



NUCLEAR WASTE
MANAGEMENT
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SOCIÉTÉ DE GESTION
DES DÉCHETS
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Phase 2 Preliminary Assessment Potential for Partnership

TOWNSHIPS OF MANITOUWADGE AND HORNEPAYNE AND AREA, ONTARIO



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OCTOBER 2019

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PHASE 2 PRELIMINARY ASSESSMENT: POTENTIAL FOR PARTNERSHIP - MANITOUWADGE & AREA, HORNEPAYNE & AREA

October 2019 FINAL

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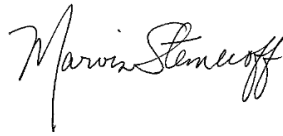
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ABSTRACT

The purpose of this report is to summarize the current understanding of the potential for partnership to advance the NWMO APM project in the Manitouwadge area and in the Hornepayne area. Three criteria guided this assessment: 1) The level of support for the project at multiple levels; 2) The potential to identify a socially acceptable repository site; and 3) The potential alignment of the project with community aspirations.

Engagement, information gathering, learning and dialogue with community and area leaders and residents at multiple levels has occurred over an eight-year period which enables this assessment of the potential for achieving partnership. The conclusions drawn are based on the more recent 2015 to 2019 timeframe.

This assessment is being conducted as part of a site selection process initiated in 2010. The site selection process involves gradually narrowing down to focus progressively more detailed studies in areas with strong potential to meet the robust technical and social project requirements. The NWMO is working to identify a single preferred site for the deep geological repository and associated Centre of Expertise by 2023. The site selected will be located in a place with a supportive partnership involving the community that initially entered the site selection process and First Nation, Métis and municipal communities in the area.

TABLE OF CONTENTS

LIST OF ACRONYMS.....	II
1.0 INTRODUCTION	1
2.0 APPROACH AND METHODS	2
2.1 Partnership Assessment Criteria and Indicators	2
2.2 Community Engagement and Other Sources of Information and Insight.....	2
2.2.1 Ongoing Learning	3
2.2.2 Site Selection for Borehole Testing.....	5
I. Initial & Preliminary Engagement Activities Conducted to Solicit Public Comments on the Potential Borehole Drilling Areas.....	5
II. Formal Presentation of Plans for Borehole Drilling	5
III. Engagement Activities to Receive Comments on Potentially Geologically Suitable Areas ..	6
IV. Engagement Activities to Receive Comments on Proposed Borehole Locations	6
2.2.3 Identification of Values and Principles – Partnership Roadmap.....	8
3.0 ASSESSMENT OF POTENTIAL FOR PARTNERSHIP	9
3.1 Support for the Project	10
3.1.1 Support for the Project at Multiple Levels.....	11
3.1.2 Confidence in the Safety Case.....	13
3.1.3 Support for Field Studies.....	14
3.2 Potential to Identify a Socially Acceptable Repository Site.....	15
3.3 Potential Alignment with Community Aspirations.....	16
4.0 SUMMARY	18
REFERENCES.....	19
APPENDIX A: KEY ENGAGEMENT ACTIVITIES	A-1
1. Selected Engagement Activities Site Selection for Borehole Testing in Hornepayne.....	A-2
2. Selected Engagement Activities Site Selection for Borehole Testing in Manitouwadge.....	A-3
3. Engagement Activities: Partnership Roadmap / Identification of Values and Principles in Hornepayne.....	A-5
4. Engagement Activities: Partnership Roadmap / Identification of Values and Principles in Manitouwadge.....	A-5

APPENDIX B: COMMENT FORM AND MAP OF PROPOSED BOREHOLE LOCATIONS	B-1
Appendix B-1: Comment Form & Map of Proposed Borehole Locations, Hornepayne (June 2019)	B-2
Appendix B-2: Comment Form & Map of Proposed Borehole Locations, Manitouwadge (June 2019) ..	B-4
APPENDIX C: ‘ADDITIONAL BOREHOLES & STUDIES’ BROCHURES	C-1
Appendix C-1: Additional Boreholes and Studies, Hornepayne Brochure	C-2
Appendix C-2: Additional Boreholes and Studies, Manitouwadge Brochure	C-6
APPENDIX D: GUIDING PRINCIPLES FOR EXPLORING PARTNERSHIP – COMMUNITY CONVERSATIONS	D-1
Appendix D-1: Guiding Principles for Exploring Partnerships, Hornepayne	D-2
Appendix D-2: Guiding Principles for Exploring Partnerships, Manitouwadge	D-8

LIST OF ACRONYMS

APM	Adaptive Phased Management
CNS	Canadian Nuclear Society
NESMG	Northeast Superior Mayors Group
NWCLC	Nuclear Waste Community Liaison Committee
NWMO	Nuclear Waste Management Organization
PGSA	Potentially Geologically Suitable Areas
WRCLC	White River Community Liaison Committee

1.0 INTRODUCTION

The Nuclear Waste Management Organization (NWMO) is responsible for implementing Adaptive Phased Management (APM), Canada's plan for the safe, long-term care of used nuclear fuel. APM involves the development of a large infrastructure project spanning many decades that will include a deep geological repository, Centre of Expertise for technical, environmental and community studies and other facilities.¹

In 2010, the NWMO launched a site selection process to identify a willing host community for a deep geological repository where Canada's used fuel can be safely stored. The site selection process involves nine steps, with the process currently at Step 3². Step 3 is defined by two phases of preliminary assessments for each interested community. Phase 1 involved documenting the current socio-economic conditions in the communities and then postulating what might be the possible implications of the APM project on community well-being (CWB) for each community and the wider area. For interested communities that successfully completed the initial screening in Phase 1, Phase 2 involves conducting a preliminary assessment of potential suitability and narrowing the number of communities that have expressed an interest in partnering with NWMO. The NWMO plans to complete all preliminary assessment work and to select one community/area to host the APM project by 2023.

This report summarizes the current understanding of the potential to develop the needed partnership required to advance the project in Manitouwadge, Hornepayne and area and neighbouring communities. The ability to achieve a partnership is one of three fundamental criteria being used to select a site (the two other criteria focus on safety and transportation).

Engagement, information gathering and dialogue with community and area leaders and residents has occurred over an eight-year period and allows an assessment of the potential for achieving partnership. The conclusions drawn are based on the more recent 2015 to 2019 timeframe.

The potential for partnership is assessed using key factors that are described in the following sections. The information and insights, although based on extensive in-community and area engagement with community leaders, groups and residents over many years, are qualitative in nature. While this report draws conclusions based on the assessment, the community and area engagement process and preliminary assessment studies are ongoing. More remains to be learned by the community and the NWMO. Therefore, this report represents our understanding of the potential for partnership at this point in time.

¹ Nuclear Waste Management Organization (2019), Implementing Adaptive Phased Management 2019 to 2023. Page 5.

² <https://www.nwmo.ca/en/Site-selection/Steps-in-the-Process>

Note that this report focuses on municipalities and other communities in the area.

