



Ecology Action Centre

Keeping the “Know” in Nova Scotia:

The facts about uranium
exploration & mining
in Nova Scotia

March 2025

The facts about uranium exploration and mining in Nova Scotia

In the spring 2025 session of the provincial legislature, the Premier of Nova Scotia brought forward Bill 6, [An Act Respecting Agriculture, Energy and Natural Resources](#). The bill, which was passed with the support of all Progressive Conservative MLAs, removed the ban that had prohibited exploration and mining for uranium in Nova Scotia. For the first time since 1981 it is now possible for prospectors and mineral exploration companies to prospect and gain mineral explorations licences to search for uranium, including on private and Crown land.

History of the uranium ban

Even before Nova Scotia had a legislated ban, it had a long-standing moratorium on uranium exploration and mining. The moratorium on uranium exploration and mining was instituted by Conservative Premier John Buchanan in 1981.

Prior to the moratorium, there had been extensive exploration for uranium in Nova Scotia by prospectors and mining companies, including on private land. This sparked widespread outcry from Nova Scotians, especially in rural Nova Scotia. The call for a ban on uranium exploration and mining was led by grassroots activists, including women's groups, doctors and several newly formed organizations, with support from the Ecology Action Centre.

Upon hearing from their residents, several municipalities also called on the Province to create a provincial ban. After the 1981 moratorium, the issue was revisited several times:

- In 1982, the Province created an inquiry on the topic (the “McCleave Inquiry”), led by Judge McCleave. This included 44 public meetings across the province, followed by a report by the Judge (Province of Nova Scotia, 1985).

History of the uranium ban (continued)

- IN 1994, Premier John Buchanan convened an interdepartmental committee to reexamine uranium exploration in Nova Scotia. The committee's recommendation to remove the ban was not accepted or acted upon.
- In 2018, there was yet another review by the staff of Nova Scotia's Energy and Mines Department (Nova Scotia Energy and Mines, 2018).

At every review, Nova Scotians were loud and clear – they did not want uranium exploration or mining in Nova Scotia.

In 2009, Premier Darrell Dexter [entrenched the ban into law](#) to make it more permanent (Province of Nova Scotia, 2009). John MacDonnell, who was Natural Resources Minister at the time, said, "This measure responds to the concerns that Nova Scotians have expressed over the mining of uranium in our province. We will legislate this moratorium because it is what Nova Scotians want."

Current interest in uranium

The mining industry and some levels of government have stated that there is an increased need to mine uranium to fuel nuclear power (which they refer to as “clean energy”). Currently, there are no nuclear power plants in Nova Scotia. In fact, Scotland and Germany are moving away from using uranium for nuclear power as they invest in cleaner energy (BBC 2023). Small modular nuclear reactors (SMRs), another possible avenue of interest or uranium suppliers, would not benefit Nova Scotia as enriched uranium fuel required for SMRs is not produced in Canada and would require importing uranium (Edwards 2024).

“Critical minerals” are minerals that governments and industries have deemed necessary to contribute to technologies that can help with moving away from fossil fuel use (e.g. wind turbines). As a result, there is more interest in mining these minerals. Uranium was not on the list of critical minerals until spring 2025 when the provincial government revised the list and lifted the ban on exploring for uranium (Province of Nova Scotia 2025).

The Province of Nova Scotia has recently suggested that mining, including for uranium, would bring revenues to the Nova Scotian government. Typically, provincial government revenue from mining comes from royalties: money companies pay to governments when they mine within the government's land base. Given that there has been a moratorium on uranium mining it is unclear what royalty rate would be ascribed to it. Uranium is not currently in the list of minerals and substances for which a royalty must be paid to the Province (Province of Nova Scotia 2018).

Current interest in uranium (continued)

Given that there has been a moratorium on uranium mining it is unclear what royalty rate would be ascribed to it. Uranium is not currently in the list of minerals and substances for which a royalty must be paid to the Province (Province of Nova Scotia 2018).

Risks of uranium mining

Uranium mining, like many other forms of mining, comes at a high cost to the environment and high risk to human health (National Research Council 2011, Ferrari et al. 2017).

The techniques used to mine uranium use large amounts of water, which is contaminated after the mining and milling processes, and must be remediated (made safer) after mining.

An additional risk of uranium mining is that the tailings (the rock left over after mine processing) are radioactive and remain so for thousands of years. Canada already has a problem in its existing waste from uranium mining (from Canadian Nuclear Safety Commission 2021):

- 218 million tonnes uranium mill tailings
- 167 million tonnes uranium waste rock
- 2.5 million spent fuel bundles (from nuclear energy generation)

Risks of uranium mining (continued)

All water and mine tailings at uranium mines must be managed very carefully to avoid poisoning people or the environment, which has happened at various uranium mine sites in Canada and abroad (CBC News 2019, Environmental Law Institute 2020, Government of Canada 2025). Working in uranium mines poses higher risks to workers than other forms of mining, including an elevated risk of cancer, even when safety procedures are followed (Occupational Cancer Research Centre 2015).

In Nova Scotia, mines must follow a set of laws and regulations to, among other things, protect the environment from the potential impacts of mine operations and mine tailings. Nova Scotia's most recent experience with a large, open pit mine similar to what could be used to mine uranium was the Touquoy open pit gold mine. During the six years the mine operated, the company that owned the mine broke 23 provincial and three federal laws that were in place to protect the environment (Halifax Examiner 2022). The company is also now in a lawsuit against the Nova Scotia Department of Environment and Climate Change to try to get out of their mine remediation responsibilities (CBC News 2024). This is instructive because it exemplifies how mining is currently conducted in Nova Scotia.

