

Photo: Studies have been carried out into the response of the rock to excavation at Andra's underground research lab in France. (Source: Andra)

#### Dear South Bruce Residents:

Thanks for taking the time to read our first ever Willing to Listen newsletter – Ear to the Ground. For those who don't know me, I am a resident of Teeswater, a wife, a mom of two beautiful kids, and an Operator at Bruce Power. I grew up on a beef farm outside of Orillia, where my family continues their cowcalf operation today. The nuclear and agricultural industries are both near and dear to my heart.

We at Willing to Listen have created this newsletter to pass along factual information we've gathered about Deep Geological Repositories (DGRs) around the world, as well as the site selection process here in South Bruce. We hope that the content will help you, our neighbours and friends, understand why we are supportive of the process, why we're encouraging you to get engaged and learn more, and why we feel it is important to dispel misinformation about the DGR project when we hear it being spread arounds our community.

There are a lot of studies coming out over the next few months so I encourage you to participate in the upcoming South Bruce Community Liaison Committee (CLC) meetings to learn more.

If you would like to contact me, feel free to email **swhytockinsouthbruce@ hotmail.com**.

Sheila Whytock



### International Conference on Geological Repositories

Willing to Listen participated virtually in the sixth International Conference on Geological Repositories (ICGR) that was held April 4-8, 2022, in Helsinki Finland. The conference theme was "Advancing Geological Repositories from Concept to Operation," with sessions about the current status of projects, experience from underground laboratories, demonstrating technical reliability, building and maintaining competence and trust, and communicating uncertainty from the scientist to the community. It was really interesting information that proved scientific research is leading to progress on DGRs around the world!

At the ICGR this year, there were speakers from Finland, the U.S., France, Sweden, United Kingdom, Canada, Germany, Norway, Japan, Switzerland, Czech Republic, European Union, Belgium, China, and Spain, as well as the International Atomic Energy Agency.

We were struck by the fact that, despite the diversity in language, culture, geography and politics, there is agreement within the international scientific community that geological repositories provide the necessary long-term safety and security to isolate long-lived nuclear waste from the human environment over an extended period of time.

#### **Uncertainty in Science**

One of the most thought-provoking statements made at the ICGR was that "Uncertainty does not mean something unsafe." Uncertainty can make us uncomfortable, especially when it comes to our health and the environment, but science helps to narrow questions of uncertainty through experiments, collecting data and analyzing results.

Research on geological repositories has been conducted around the world in underground laboratories (more on this in our next newsletter!) to ask and answer questions about suitable rock formations, engineered barriers, and final disposal methods/procedures. After decades of research, the weight of evidence (from many different experiments in many locations) has led the vast majority of researchers to the same conclusion – that geological repositories using a multi-barrier approach are a safe, long-term solution to contain and isolate nuclear waste to protect people and the environment.



Construction is underway at the ONKALO nuclear waste repository excavated deep in the Olkiluoto bedrock in Finland. (Source: Posiva)

#### **Communicating Uncertainty**

If experts around the world believe that DGRs are safe, why are we still debating whether one should be constructed? The simple answer is there are uncertainties in the process which leads to misinformation and ultimately degraded social acceptance. That's why it's so important that we ask questions and learn about how the nuclear waste will be handled. It's also hard to get our heads around how much time we're talking about! One speaker at the conference said it's sometimes helpful to compare the DGR to processes in nature. **Simply put, if the rock can preserve fossils for a million years, the rock can preserve the spent fuel.** 

Another speaker at the ICGR talked about the social and ethical considerations related to siting a geological repository. We don't know what the future will bring and we are unable to communicate with future generations to ask them what they think, but we have a moral obligation to do our best to protect them today.

Bottle drive

# A bottle drive is underway to raise funds for the Teeswater Medical Centre

Drop your empties off at 16 Shannon St., Teeswater, until the end of May. If you can count cans and label your bags with totals, it would be incredibly helpful!





Lawn signs

Need some green for your lawn?

**Email willingtolistensouthbruce@gmail.com** to pick up a 'South Bruce Proud – Willing to Listen' lawn sign.

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