2.0 APPROACH AND METHODS

The approach to understanding the potential for partnership in the area, and methods used, were based on an extensive engagement program with multiple levels of leaders, groups, tenure holders, and residents. This section summarizes criteria and indicators used to assess the potential for partnership followed by an overview of the engagement program.

2.1 Partnership Assessment Criteria and Indicators

Over the course of the past eight years, progress towards partnership in Manitouwadge, Hornepayne and area has been considered in the context of the following three criteria and indicators:

- A. Support for the project
 - i. Measured at multiple levels namely the initiating community leadership and grassroots as well as the leadership and grassroots of neighbouring communities.
 - ii. Confidence in the safety case as measured by the degree to which any or all levels of the communities understand the safety case, and their degree of confidence/acceptance of it.
 - iii. Support for field studies as measured by the degree of social acceptance of test boreholes.
- B. Potential to identify a socially acceptable repository site as measured by the degree to which community members are willing to discuss options and exchange ideas on the topic.
- C. Potential for the APM project to align with community and area aspirations for community well-being and development.

The assessment is summarized in Section 3 ('Potential for Partnership – Foundation Assessment') below.

2.2 Community Engagement and Other Sources of Information and Insight

The following is an overview of engagement activities conducted for Step 3, Phase 2 studies in 2015 - 2019 that provided insight in terms of understanding the potential for partnership in the area. In addition to ongoing learning, a key focus of engagement activities was on preparation for field work (2015 and 2016), and input on the social considerations and community preferences for identifying potential borehole drilling locations at or near a potential repository site (2017) in the withdrawal areas². In 2018, engagement focused on potential locations for borehole drilling, and identification of values and principles that will guide the way NWMO and communities work together to further explore and advance partnership. The NWMO gathered public comments through a series of one-on-one meetings, meetings with community organizations, attendance at local and area events, Nuclear Waste Community Liaison Committee (NWCLC) meetings, and open houses. Activities also extended beyond the communities, to engage in an initial way with those having knowledge of/ interests in the potential

² The withdrawal areas have been temporarily withdrawn from staking for mineral claims to provide an opportunity for initial field studies to proceed.

locations for borehole drilling (e.g., trappers, camp owners/ operators, forestry organizations), and the leadership of municipalities in the surrounding area. In 2019, engagement focused on updating the communities on the siting process, the status of borehole applications in both Hornepayne and Manitouwadge areas, the proposed additional studies in Hornepayne, and the outcomes of the engagement to identify guiding values principles in the fall of 2018.

Selected engagement activities are highlighted in Appendix A.

2.2.1 Ongoing Learning

The knowledge base is derived from extensive interaction with the residents of Manitouwadge, Hornepayne and area over the past eight years. Some of the key engagement mechanisms used to inform the communities about the project, and in turn listen to interests and opinions, are listed below:

- The Nuclear Waste Community Liaison Committees (NWCLCs) were established in 2011 in Hornepayne, and 2013 in Manitouwadge; they meet on a monthly basis. Meetings are locally advertised.
- The NWCLCs have their own websites, in addition to NWMO's comprehensive website that is routinely updated with information related to the communities, the siting process, ongoing technical research, and other topics. Written responses to dozens of topical questions from community members are periodically published, provided to the NWCLCs, and posted on NWCLC websites.
- NWMO has maintained high visibility in the communities via direct mail and advertising in print³ and radio media (e.g., open houses, Used Fuel Transportation Package exhibit). This includes newsletters distributed by direct mail.
- The NWCLCs also periodically distribute print newsletters directly to residents; these are also available on the NWCLC websites.
- NWMO hosts multi-day open houses in communities at key milestones, periodically and at least annually.
- Visits by NWMO's Used Fuel Transportation Package Exhibit, and NWMO's new Mobile Learn More Centre.
- NWCLC members, municipal officials/ staff, and local residents periodically attend 'Learn More' tours at the dry storage facilities at the Bruce ('Western'), Darlington or Pickering generating stations, at the NWMO's research facility in Oakville and/or the research nuclear reactor at McMaster University.
- Many one-on-one interviews have been conducted with municipal and community leaders, administrators, businesses, tenure holders in the vicinity of proposed borehole locations, representatives of local organizations, and residents (in addition to numerous informal discussions via other engagement activities); recently these have focused on both the proposed borehole locations and the values and principles that will guide future discussions.

³ Neither Manitouwadge nor Hornepayne currently have local newspapers (the Wicksteed Weekly - Hornepayne's community newspaper, formerly the Jackfish Journal - ceased publication January 2019).

- Presentations to local groups in Hornepayne and Manitouwadge.
- NWMO has also engaged with students in the primary and secondary schools in both Manitouwadge and Hornepayne. Students have attended open houses in their communities, and presentations/ sessions held at the community offices, at the NWMO offices in Toronto, and via webinar.
- NWMO has attended community events in both Manitouwadge and Hornepayne (e.g., Hornepayne Public Awareness Days; Manitouwadge ATV Jamborees), often with booths and displays.
- NWMO has held periodic briefings/meetings with elected officials/ senior staff from municipalities and regional organizations in the surrounding area, including:
 - White River;
 - Greenstone;
 - Marathon;
 - Terrace Bay/ Schreiber;
 - Hearst/ Hearst Economic Development Committee/ Nord-Aski Regional Economic Development Corporation⁴; and
 - Kapuskasing, Moonbeam, Val Rita-Harty, Fauquier-Strickland, Opasatika.
- NWMO also participates in regional and provincial municipal conferences attended by municipalities in the surrounding area, and has made presentations to regional organizations such as the Porcupine Health Unit staff and Medical Officer of Health⁵; the Superior North Community Futures Development Corporation and Economic Development Officers in Terrace Bay; and at the Hospice Northwest Services regional workshop in Marathon. A meeting/ tour of the Mobile Learn More Centre was conducted with the Nord-Aski Regional Economic Development Corporation (including several members of Hearst Council).
- Both Hornepayne and Manitouwadge are members of the Northeast Superior Mayors Group (NESMG⁶), which is periodically briefed on the NWMO siting process.
- Community representatives have attended the Canadian Nuclear Society's conferences on Nuclear Waste Management Decommissioning and Environmental Restoration and their Nuclear 101 conferences, and the International Conference on Geological Repositories in 2016.
- Learn More Community Offices have been established in both Manitouwadge and Hornepayne. These are staffed by Project Coordinators, who are municipal staff selected by each municipality to work on their behalf. In 2018, NWMO staffed Community Liaison Manager positions in both Manitouwadge and Hornepayne.

