



Update on the APM Site Selection Process – Canada’s Plan for the Long-Term Management of Used Nuclear Fuel

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The Nuclear Waste Management Organization (NWMO) was established by Canada’s nuclear energy generators (Ontario Power Generation, New Brunswick Power and Hydro Quebec) in 2002 as a requirement of the Federal Nuclear Fuel Waste Act. 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. In 2005, after a multi-year dialogue with the public, the NWMO published the Adaptive Phased Management (APM) plan for managing Canada’s used nuclear fuel which was accepted by the Government of Canada in 2007.

The site selection process began in 2010 and 22 communities expressed interest in “Learning More” about the plan. The technical evaluation process occurs in three major phases: Initial Screenings, Preliminary Assessments and Detailed Site Characterization. These phases are part of a narrowing down process to ultimately select one site for Canada’s used nuclear fuel. As of January 2019, there are five communities remaining in the process, including three in crystalline rock environments across northern Ontario and two in sedimentary rock environments in southern Ontario.

The initial field work for Preliminary Assessments has been completed for all crystalline rock communities remaining in the site selection process. The work included the acquisition and interpretation of high-resolution airborne geophysics and geological mapping. Borehole drilling and testing is the current focus of work, and additional site-specific geoscientific field and laboratory studies, planned to be completed over the next several years, will complement these previous and on-going studies. Local Indigenous and non-Indigenous community members participate and interact with NWMO and its contractors in all stages of the field work including through attendance at information sharing meetings, cultural awareness training and Indigenous ceremonies. NWMO acknowledges that we all have a stewardship responsibility to protect and preserve the Earth for this and future generations and has committed that Indigenous Knowledge will inform the implementation of the site selection process. Together these activities highlight NWMO’s transdisciplinary approach to the site selection process by developing partnerships with the local Indigenous and non-Indigenous communities, while advancing a technically sound site characterization program.