

## **BACKGROUND: WHY WE OPPOSE NUCLEAR WASTE ABANDONMENT IN NORTHWESTERN ONTARIO**

Plans are being made and studies conducted into burying all of Canada's **highly radioactive nuclear fuel waste** in the heart of Northwestern Ontario – on Treaty 3 lands – in “Sunset Country”. ***The decision will be made as early as 2023.***

The organization responsible for the study and disposal plans is the Nuclear Waste Management Organization (NWMO), whose member companies are nuclear power producers.

### **ISSUE - DEFINING CONSENT:**

The NWMO says they will only proceed with an “informed and willing” community. **Who should also be included in the consent process? And, how should consent be defined and measured?** The NWMO has agreements in place with Ignace and with Wabigoon First Nation, but the site is half-way between them, and is more than 40 km outside Ignace's municipal boundary. The proposed project affects not only those living or doing business near the disposal site, but also those in its watersheds, including people in **Grassy Narrows, Dryden, Kenora, Fort Frances, Rainy River area, Lake of the Woods, Kenora and Winnipeg** as well as **hundreds of thousands of people** living along the transportation route.

### **ISSUE - LACK OF SCIENTIFIC EVIDENCE OF SAFETY:**

***There are no operating deep geological repositories for high-level nuclear fuel waste anywhere in the world.*** So, 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. Ground-water could be contaminated for eons, making the waterways of Northwestern Ontario unsuitable for human use and causing irreparable damage to the ecosystem.

Studies are underway to determine the integrity of the bedrock, but the rock of the Canadian Shield is generally highly fractured and variable, and the characteristics of the rock will be fundamentally altered by the disturbance caused by constructing the underground repository.

Note that upon arrival at the disposal site, ***high-level nuclear waste will require repackaging***, which is a challenging process - and another opportunity for environmental contamination.

### **ISSUE - TRANSPORTATION RISKS:**

If the nuclear waste in question is transported to the disposal site by truck, it will amount to **2-3 transport truckloads per day, for 40 years**. This is based only on the nuclear waste we have already produced; extended or expanded use of nuclear power reactors means more nuclear fuel waste.

From 2015-2020 there were 712 collisions along Hwy. 11/17 between Shabaqua and Ignace. **51.5%** of these collisions involved heavy transport trucks. Cask safety tests are done by computer modelling and scale tests, and do not reliably reproduce field conditions. In the event of a collision that causes the breach of a cask, communities along the transportation route are ill-prepared. The radioactive material within, in addition to being hazardous to approach, poses a ***grave environmental contamination risk***.

## ***FREQUENTLY ASKED QUESTIONS***

**Q: Will NWMO's proposed DGR create good, long-term jobs in NW Ontario?**

**A:** There will be temporary construction jobs, but most long-term jobs created locally will likely be **in custodial and maintenance roles**, and will disappear when the site is abandoned. This project will not operate like a mine.

**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.

**Q: Don't we need continued production of nuclear power 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 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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