⁴ Nord-Aski Regional Economic Development Corporation, as an economic development entity, plays a vital role in promoting economic growth in four Northeastern Ontario municipalities along Highways 11 and 631. The communities serviced are: Constance Lake First Nation, the Town of Hearst, the Township of Hornepayne, the Municipality of Mattice-Val Côté and the Unincorporated Territories. <https://www.nordaski.com/about-us>

⁵ Hornepayne is a member community, along with Hearst, Cochrane, Iroquois Falls, Kapuskasing, Matheson, Moosonee, Smooth Rock Falls, Timmins. <http://www.porcupinehu.on.ca/en/your-community/branch-offices/>

⁶ Members of NESMG are the municipalities of Hornepayne, Manitouwadge, White River, Chapleau, Wawa and Dubreuilville.

2.2.2 Site Selection for Borehole Testing

The NWMO gathered public comments regarding the social considerations related to the withdrawal areas, Potentially Geologically Suitable Areas (PGSAs, or ‘ovals’), and then proposed borehole locations, through a series of one-on-one meetings, meetings with community groups, attendance at local and area events, Nuclear Waste Community Liaison Committee (NWCLC) meetings, and open houses. An overview of the engagement is provided below. Additional detail is provided in a separate report on the engagement related to proposed borehole locations in Hornepayne⁷.

I. Initial & Preliminary Engagement Activities Conducted to Solicit Public Comments on the Potential Borehole Drilling Areas

In 2015, the NWMO began to discuss the plan for geological and environmental fieldwork that helped identify potential social, economic and cultural considerations related to the withdrawal areas. The airborne surveys were discussed at 2015 NWCLC meetings, March 2015 open houses, and through other engagement activities in the area. At the May 2016 NWCLC meetings in Hornepayne, White River and Manitouwadge, NWCLC members discussed the planned work to observe general geological features and geophysical and environmental mapping in their areas.

Open Houses were held in Hornepayne, White River and Manitouwadge in May 2016 to provide an update on the field studies previously completed in the area, and the field work (‘walking the land’) proposed for 2016 season. NWMO also engaged with local individuals having knowledge of/ interests in the withdrawal areas to gain their insights about the local conditions and to discuss their questions and concerns regarding the field work to be conducted in 2016. In addition, many one-on-one interviews were conducted with local residents (as well as many informal discussions via other engagement activities) in all three communities.

The NESMG was periodically briefed on the status of fieldwork in 2015 (April and December) and 2016 (June and November); informal briefings were provided to municipal leadership in the surrounding area.

II. Formal Presentation of Plans for Borehole Drilling

NWCLC meetings in Manitouwadge, Hornepayne and White River in April 2017 introduced the topic of ‘*Planning for Initial Borehole Drilling and Testing in the North of Superior*’. A draft borehole drilling brochure was distributed to NWCLC members. NWMO received preliminary feedback from the NWCLCs and members of the public in attendance at the meetings.

⁷ DPRA Canada (April 2018), *Borehole Drilling: Public and Stakeholder Engagement Report – Hornepayne and Area*. https://www.nwmo.ca/~media/Site/Files/PDFs/2018/08/08/16/31/Hornepayne_Borehole_Drilling_Project_Description_Submission.ashx?la=en (Appendix C).

III. Engagement Activities to Receive Comments on Potentially Geologically Suitable Areas

At the June 2017 NWCLC meetings in Hornepayne and Manitouwadge, an overview of the geoscience assessments was provided, and maps of Potentially Geologically Suitable Areas (PGSAs, or ‘ovals’) within the withdrawal areas were introduced.

In July and early August 2017, engagement in both Manitouwadge and Hornepayne sought detailed feedback on the social considerations and preferences associated with the PGSAs (18 PGSAs in the Manitouwadge area, 13 PGSAs in the Hornepayne area). This was done primarily through:

- July 2017 Open Houses in Hornepayne and Manitouwadge on ‘Geologically Suitable Areas for Potential Initial Borehole Drilling Based on Early Phase 2 Studies’; and
- One-on-one mapping exercises or ‘community conversations’ conducted at open houses, and in meetings with groups/ individuals.

In September 2017, the NESMG was updated on the siting process, including the geoscience assessments and the engagement process regarding borehole drilling and the PGSAs in the Manitouwadge and Hornepayne areas. Informal briefings were provided to municipal leadership in the surrounding areas.

The borehole drilling engagement at the NWCLC meetings, open houses, one-on-one meetings and group meetings focused on three questions:

1. What is important to know about each of the areas identified on the map?
2. What about each area would make it a good site to drill a borehole? What, if any, concerns would you have?
3. Are some of these areas preferred over others for initial boreholes? Which ones? Why?

IV. Engagement Activities to Receive Comments on Proposed Borehole Locations

In 2018 and 2019, NWMO undertook engagement to identify social, cultural, economic and environmental matters related to three proposed borehole locations in each of Manitouwadge and area, and Hornepayne and area. Maps showing these locations are included in Appendix B (Comment Forms and Maps of Proposed Borehole Locations). NWMO identified and engaged with the tenure holders in the immediate proximity of the proposed borehole locations. ‘Immediate proximity’ has been defined to include tenure that overlaps all or part of one or more of the potential drill site areas, or that lies between 2 or more of the potential drill site areas. Engagement was undertaken through a series of one-on-one and group meetings, meetings with representatives of community groups, NWCLC meetings, and publicly advertised open houses, as described below.

The borehole drilling engagement at the NWCLC meetings, open houses, one-on-one and group meetings focused on two questions:

1. Are you aware of any social, economic, cultural or natural environment matters in relation to the proposed sites for potential boreholes 1, 2, 3 or the temporary access roads which may be needed?
2. If so, what are they and how should they be addressed?

At each of the open houses and one-on-one meetings, note takers were on hand to record comments provided by participants. Public comment forms were also available for participants to complete and return to the NWMO. These forms were also available at the Community Office. The public comment forms are included in Appendix B (Comment Forms and Maps of Proposed Borehole Locations).

Nuclear Waste Community Liaison Committee Meetings

The January 2018 NWCLC meetings in both communities included an update presentation provided by NWMO, including discussion of proposed borehole drilling activities. At the February 2018 NWCLC meetings, NWMO provided a detailed overview of the proposed borehole locations in the Hornepayne and Manitouwadge areas. The March 2018 NWCLC meetings included further discussion of the technical and infrastructural / logistic factors for the potential borehole locations, social considerations and an overview of engagement with community members at the open houses held in March. Comments on APM and the siting process from community members attending NWCLC meetings were responded to by NWMO staff.

During the April 2018 NWCLC meetings, NWMO's presentation provided an update on conversations with people in the area about plans for potential borehole drilling, and next steps in the process. At the May NWCLC meetings, the 'NWMO Update' presentation included an overview of borehole engagement to date, and proposed upcoming activities related to borehole drilling for the remainder of 2018. In 2019, NWMO has subsequently provided monthly updates to each of the NWCLCs with respect to borehole drilling and related matters in the area.

Appendix C includes 'Additional Boreholes & Studies' brochures for Hornepayne and Manitouwadge that were tabled in July 2019.

