



NUCLEAR WASTE SOCIÉTÉ DE GESTION
MANAGEMENT DES DÉCHETS
ORGANIZATION NUCLÉAIRES

Phase 2 Preliminary Assessments in
crystalline rock settings:
Working together to identify study areas

DRAFT FOR DISCUSSION



Updated: NOVEMBER 2019

Phase 2 preliminary assessments are a step in the multi-year process of technical study, dialogue and engagement designed to identify a safe and secure site for the long-term management of Canada's used nuclear fuel in a deep geological repository. Phase 2 studies build on work conducted earlier in the siting process and will advance the search for potential sites through identifying smaller siting areas for consideration and more detailed study.

- **Land around interested communities has been identified as potentially suitable.**

Studies conducted to date by the Nuclear Waste Management Organization (NWMO) suggested there are large land areas in the vicinity of interested communities that have potential to meet technical safety requirements for the deep geological repository and warrant further study. Working together with those in the area, decisions needed to be made on where to focus Phase 2 studies.

- **Phase 2 studies help identify smaller areas with strong potential to meet technical requirements for safety.**

Phase 2 technical studies have helped identify smaller land areas for consideration. These studies will provide important information to support discussions with the interested community, First Nation and Métis communities in the area, and surrounding communities about a site where the project might be implemented.

- **The NWMO is working closely with the interested community, First Nation and Métis communities in the area, and surrounding communities to plan and implement these studies.**

Phase 2 technical studies involve airborne geophysical surveys, and depending on the outcome of these surveys, surface and subsurface studies, including detailed geological and environmental mapping, and borehole drilling and testing.

The NWMO is working closely with the interested community, First Nation and Métis communities in the area, and surrounding communities to plan and implement these technical studies.

- **Land in potentially suitable areas was temporarily removed from mineral staking and exploration to allow for Phase 2 studies to be conducted. This was the starting point for planning and discussion.**

In preparing for Phase 2 studies, the NWMO applied to the province to temporarily remove land from staking for mineral claims in the vicinity of the northwestern Ontario community of Ignace. This land is marked on the map that follows. The NWMO used this map to continue discussions with communities on how best to plan and implement Phase 2 studies in the area. Some such studies have been completed, while others are underway and planned for the future.

The NWMO had also temporarily removed land from staking and exploration in the vicinity of White River, Blind River, Elliot Lake, and Schreiber, Ont., and staked land in the Saskatchewan community of Creighton. Studies were previously concluded in these areas, and the NWMO has since worked with both provinces to reopen the land.

In addition, the NWMO had temporarily removed land from staking and exploration in the vicinity of the northern Ontario communities of Hornepayne and Manitowadge. Studies have now concluded in these areas, and the NWMO is working with the province to release the land.

- **The identification of a single smaller preferred site involves the interested community, First Nation and Métis communities in the area, and surrounding communities.**

Phase 2 studies are an early step in a multi-year process to identify a site for Canada's used nuclear fuel repository and Centre of Expertise. The preferred site must meet robust technical requirements focused on safety. It must also be appropriate, considering the social, economic, cultural, and spiritual practices and preferences of those in the area.

The project will only proceed with the interested community, First Nation and Métis communities in the area, and surrounding communities working in partnership to implement the project.

Phase 2 technical studies

- Some land has been temporarily removed from staking for mineral claims to provide an opportunity for further study. These areas have been identified as potentially technically suitable to safely and securely contain and isolate used nuclear fuel over the long term.
- The temporary removal of land from mineral staking is intended to facilitate further assessment. The NWMO will continue to work with interested communities, First Nation and Métis communities in the area, and surrounding communities to identify a potentially suitable site. We expect to be able to identify a preferred site by 2023.
- These areas of land are much larger than would be required for the deep geological repository and associated facilities.
- Surface activities such as trapping, tourism, hunting, fishing, berry picking, and gathering of medicinal plants will continue to be encouraged. The temporary removal of land from mineral staking is not intended to affect these activities.
- The NWMO has worked with interested communities, First Nation and Métis communities in the area, and surrounding communities to help determine when studies are conducted in order to minimize any disruption to regular activities on the land and to ensure the public is notified about the activity.
- As land is assessed, areas not considered potentially suitable for the NWMO project will be identified to the province so the land can be released.
- The temporary removal of land from mineral staking is not expected to negatively affect mineral exploration; the NWMO is seeking areas that do not have the potential for or have known exploitable natural resources.
- Phase 2 technical studies are conducted with the involvement of the interested community, First Nation and Métis communities in the area, and surrounding communities. Involvement in research studies is not interpreted as an indication of support for the project, nor of a particular site.