References

- BBC. December 6, 2023. Does nuclear power have a role in Scotland's energy future? Accessed February 12, 2025: [bbc.com/news/uk-scotland-scotland-politics-67628514](https://www.bbc.com/news/uk-scotland-scotland-politics-67628514)
- Canadian Nuclear Safety Commission. 2021. High-level radioactive waste. Government of Canada: cnsccsn.gc.ca/eng/waste/high-level-waste/
- CBC News. 2019. 50K litres of uranium-contaminated water leaks into ground at Cameco's Key Lake mill. Accessed February 12, 2025: [cbc.ca/news/canada/saskatoon/contaminated-water-key-lake-cameco-1.5104043](https://www.cbc.ca/news/canada/saskatoon/contaminated-water-key-lake-cameco-1.5104043)
- CBC News. 2024. Gold mining company escalates appeal to N.S. Supreme Court: [cbc.ca/news/canada/nova-scotia/gold-mining-company-nova-scotia-supreme-court-1.7298586](https://www.cbc.ca/news/canada/nova-scotia/gold-mining-company-nova-scotia-supreme-court-1.7298586)
- Edwards, G. 2024. Will New Brunswick choose a 'small, modular' nuclear reactor that's not small at all (among other problems)? NB Media Coop: nbmediacoop.org/2024/11/23/will-new-brunswick-choose-a-small-modular-nuclear-reactor-thats-not-small-at-all-among-other-problems/
- Environmental Law Institute. 2020. An Ongoing Battle: Fighting the Impacts of Uranium Mining in Southwestern Indigenous Communities. Accessed February 12, 2025: eli.org/vibrant-environment-blog/ongoing-battle-fighting-impacts-uranium-mining-southwestern-indigenous
- Ferrari, C.R., do Nascimento, H.d.A.F., Rodgher, S. et al. 2017. Effects of the discharge of uranium mining effluents on the water quality of the reservoir: an integrative chemical and ecotoxicological assessment. Sci Rep 7, 13919 (2017). doi.org/10.1038/s41598-017-14100-w



References (continued)

- Halifax Examiner. 2022. Atlantic Gold sentenced to \$250,000 fines and penalties after pleading guilty to federal and provincial environmental charges. Accessed February 12, 2025: halifaxexaminer.ca/economy/natural-resources/mining/atlantic-gold-sentenced-to-250000-fines-and-penalties-after-pleading-guilty-to-federal-and-provincial-environmental-charges/
- Government of Canada. 2025. Events Reporting: Uranium Mines and Mills. Accessed February 12, 2025: cnscccsn.gc.ca/eng/acts-and-regulations/event-reports-for-major-nuclear-facilities/event-reporting/uranium-mines-mills/
- National Research Council (U.S.). 2011. Uranium Mining in Virginia: Scientific, Technical, Environmental, Human Health and Safety, and Regulatory Aspects of Uranium Mining and Processing in Virginia. National Academic Press. Accessed February 12, 2025: ncbi.nlm.nih.gov/books/NBK201052/
- Nova Scotia Energy and Mines. 2018. A Review and Summary of Activities Related to Uranium in Nova Scotia Well Water. Open File Report ME 2018-006. Accessed January 30, 2025 - novascotia.ca/natr/meb/data/pubs/18ofr06/ofr_me_2018-006.pdf
- Occupational Cancer Research Centre. 2015. Ontario Uranium Miner Cohort: Cancer incidence and mortality. Accessed February 12, 2025: occupationalcancer.ca/project/ontario-uranium-miner-cohort/
- Office of the Premier. 2025. Caucus Memo. Accessed January 30, 2025: documentcloud.org/documents/25501852-caucus-memo/
- ProPublica. 2022. The Cold War Legacy Lurking in U.S. Groundwater. Accessed February 12, 2025: propublica.org/article/uranium-mills-pollution-cleanup-us



References (continued)

- Province of Nova Scotia. 1985. Report of the Commission of Inquiry on Uranium. Open File Report ME 612. Accessed January 30, 2025: novascotia.ca/natr/meb/data/pubs/ofr/ofr_me_612.pdf
- Province of Nova Scotia. 2018. Mineral Resources Regulations made under Section 156 of the Mineral Resources Act. Accessed February 12, 2025: novascotia.ca/just/regulations/regs/mrregs.htm
- Province of Nova Scotia. 2004. Renewable Electricity Regulations, Electricity Act. Accessed January 30, 2025: novascotia.ca/just/regulations/regs/elecrenew.htm#TOC32
- Province of Nova Scotia. 2009. Uranium Exploration and Mining Prohibition Act. Accessed January 30, 2025: nslegislature.ca/sites/default/files/legc/statutes/uranexpl.htm
- Province of Nova Scotia. 2024. Nova Scotia's Critical Mineral Strategy. Accessed February 12, 2025: novascotia.ca/natr/meb/docs/critical-minerals-strategy.pdf
- Province of Nova Scotia. 2025. Nova Scotia Updates Critical Minerals Strategy. news.novascotia.ca/en/2025/05/14/nova-scotia-updates-critical-minerals-strategy