# BACKGROUNDER: WHY WE OPPOSE NUCLEAR WASTE ABANDONMENT IN NORTHWESTERN ONTARIO

In November 2024, the Nuclear Waste Management Organization (NWMO) announced that it is targeting the heart of Treaty #3 territory / "Sunset Country" in northwestern Ontario for a deep geological repository (DGR) in which to bury and abandon all of Canada's **highly radioactive nuclear fuel waste**.

The Nuclear Waste Management Organization (NWMO) is a corporation - its member companies are nuclear power producers.

## ISSUE - EXPRESSIONS OF CONSENT:

The NWMO has maintained that it will only proceed with an "informed and willing" community. In 2024, the NWMO obtained consent for repository construction from the Council of the **Township of Ignace**, after the Township asked its citizens whether they would like to continue to continue in the NWMO's siting process. At no point were citizens asked if they favoured becoming a host community to a DGR (and, in fact, Ignace is 45 km east of the site and in a different watershed, so they will not be "host" to the impacts and have no actual authority over the Revell site)

**Wabigoon Lake Ojibway Nation**, also now called a host community by the NWMO, has not expressed consent, but has given permission for the NWMO to conduct further site studies in their traditional territory. In a Nov. 18, 2024 release, WLON stated: "The yes vote does not signify approval of the project."

The NWMO's proposed site (the "Revell site") is half-way between Ignace and Dryden, more than 45 km outside Ignace's municipal boundary. The proposed project affects not only those living or doing business near the burial site, but also those in its watersheds, including people in **Grassy Narrows, Dryden, Kenora, Fort Frances, Rainy River area, Lake of the Woods, and Kenora** as well as **hundreds of thousands of people** living along the transportation route. None of these communities have been consulted for "consent."

## ISSUE - LACK OF SCIENTIFIC EVIDENCE OF SAFETY:

There are no operating deep geological repositories for high-level nuclear fuel waste anywhere in the world. There is no direct evidence of their safety. If and when there are radioactive releases from the repository – in 50 years, 100 years, 1,000 years or longer – the consequences will affect the watershed areas. Groundwater could be contaminated for eons, making the waterways of northwestern Ontario unsuitable for human use and causing irreparable ecosystem damage.

Studies have been done on the integrity of the bedrock (Canadian Shield rock is typically fractured and variable); note that the characteristics of the rock will be fundamentally altered by the disturbances of underground repository construction.

On arrival at the disposal site, *high-level nuclear waste will require repackaging* - another significant source of environmental contamination.

#### ISSUE - TRANSPORTATION RISKS:

If the nuclear waste in question is transported to the burial site by truck, it will amount to **2-3 transport truckloads per day, for an estimated 50 years**.

From 2015-2020 there were 712 collisions along Hwy. 11/17 between Shabaqua and Ignace. **51.5**% of these collisions involved heavy transport trucks. The nuclear industry's cask safety tests are computer model and scale tests, and do not reliably reproduce field conditions. If a collision caused the breach of a cask, communities along the transportation route are ill-prepared. The radioactive materials are hazardous to approach and pose a *grave environmental contamination risk*.

# FREQUENTLY ASKED QUESTIONS

## Q: Is burying the waste the best way to prevent a terrorist attack on it?

**A:** Nuclear fuel waste is most vulnerable to terrorists while it is in the cooling pools near the reactor, where it must be stored for 10 years after removal due to its radiation and heat. After that period, it is packaged and moved into dry storage, again near the reactor, where it is monitored for safety. In all, it must remain near the reactor site for decades. The best way to prevent terrorist attack on the waste is to cease producing it, by phasing out nuclear energy production, and making existing stockpiles more secure in their present locations, where security measures are already in place.

## Q: Is continued production of nuclear power needed to avert climate change?

**A:** No. The nuclear sector will be unable to expand quickly enough to substantially reduce carbon emissions by 2030. Also, nuclear power is not "emissions-free"; the life-cycle carbon emissions from nuclear power are greater than wind and solar. Austria and Denmark will soon achieve carbon neutrality without the use of nuclear energy. Germany and Spain are phasing out nuclear power and looking to renewables and efficiency to help meet climate targets.

# Q: What is the alternative to burying the nuclear fuel waste?

**A:** Currently there is no "solution" to the problem of Canada's existing nuclear fuel waste. **Continued stewardship of the waste near the site of its production,** in specialized containers and secure long-term storage facilities, is the best proposed practice. Improvements are needed to how the waste is managed now, but the best options increase security, require constant safety monitoring, and do not involve transporting/abandoning the waste.



**We the Nuclear Free North** is an alliance of people & groups opposed to transporting and burying highly radioactive nuclear waste in NW Ontario. Get in touch!

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