

Advancing the Site Selection Process: Identifying Areas for Sub-Surface Studies

The NWMO is making decisions to help advance the site selection process as it moves towards identifying a preferred area to host a deep geological repository for Canada's used nuclear fuel. We are working to identify a single location with safe geology in an area with a willing and informed host by 2023. Detailed site characterization studies will then be conducted on this preferred site to confirm suitability and initiate the regulatory review process.

We are now moving from desktop and surface-based field studies to planning and conducting sub-surface investigations, including borehole drilling, at potential repository sites. At the same time, we will be advancing discussions to explore the nature and potential for partnerships, and help communities and their neighbours in the area better understand what the project would mean for them.

We are ready to proceed with these next activities in four broad siting regions involved in the process: the Ignace area; the area of Hornepayne and Manitouwadge; the South Bruce and Huron-Kinloss area, and the area around Elliot Lake and Blind River. We plan to focus in areas where there is a strong potential to successfully implement the project. That means these activities would proceed in areas where we have confidence we can identify a technically suitable and socially acceptable location for further study, and where there is a foundation of local interest to support a partnership approach.

The NWMO's mission is to develop and implement collaboratively with Canadians a management approach for the long-term care of Canada's used nuclear fuel that is socially acceptable, technically sound, environmentally responsible, and economically feasible. Safety and security remain the top priority. The ability to develop a supportive partnership in the area around a potential repository site is also an important consideration.

Narrowing focus: Communities moving forward at this time

White River and Central Huron are not planned to be a focus of more detailed geological study. Both communities will, however, continue to have an important role in advancing work in their respective regions as key neighbouring communities. A broader regional approach will need to involve municipalities, First Nation and Métis people in each siting area to support field studies and begin discussions about partnership.

Although we have seen interest in the project in Central Huron and White River, we have not been able to expand interest or learning to the level needed to give sufficient confidence to advance geotechnical studies in their immediate vicinities. We strongly encourage and welcome their continued interest, learning and engagement as an important part of the ongoing work in the broader area.

Beginning this summer and working together with communities, the NWMO will focus next steps in several areas:

- » **Hornepayne and Manitouwadge area:** We are planning to engage with people in the area to determine if it is possible to identify one technically suitable and socially acceptable location for initial borehole drilling in 2018. This location needs to have the potential to be technically suitable for hosting a repository site and to have support from municipal, First Nation and Métis communities in the area.

Narrowing Focus (continued)

- » **Huron-Kinloss and South Bruce area:** We are planning for initial boreholes on municipal lands to further advance understanding of the geology in the area prior to initiating boreholes at a potential repository location. The timing and logistics of these initial boreholes is still to be confirmed.
- » **Ignace area:** We plan to drill an initial borehole in 2017. Working with Ignace and Wabigoon Lake Ojibway Nation, as well as others in the area, we have identified a location for initial borehole studies in a portion of a geologic formation known as the Revell Batholith. This location has potential to be technically suitable and socially acceptable as a future repository site.
- » **Elliot Lake and Blind River area:** Geological and environmental mapping studies are underway, with guidance and participation of Sagamok First Nation. Decisions about plans to advance with initial boreholes are expected to be made early in 2018.

Moving forward

To prepare for this next set of activities, the NWMO will work with communities to plan for broader area discussions. The project will require working together with communities that initiated their areas' involvement by expressing interest in the project and with First Nation, Métis and municipal communities in the area. If the project is ultimately sited in any of the areas currently being considered, many communities in the area would experience benefits. Planning with communities in the area will help optimize benefits and address the types of challenges associated with any large project.

The NWMO will work with communities to put in place a structure for coordinated planning within each area. Together, we will need to broaden engagement activities to include those who would be most affected by the project, including municipalities, First Nation and Métis communities.

The NWMO will continue the process of narrowing down potential sites to host the project until it arrives at one preferred safe and socially acceptable site as the focus of more detailed site characterization. The preferred site must have a suitable rock formation in an area with an informed and willing host. It is expected to take until about 2023 to complete the necessary studies.