize many other toxic metals and radionuclides, and it will make groundwater restoration very difficult once mining is completed. Even after extensive flushing and chemical treatment, residual acidity and metal contamination can persist for very long periods of time. There are also elevated risks of spills on the mine site that can contaminate both soils and surface waters.

3. In Wyoming and Czechia, the negative experiences with in-situ uranium mining using sulfuric acid injection offer a flashing red light for why CNSC should be very hesitant about allowing Denison to adopt this approach.

4. In addition to the concerns I have expressed about sulfuric acid injection, the geology of the area around the ore body appears to pose some additional risks. There is discontinuous sandstone overlying the ore deposit which leaves me worried about elevated risk of contaminant migration.

5. Given the controversial nature of Denison's proposal, it is concerning that the company wishes to remove from public scrutiny numerous documents it has prepared on topics that in my view the public should have every right to be able to examine. (It is understandable if commercially confidential sentences or pages in these documents need to be redacted.) I hope CNSC staff and commissioners will insist on a high level of transparency and accountability related to this project.

6. If the project is allowed to move forward, extremely rigorous remediation standards should be set. Remediation is likely to be a slow and complex process. In addition, Denison should be required to post a very large bond to leave funds on hand for additional remediation and monitoring work that is likely to be needed in the years after Denison is no longer on site. The reality is that pollutants unleashed by this project could be in the environment for thousands of years into the future.

7. On balance, my advice to CNSC would be not to approve the Denison application in its current form for the reasons I have stated above.

8. If the Wheeler River project is approved in the future, I advise CNSC to require independent third-party monitoring of the site by both indigenous peoples and by independent scientists.

9. Finally, I want to add a cautionary note on Denison's claim that nuclear power should be expanded in the world. In recent years we have seen a dangerous escalation of armed conflict, and in conflict zones nuclear power plants are an exceptional danger. Armed conflict in the vicinity of a nuclear power plant poses the risk that conventional weapons could rupture the silos where radioactive waste is stored or cut off all electricity supplies for several days, so that uranium fuel rods overheat and cause the plant to melt down.

   I also wanted to suggest that Denison, or any other proponent, not be allowed to sell uranium to countries that are in blatant violation of the United Nations Non-Proliferation Treaty. India is now in blatant violation. It has refused to sign the Treaty and has doubled its nuclear weapons arsenal since signing an agreement with Canada on renewed uranium shipments in 2012. No further uranium sales from Canada to India should be permitted and I urge that this be a condition of any future license Denison may receive, and of all future uranium mine license renewals.