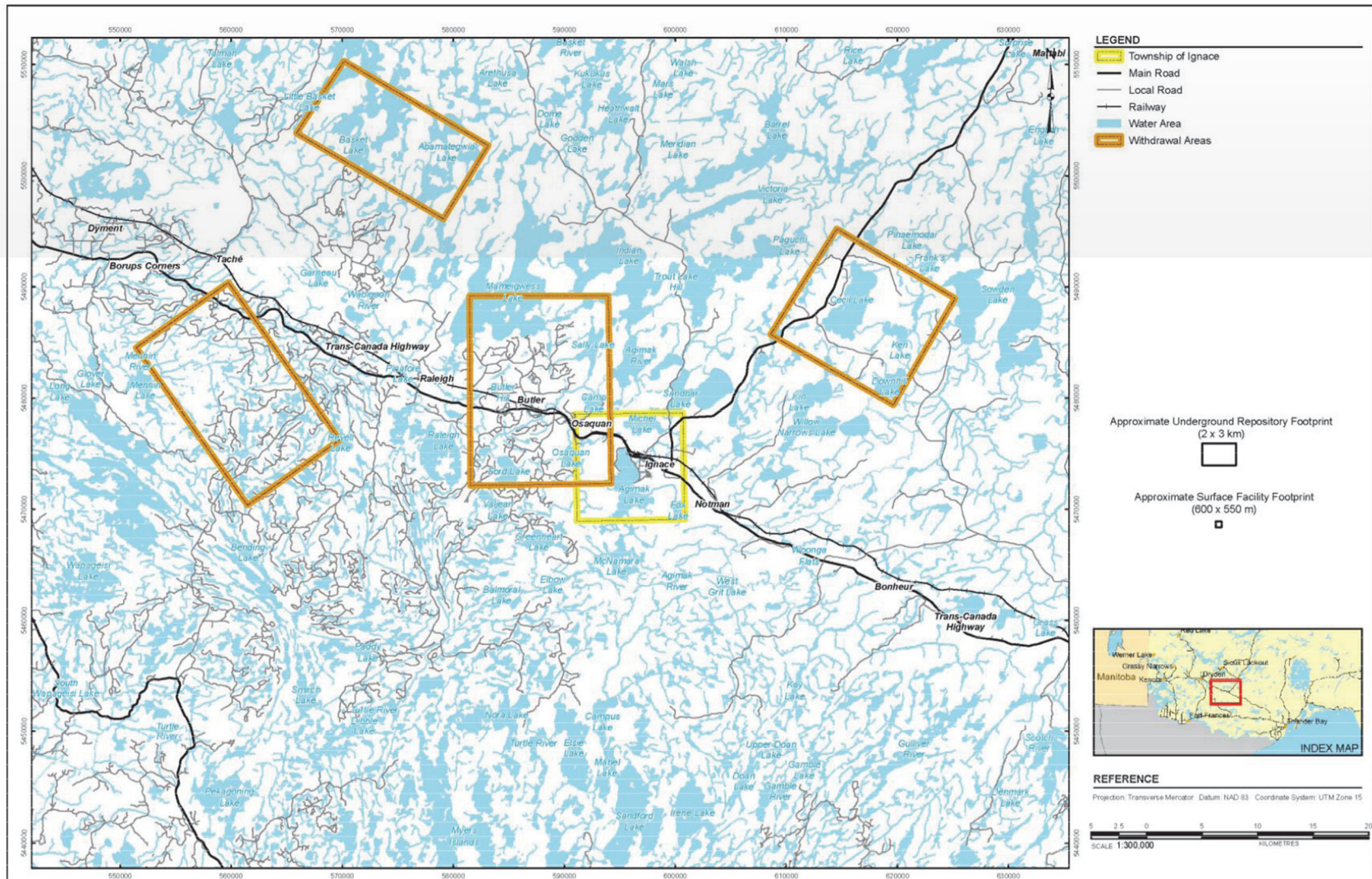


Figure 1: Ignace area, Ont. – Land withdrawn to facilitate Phase 2 studies