Open Houses

In March 2018, publicly advertised open houses were held in both Manitouwadge and Hornepayne. The NWMO staff at the open house walked members of the public through display panels explaining the overall siting process, APM and reference materials on the borehole drilling process. Participants were shown the three proposed potential borehole locations in their area and asked for their feedback. Public comment forms were also available for participants to complete and return to the NWMO. Open houses were held again in both Hornepayne and Manitouwadge in June 2019. The objective was to update the communities on the siting process, the status of borehole applications in both Hornepayne and Manitouwadge areas, the proposed additional studies in Hornepayne, and the outcomes of the engagement to identify guiding values and principles in the fall of 2018. Participants were also once again shown the three proposed potential borehole locations in their area and asked for their feedback. Public comment forms were also available for participants to complete and return to the NWMO (Appendix B: 'Comment Forms and Maps of Proposed Borehole Locations').

One-on-one and Group Meetings

Beginning in February through to May 2018, NWMO conducted one-on-one meetings with individuals or organizations having tenure (e.g., trapping areas, bear management or baitfish management areas, camps/ cabin owners, forestry management companies, recreational users, and commercial outfitters) in the immediate proximity of the proposed borehole locations. Meetings were also held with community organizations with an interest in the potential borehole locations (e.g., the West Larkin Lake Cottagers Association). These meetings were intended to identify social, cultural, economic and natural environment matters with respect to the 3 potential borehole locations identified by NWMO in each area. From April through to June 2019, NWMO continued one-on-one meetings with individuals or organizations having tenure in the immediate proximity of the proposed borehole locations in Hornepayne. The objective was to update tenure holders and others on the siting process, the status of borehole applications in both Hornepayne and Manitouwadge areas, and the proposed additional studies in Hornepayne.

2.2.3 Identification of Values and Principles – Partnership Roadmap

The first step in the partnership roadmap is the identification of values and principles that will guide the way communities and NWMO talk together and further explore the APM project. In both Manitouwadge and Hornepayne, a set of values and principles emerged in both communities; these are publicly available on the NWMO website^{8,9}, and are included as Appendix D of this document. Their development in 2018 was a joint process between the NWMO, the Chief Administrative Officers and NWCLCs in both communities.

The engagement activities for the identification of values and principles are summarized in Appendix A. The NWMO, the Township of Hornepayne, and the Township of Manitouwadge engaged in conversations in the respective communities to gather community member input and feedback on the values and principles that should guide future discussions. In 2018, NWCLC meetings and a Drop-in session on this topic were advertised in local publications, through the NWCLC websites, and via posters in the community. Presentations and discussions occurred at NWCLC meetings and in preliminary conversations with residents in the summer and fall of 2018. Workbooks were available at the community offices in the fall. In November, a ‘Community Drop-in’ was held in conjunction with the NWCLC meetings to discuss the draft emerging values and principles. Subsequently, both Councils passed resolutions (Hornepayne December 2019; Manitouwadge May 2019) regarding the joint values and principles.

⁸ Nuclear Waste Management Organization and the Township of Hornepayne. November 2018. *Guiding Principles for Exploring Partnership – Community Conversations to Date*.

<https://www.nwmo.ca/~media/Site/Reports/2018/11/30/12/06/Guiding-principles-for-exploring-partnership--Community-conversations-update-summary-report--Hornepayne.ashx?la=en>

⁹ Nuclear Waste Management Organization and the Township of Manitouwadge. November 2018. *Guiding Principles for Exploring Partnership – Community Conversations to Date*.

<https://www.nwmo.ca/~media/Site/Reports/2018/11/30/11/58/Guiding-principles-for-exploring-partnership--Community-conversations-update-summary-report--Manitouwadge.ashx?la=en>

Local residents, the NWCLCs and the leadership (elected and senior staff) have demonstrated in November 2018, at the June 2019 open houses, and in Council resolutions that they are supportive of the outcome of discussions about the values and principles to guide future discussions. Ongoing engagement, discussions and learning may suggest refinements to these principles over time.

Focus of discussion

The principles emerged from community discussions on three key questions:

1. Values and principles are important because they will guide the way Hornepayne and the NWMO talk and work with each other during more detailed conversations about the project. What values or principles – i.e., rules or requirements – should guide discussions and future decision-making between Hornepayne and the NWMO? Why are these values and principles important?
2. What should we avoid doing while having partnership discussions?
3. Other suggestions or rules that should be considered?

These principles were the focus of further discussion at a Community Drop-in session in November:

1. Have we covered what is most important? Are there important values and principles that should be added?
2. Each value and principle has a short description. Can you suggest refinements to these descriptions that would make them clearer or the principles stronger?
3. Do you have any other comments or suggestions?

3.0 ASSESSMENT OF POTENTIAL FOR PARTNERSHIP

The potential for partnership has been considered in the context of:

1. Support for the Project (Section 3.1)
2. Potential to Identify a Socially Acceptable Repository Site (Section 3.2)
3. Potential Alignment with Community Aspirations (Section 3.3)

These are discussed in terms of the:

- Initiating community (i.e., Hornepayne, Manitouwadge)
 - Leadership
 - Grassroots
- Neighbours (i.e., White River, Marathon, Hearst)
 - Leadership
 - Grassroots

‘Leadership’ includes elected leaders (mayors, council members), senior municipal staff, as well as un-elected leaders active in community organizations (e.g., NWCLC Chairs, Economic Development Corporations, Economic Development Officers) or otherwise influential in the community. ‘Grassroots’

is defined as members of the general public not involved in leadership roles, directing major organizations, or political activities.

The ‘neighbour’ municipalities for Hornepayne and Manitouwadge have been identified as follows for the purposes of this assessment:

Hornepayne ‘Neighbours’	Manitouwadge ‘Neighbours’
Manitouwadge	Hornepayne
Hearst	Marathon
White River	White River

Manitouwadge and Hornepayne have been identified as each other’s ‘neighbour’. However, both communities (leadership and grassroots) recognize that if the project goes to the other, they will benefit (particularly if the winter logging road between the two communities is upgraded as planned in 2021-22). While each would prefer to be the host, they would support a location in the other’s area.

Other communities in the wider regional area that are not considered as a ‘neighbour’, and are therefore not included in this assessment, include:

- Other member municipalities of the Northeast Superior Mayors Group¹⁰: Dubreuilville, Wawa (former participant in the ‘Learn More’ process), and Chapleau;
- Greenstone;
- Terrace Bay;
- Schreiber (former participant in the ‘Learn More’ process);
- Kapuskasing, Moonbeam, Val Rita-Harty, Fauquier-Strickland, Opasatika (along Hwy 11);
- Nipigon (former participant in the ‘Learn More’ process);
- Sault Ste. Marie; and
- Thunder Bay.

This report focuses on municipalities and other communities in the area.

3.1 Support for the Project

Overall support for the APM project is strong in Manitouwadge and moderately strong in Hornepayne. There appears to be support in the neighbouring municipalities – potential partners and neighbours. Evidence to support this assertion comes from the following perspectives:

1. Extent of awareness and support (Section 3.1.1);
2. Confidence in the safety case as measured by the degree to which any or all levels of the community understand the safety case, and their degree of confidence/acceptance in it (Section 3.1.2); and

¹⁰ Hornepayne, Manitouwadge, and White River are also members of the NESMG.

