



Phase 2 Preliminary Assessments:

Initial Borehole Drilling and Testing in Huron-Kinloss and South Bruce

Presented to: Huron-Kinloss Nuclear Waste Community Advisory Committee
South Bruce Community Liaison Committee

Presented by: Dr. Ben Belfadhel, Director Geosciences, NWMO

November 3 and 5, 2015

Draft for discussion with communities

Geoscientific studies to date have involved desktop studies

- A next step in siting process could involve drilling one initial borehole within both South Bruce and Huron-Kinloss
- Objective is to further understand the general geology across the two communities
- Borehole not expected to be a repository site
- Opportunity to drill borehole on municipal land

What is borehole drilling?

- Narrow, deep circular hole made in the ground using drilling equipment
- Retrieves a rock sample or core
- Testing is performed both on the borehole and core



3



Purpose of this initial borehole

- Provide more information about whether the geology in the area could be a safe place for a repository
- Provides information on true orientation, thickness and other characteristics of the rock layers



4



Where will initial boreholes be drilled?

Will be decided with the community and be a focus of engagement in 2016

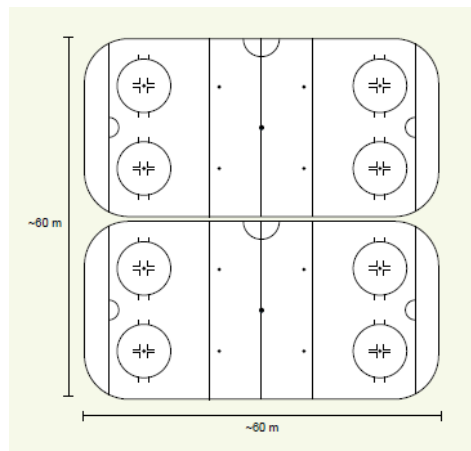
- Advance technical understanding of the general geology of the area
- Also, be accessible to community members to observe the drilling activity
- Provide an opportunity for learning about the project

5



How much land is needed to drill a borehole?

- 60 metres by 60 metres



6



What equipment is used?

- Conventional truck-mounted or track-mounted rotary drill rig



7



What kind of testing is conducted?

- Logging of the rock core
- Geomechanical measurements
- Geophysical measurements



8



Next Steps

- NWMO and community will plan the next set of activities together
 - considering potential locations for this initial borehole
 - considering timing for this initial borehole
- Focus of engagement in 2016
- Work to interweave Traditional Knowledge