3. Support for field studies as measured by the degree of social acceptance for test boreholes (Section 3.1.3).

Discussion of each of these perspectives is provided below.

3.1.1 Support for the Project at Multiple Levels

All evidence indicates strong awareness and support for the APM project in Manitouwadge, and somewhat strong awareness and support in Hornepayne. Interest/ support in Hornepayne has continued to strengthen in 2018 and into 2019. Municipal elections were held in October 2018. There was a high degree of Council turnover in both Hornepayne and Manitouwadge; however, the Councils in both communities remain supportive of the 'Learn More' process and want to succeed in the siting process. There are new mayors and councillors in both communities, and there has been a period of learning for their Councils and the newly re-established NWCLCs in 2019. Incumbent mayors in several neighbouring North of Superior communities were re-elected (e.g., White River, Hearst, Marathon, Greenstone, Wawa, Terrace Bay) in 2018. These individuals have at least an ongoing awareness of the project, to varying extents, and an interest in learning more.

Manitouwadge

Manitouwadge has been in the siting process since 2012. The elected leadership/ senior staff/ NWCLC are all fully aware and supportive of the project, field studies, and willing to engage. There has been a high degree of participation in 'Learn More' tours and NWMO events. All tenure holders in the vicinity of the proposed borehole locations are supportive. It is not certain that everyone/ the grassroots in Manitouwadge is fully aware of the process – but a substantial majority are aware and supportive. There are relatively high levels of engagement by the grassroots. Support for the project and field studies has been strong with the leadership and grassroots since the outset of the siting process, and there is no reason to anticipate that this will change in the future.

Hornepayne

Hornepayne has been in the siting process since 2011, and support for learning about the project and participating in the siting process has been increasing in the last 12 to 18 months. There has been increasing leadership/grassroots participation at NWMO events in 2018/19, and many of leadership have been on 'Learn More' tours. The leadership and some of the grassroots in Hornepayne are committed to the learning process. On Council, some members are fully engaged in the process and supportive of the field studies; others are less visibly engaged but appear to be supportive of learning if not the project. Senior staff and most of the NWCLC are also fully engaged and are supportive of learning; two NWCLC members do not support the process. It is not certain that all of the grassroots in Hornepayne is fully aware of process – however a majority appear to be. There is a small vocal group at the grassroots level in Hornepayne that is actively opposed to participating in the siting process. Many residents observe that the 2018 election was a form of referendum on involvement in the NWMO siting process.

There appears to be a substantial number of individuals in the community who have not engaged in learning and discussions about the project. NWMO has heard, from some of those who have been engaged, that some of these individuals are supportive; however, many may be either 'neutral' or do not support the project. This appears to be driven by considerations such as lack of confidence in safety, potentially affected relationships with Indigenous groups in the surrounding area, concerns about the nuclear industry in general and desire not to become involved in it, concern about effects on community cohesion, uncertainty about how the project would be implemented 'on the ground', or potential changes in community character with the introduction of a large project and population growth. While some of these concerns may be addressed through further discussion and learning, some are related to values (such as orientation towards the nuclear industry) that are less likely to change.

Neighbours

There has been limited engagement with Marathon leadership to date, and none directly with the grassroots. As a 'Neighbouring Community', White River appears to be more comfortable/ supportive in this role than it was as an 'interested community' earlier in the process. The mayor and some council members/ former White River Community Liaison Committee (WRCLC) members remain supportive. In White River, individuals with tenure in the Hornepayne area or involvement on the former WRCLC are supportive of the project and field studies to test feasibility. There remains a level of uncertainty or lack of support amongst the broader grassroots within White River, but there has been no direct engagement with them since 2017.

Engagement with the leadership of Hearst and the Nord-Aski Regional Economic Development Corporation has been generally positive and supportive. At a 2019 meeting/ tour of the Mobile Learn More Centre with the Nord-Aski Regional Economic Development Corporation (including several members of Hearst Council), there were high levels of awareness, recognition of the potential regional opportunities, and interest in learning more and involving the grassroots. The leadership indicated that there is currently a high level of grassroots awareness of the project in Hearst.

Overall, there appears to be interest and some support in the neighbouring municipalities of Marathon, White River, and Hearst. Since there has been limited engagement by the NWMO in the surrounding area, it is too early to determine the nature and extent of support or opposition. If the project were to proceed in either Hornepayne or Manitouwadge, given the interrelationships among municipalities and among municipal and Indigenous communities, it is possible that some relationships may be strained by opposition to the APM project by some Indigenous groups in the area.

3.1.2 Confidence in the Safety Case

Over the last eight years, there has been a noticeable growth in overall confidence for the safety case associated with the Project in both communities. People who have engaged have listened, asked questions, learned, and in most cases have reached a comfort level with project safety. Those who are aware tend to support the project and they appear to accept the safety case for the project. During engagement with local residents in both communities in mid to late 2018 and in the first half of 2019, many stated that they are confident in the safety of the project, and that information needs to be communicated to the grassroots who are not engaged as part of the learning process.

Manitouwadge

Manitouwadge has little or no nuclear experience; it is a mining community that is also actively involved in forestry. The elected leadership, senior staff, NWCLC and unelected leadership in Manitouwadge are all fully accepting with respect to the safety of the project. Many individuals are observed to have a relatively greater level of confidence in safety after attending dry storage tours. The level of confidence in safety amongst the grassroots is less fully understood, however, grassroots confidence seems to be strong in Manitouwadge based on engagement to date (e.g., open houses, one-on-one conversations, NWCLC meetings etc.). Manitouwadge's mining history has contributed to an enhanced understanding of how the repository would be built and operated.

Hornepayne

Hornepayne has little or no nuclear experience; its economic activity is focused on the lumber mill and rail transportation. The leadership, staff and NWCLC have previously expressed confidence in the safety of the APM project, and this has continued with the newly elected council and recently reconstituted NWCLC, although two NWCLC members have stated their lack of confidence in the safety of the project. Individuals are observed to have a relatively greater level of confidence in safety after attending dry storage tours. The level of confidence in safety amongst the grassroots is less fully understood relative to the leadership in Hornepayne, and the fact that there is a substantial cross-section of individuals in the community that have not engaged may be influenced by social media that has been active in the community (both 'for' and 'against' the project). The small vocal opposition at the grassroots level in Hornepayne often cite concerns about safety.

Neighbours

Due to limited formal/ recent engagement with Marathon leadership, it is not possible to gauge acceptance of the safety case at this time.

In White River, some Councillors may have concerns and/ or their views are not known. Some unelected leadership are thought to be cautious about the project; however other elected/ un-elected leadership (e.g., former WRCLC members) are accepting of the safety case.

Due to limited formal/ recent engagement with Hearst leadership, it is not possible to gauge acceptance of the safety case at this time. However, at the July 2019 presentation/ Mobile Learn More Centre tour

in Hearst, while there were questions about safety and the project's approach to ensuring it during transportation and operations, participants did not have outstanding concerns.

While the leadership in neighbouring communities may be interested in learning more or generally support the Project, the confidence in the safety case of those not formally in the 'Learn More' process (Marathon and Hearst) cannot be understood at this time.

3.1.3 Support for Field Studies

There continues to be participation by leadership and the grassroots community at engagement activities and visits to the Community Offices in both Manitouwadge and Hornepayne during the borehole drilling engagement process in 2017 -2019. Fieldwork has been part of the conversation for several years, and NWMO staff talked to the NWCLCs and held open houses about the geology, the natural environment and borehole drilling annually since 2016. Both communities have been supportive about providing information that has facilitated field studies to date.

Manitouwadge

The leadership and grassroots in Manitouwadge are strongly supportive of field studies. No opposition to borehole drilling was expressed, and considerable support was raised by community members for the APM process and for siting of the project in the Manitouwadge area. This was reinforced during engagement in 2019, including the June open house.

Hornepayne

The leadership of Hornepayne are supportive of moving forward with actions such as field studies that demonstrate progress 'on the ground'. On Council, some are fully engaged in the process and supportive of the field studies; others are less visibly engaged but supportive of learning. The senior staff and most of the NWCLC are fully engaged and are supportive of field studies; two NWCLC members do not support them. While a majority of the grassroots engaged in Hornepayne re: potential borehole locations are supportive, there is a substantial cross-section of residents within the community who are not engaged. Some residents, tenure holders (e.g. a cabin owner) and several of 24 camp owners on West Larkin Lake are opposed to field studies. With respect to the latter, some of them stated concerns about the disruption of the use and enjoyment of their camp experience, but their opposition to field studies may be related to broader concerns about the APM project.

Neighbours

In White River, individuals with tenure in the Hornepayne area or involvement on the former WRCLC are supportive of the project and field studies to test feasibility. It is not possible to gauge the level of understanding or support for field studies, including proposed borehole drilling activities, on the part of the leadership and grassroots in neighbouring municipalities.

3.2 Potential to Identify a Socially Acceptable Repository Site

There is potential to identify a socially acceptable repository site in Manitouwadge and Hornepayne, based on observed support to date (see Section 3.1.1, above), willingness to engage based on municipal/ community engagement (see Section 2.2, above), and the support for field studies (as discussed in Section 3.1.3). During various engagements, it has been made clear to participants that the withdrawal areas, and the subsequently identified potential borehole testing locations within the PGSA's, may be a future repository site.

Manitouwadge

The Manitouwadge leadership are fully supportive and generally active participants in public events and one-on-one engagement with NWMO. There is strong support and participation at the grassroots level. Both the leadership and grassroots understand that the proposed borehole locations are a potential repository site, and there has been full support and participation in engagement in Manitouwadge with respect to those locations. No opposition to borehole drilling has been expressed, and considerable support was raised by community members for the APM process and for siting of the project in the Manitouwadge area. This was reinforced during engagement in 2019, including the June open house.

Hornepayne

Engagement on the three proposed borehole locations was initiated in early 2018 and continued again in early 2019. As noted above, in Hornepayne support at the grassroots level in particular has been increasing in the last 12 to 18 months. Leadership and grassroots understand that proposed borehole locations are a potential repository site. However, while a majority of those engaged re: potential borehole locations (potential repository site) are supportive, there is a substantial cross-section of residents within the community who are not engaged.

Neighbours

There has been limited engagement with Marathon leadership to date, and none directly with the grassroots.

White River's leadership has been expressing interest in field studies/ potential repository site to date and can be expected to engage if asked going forward. There may remain a level of uncertainty or lack of support amongst the broader grassroots within White River.

At the July 2019 meeting/ tour of the Mobile Learn More Centre with the Nord-Aski REDC, (including several members of Hearst Council), participants noted that borehole drilling in particular will make the project more tangible and people will be even more interested in learning more.

3.3 Potential Alignment with Community Aspirations

The project would go far to address many of the common economic development and social priorities for Manitouwadge and Hornepayne such as:

- Smoothing out the ‘boom/ bust’ cycles associated with forestry, mining, and changes in the railway industry;
- Retaining/ attracting new residents, and a younger population;
- Economic stability and diversity;
- Improved infrastructure and municipal revenue/ capacity; and
- Enhanced community and recreational events, programming and facilities for residents of all ages.

These priorities are typical in many small northern Ontario communities, including the municipalities neighbouring Manitouwadge and Hornepayne.

Manitouwadge

The project aligns with many of the economic development and social priorities for Manitouwadge. There is a strong certainty regarding the alignment/ cohesion of Manitouwadge’s leadership and grassroots with the project and the community’s economic development aspirations. The APM project generally aligns well with the vision, strategic directions and recommendations in the Manitouwadge strategic plan (2017); in September 2019, the Township initiated community engagement to review/ update the plan. Manitouwadge utilized NWMO funding to hire Economic Development Officer in the fall of 2018, who is learning and supportive of the project. During engagement with local residents on values and principles in Manitouwadge, many stated that they see a need to move to more detailed discussions about what the project might look like if it were to be located in the area, who needs to be involved and how, and the potential benefits and challenges that need to be understood and planned for.

Hornepayne

The Project would go far to address many of the economic development and social priorities for Hornepayne. The APM project generally aligns well with the vision, strategic directions and recommendations in the Hornepayne strategic plan (2017).

There is good alignment of the project with aspirations of many of those engaged in the community, however not all. While many residents have expressed a need for growth and the economic diversification the project would bring, a cross-section of community members appear not to be certain if it should be via the APM project or perhaps through other means. Their reasons may relate to lack of confidence in safety, potentially affected relationships with Indigenous groups in the surrounding area, concerns about the nuclear industry in general and desire not to become involved in it, concern about effects on community cohesion, uncertainty about how the project would be implemented ‘on the ground’, or potential changes in community character with the introduction of a large project and

population growth. While some of these concerns may be addressed through further discussion and learning, some are related to values (such as orientation towards the nuclear industry) that are less likely to change.

Neighbours

There are current and past partnerships amongst the municipalities and with Indigenous groups in the area, including the NESMG, Superior North Community Futures Development Corporation, Nord-Aski Regional Economic Development Corporation, and the Nawiinginokiima Forest Management Corporation¹¹. There is general acknowledgement by both Manitouwadge and Hornepayne (and their neighbouring municipalities) that the APM project is a 'regional' one in several senses and will require working together with neighbours during the siting process, detailed characterization/ assessment, and implementation.

The communities also have relationships based on joint economic activity. These include the forestry activities in Hearst, Hornepayne, Manitouwadge, Calstock, White River and Terrace Bay. Mining activities link Manitouwadge, Marathon, White River, Dubreuilville, and Wawa.

Regardless of the APM project, the communities realize that they can no longer work in isolation as one-industry towns. They must work together on economic and community development, and the NESMG for example has been doing so for more than a decade. Many planning agencies (e.g. Community Futures Development Corporations, economic development organizations, labour planning groups, emergency services groups), resource management groups, and municipal forums also take a regional approach. The 2016 economic modelling presentations and briefings in 2017 with the leadership of communities and regional organizations in the broader area elicited a desire to learn more about the project. At 2019 presentations at regional events, participants expressed interest/ support in learning more and about the potential benefits to the region from the project.

For Marathon, there is no indication of lack of alignment/ cohesion on aspirations, however engagement with their leadership has been limited and the grassroots has not been engaged, so there is no firm indication one way or another. At regional presentations in 2019 (i.e., to the Superior North Community Futures Development Corporation and Economic Development Officers in Terrace Bay; presentation at Hospice Northwest Services regional workshop in Marathon), participants expressed interest/ support in learning more and about the potential benefits to the region from the project.

There is some certainty with respect to the cohesion/ alignment within White River leadership on aspirations (due to their ongoing participation in the siting process). However, in White River many

¹¹ The Nawiinginokiima Forest Management Corporation (NFMC) is the first local forest management corporation in Ontario. NFMC was established to operate within a defined management area that includes the Ojibways of the Pic River First Nation, Pic Mobert First Nation, Hornepayne Aboriginal community, Manitouwadge, Marathon, Hornepayne, and White River.

residents previously expressed need for change to address current challenges, but some (i.e., those opposed to the APM project/nuclear power in general) were not certain if it should be via the APM project or perhaps other means.

At a 2019 meeting/ tour of the Mobile Learn More Centre with Nord-Aski Regional Economic Development Corporation (including several members of Hearst Council), there was recognition of the potential regional opportunities, and interest in learning more and involving the grassroots. At a presentation to the Porcupine Health Unit staff and Medical Officer of Health in Timmins in 2019, participants expressed interest/ support in learning more and noted the potential benefits to the region from the project.

Given the interrelationships among municipalities and among municipal and Indigenous communities, if the project were to proceed in the area it is possible that some relationships may be strained by opposition to the APM project by some Indigenous groups in the area.

4.0 SUMMARY

Overall, considering municipal communities, there is strong potential for partnership with NWMO in the Manitouwadge area; there is also potential in the Hornepayne area although somewhat less so with some challenges that would need to be addressed.

There is strong awareness and support for the APM project in Manitouwadge, and for proceeding with the borehole locations that have been identified. The APM project would go far to address many of the economic development and social priorities for Manitouwadge, and there appears to be strong recognition and support across the community of the strong alignment of the project with the community's vision and aspirations for itself and the area over the long term.

There is awareness and support for participating in the siting process in Hornepayne and this has increased substantially over the past two years. Within the community, there are many community members who have actively engaged and are supportive of both the learning process and the project. There is also a substantial cross-section of community members who have not engaged in community learning and discussions to this point in the process. The hesitation to engage by this segment of the community may relate to a silent opposition, or concerns about a number of factors such as safety of the project or involvement in the nuclear industry. It may relate to concerns about what involvement of the project may mean to relationships with Indigenous groups in the area, community cohesion, or potential changes in community character with the introduction of a large project and population growth.

While there is alignment of the project with the aspirations of Hornepayne's leadership and many of those engaged in the community, the alignment may not be strong for some in the community. While many residents have expressed a need for growth and the economic diversification the project would bring, some appear to continue to be uncertain if it should be via the APM project or perhaps through other means. While the concerns of some community members may be addressed through further discussion and learning, some are related to values (such as orientation towards the nuclear industry, or values related to growth) that are less likely to change.

There appears to be interest and some support in the neighbouring municipalities of Marathon, White River, and Hearst.

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APPENDIX A: KEY ENGAGEMENT ACTIVITIES

CONTENTS

APPENDIX A: SELECTED ENGAGEMENT ACTIVITIES A-ERROR! BOOKMARK NOT DEFINED.

1. *Selected Engagement Activities Site Selection for Borehole Testing in Hornepayne..... A-2*
2. *Selected Engagement Activities Site Selection for Borehole Testing in Manitouwadge..... A-3*
3. *Engagement Activities: Partnership Roadmap / Identification of Values and Principles in Hornepayne..... A-5*
4. *Engagement Activities: Partnership Roadmap / Identification of Values and Principles in Manitouwadge..... A-5*

1. Selected Engagement Activities Site Selection for Borehole Testing in Hornepayne

Selected engagement activities for key milestones in the site selection for borehole testing in Hornepayne from 2015 to September 2019 are listed below.

1. 2015: NWMO began to discuss the plan for geological and environmental fieldwork that helped identify potential social, economic and cultural considerations related to the withdrawal areas. The airborne surveys were discussed at 2015 CLC meetings and through other engagement activities.
2. May 25, 2016: NWCLC meeting in Hornepayne discussed the planned work to observe general geological features and geophysical and environmental mapping in their area.
3. May 25-26, 2016: Open House in Hornepayne to provide an update on the field studies previously completed in the area, and the field work ('walking the land') proposed for 2016 season.
4. April 12, 2017: NWCLC meeting in Hornepayne to introduce topic of 'Planning for Initial Borehole Drilling and Testing in the North of Superior'. A draft borehole drilling brochure was distributed to NWCLC members.
5. June 28, 2017: NWCLC meeting in Hornepayne provided an overview of the geoscience assessments, and maps of Potentially Geologically Suitable Areas (PGSAs, or 'ovals') within the withdrawal areas were introduced.
6. July 11-12, 2017: Open House at Hornepayne Legion on 'Geologically Suitable Areas for Potential Initial Borehole Drilling Based on Early Phase 2 Studies'
7. July 11, 2017: NWCLC meeting following day 1 of the open houses in Hornepayne, and included an overview from NWMO of recent activity and discussion at the open houses on the PGSAs.
8. July 19, 2017: meeting with West Larkin Lake Cottagers Association
9. July 2017: NWMO conducted one-on-one meetings with individuals in Hornepayne and area to identify social considerations and preferences with respect to the 13 PGSAs or 'ovals' identified by NWMO.
10. January 9, 2018: NWCLC meeting included an update presentation provided by NWMO, including discussion of proposed borehole drilling activities.

11. February 13, 2018: NWCLC meeting provided a detailed overview of the proposed borehole locations in the area.
12. February through April 2018: NWMO conducted one-on-one meetings with individuals or organizations having tenure (e.g., trapping areas, bear management or baitfish management areas, camps/ cabin owners, forestry management companies, recreational users, and commercial outfitters) in the immediate proximity¹² of the proposed borehole locations.
13. March 5-6, 2018: Open House at the Hornepayne Legion on 'Proposed Borehole Locations'
14. March 13, 2018: NWCLC meetings included further discussion of the technical and infrastructural / logistic factors for the potential borehole locations, social considerations and an overview of engagement with community members at the open houses.
15. March 14, 2018: meeting with West Larkin Lake Cottagers Association and other individuals with land tenure/ interests near or in the immediate proximity of the proposed borehole locations:
16. April 10, 2018: NWCLC meeting presentation provided an update on conversations with people in the area about plans for potential borehole drilling, and next steps in the process.
17. May 15, 2018: NWCLC meeting 'NWMO Update' presentation included an overview of borehole engagement to date, and proposed upcoming activities related to borehole drilling for the remainder of 2018.
18. April through to June 2019: NWMO continued one-on-one meetings with individuals or organizations having tenure in the immediate proximity of the proposed borehole locations in Hornepayne. The objective was to update tenure holders and others on the siting process, the status of borehole applications in both Hornepayne and Manitouwadge areas, and the proposed additional studies in Hornepayne.
19. June 18-19, 2019: Open House at the Hornepayne Legion to update the communities on the siting process, the status of borehole applications in both Hornepayne and Manitouwadge areas, the proposed additional studies in Hornepayne, and the outcomes of the engagement to identify guiding values and principles in the fall of 2018
20. In the last half of 2018/into 2019: NWMO has subsequently provided monthly updates to the NWCLC with respect to borehole drilling and related matters in the area.

2 Selected Engagement Activities Site Selection for Borehole Testing in Manitouwadge

Selected engagement activities for key milestones in the site selection for borehole testing in Manitouwadge from 2015 to September 2019 are listed below.

1. 2015: NWMO began to discuss the plan for geological and environmental fieldwork that helped identify potential social, economic and cultural considerations related to the withdrawal areas. The airborne surveys were discussed at 2015 CLC meetings, a March 2015 open house, and through other engagement activities.

¹² 'Immediate proximity' has been defined to include tenure that overlaps all or part of one or more of the potential drill site areas, or that lies between 2 or more of the potential drill site areas.

2. March 11-12, 2015: Open House in Manitouwadge
3. May 12, 2016: NWCLC meeting in Manitouwadge discussed the planned work to observe general geological features and geophysical and environmental mapping in their area.
4. May 12-13, 2016: Open House in Manitouwadge to provide an update on the field studies previously completed in the area, and the field work ('walking the land') proposed for 2016 season.
5. April 10, 2017: NWCLC meeting in Manitouwadge introduced topic of 'Planning for Initial Borehole Drilling and Testing in the North of Superior'. A draft borehole drilling brochure was distributed to NWCLC members.
6. June 26, 2017: NWCLC meeting in Manitouwadge provided an overview of the geoscience assessments, and maps of Potentially Geologically Suitable Areas (PGSAs, or 'ovals') within the withdrawal areas were introduced.
7. July 13-14, 2017: open house at the Manitouwadge recreation centre on 'Geologically Suitable Areas for Potential Initial Borehole Drilling Based on Early Phase 2 Studies', with the Used Fuel Transportation Exhibit (one day only)
8. July 13, 2017: NWCLC meeting following day 1 of the open houses in Manitouwadge, and included an overview from NWMO of recent activity and discussion at the open houses on the PGSAs.
9. July 2017: NWMO conducted one-on-one meetings with individuals in Manitouwadge and area to identify social considerations and preferences with respect to the 18 PGSAs or 'ovals' identified by NWMO.
10. January 11, 2018: NWCLC meeting included an update presentation provided by NWMO, including discussion of proposed borehole drilling activities.
11. February 15, 2018: NWCLC meeting provided a detailed overview of the proposed borehole locations in the area.
12. February through May 2018 - NWMO conducted one-on-one meetings with individuals or organizations having tenure (e.g., trapping areas, bear management or baitfish management areas, camps/ cabin owners, forestry management companies, recreational users, and commercial outfitters) in the immediate proximity of the proposed borehole locations.
13. March 7-8, 2018: Open House at the Manitouwadge recreation centre on 'Proposed Borehole Locations'.
14. March 15, 2018: NWCLC meeting included further discussion of the technical and infrastructural / logistic factors for the potential borehole locations, social considerations and an overview of engagement with community members at the open houses held earlier in March.
15. April 12, 2018: NWCLC meeting presentation provided an update on conversations with people in the area about plans for potential borehole drilling, and next steps in the process.
16. May 17, 2018: NWCLC meeting 'NWMO Update' presentation included an overview of borehole engagement to date, and proposed upcoming activities related to borehole drilling for the remainder of 2018.

17. June 20-21, 2019: Open House at the Manitouwadge recreation centre to update the communities on the siting process, the status of borehole applications in both Hornepayne and Manitouwadge areas, the proposed additional studies in Hornepayne, and the outcomes of the engagement to identify guiding values and principles in the fall of 2018
18. In last half of 2018/into 2019: NWMO has subsequently provided monthly updates to the NWCLC with respect to borehole drilling and related matters in the area.

3 Engagement Activities: Partnership Roadmap / Identification of Values and Principles in Hornepayne

In 2018, the NWMO and Township of Hornepayne engaged in conversations to gather community member input and feedback on the values and principles that should guide future discussions. Community Liaison Committee meetings and a Drop-in session were advertised in the local newspaper (the Wicksteed Weekly) and through the Hornepayne Nuclear Waste Community Liaison Committee's (NWCLC) website and via posters in the community.

1. NWMO presented the "Partnership - Roadmap for Discussions" at the February 2018 Hornepayne Nuclear Waste Community Liaison Committee (NWCLC) meeting.
2. Preliminary conversations with residents through summer 2018.
3. Draft values and principles emerging from conversations introduced at the October 2018 NWCLC meeting.
4. Workbook and questions available in the community office from mid-October to November 2, 2018 for people to add their perspective. NWMO continued to reach out to community members in October 2018.
5. November 13, 2018: "Community Drop-in"/NWCLC discussion on emerging values and principles. The NWCLC passed Resolution #18-105 stating acceptance of the values and principles and recommending that Council adopt them going forward in conversations with the NWMO.
6. December 3, 2018: the Hornepayne Township Council passed Resolution #2018-475 acknowledging receipt of the values and principles.
7. An overview of this process and the agreed-upon values and principles were presented in two of the display panels at the June 18-19, 2019 open house in Hornepayne.

4. Engagement Activities: Partnership Roadmap / Identification of Values and Principles in Manitouwadge

In 2018, the NWMO and Township of Manitouwadge engaged in conversations to gather community member input and feedback on the values and principles that should guide future discussions. Community Liaison Committee meetings and a Drop-in session were advertised in the monthly 'Forecaster' publication, through the Manitouwadge Nuclear Waste Community Liaison Committee's (NWCLC) website, and via posters in the community.

1. NWMO presented the “Partnership - Roadmap for Discussions” at February 2018 Manitouwadge Nuclear Waste Community Liaison Committee (NWCLC) meeting.
2. NWCLC working session to discuss values and principles for exploring partnership at March 15, 2018 meeting.
3. Preliminary conversations with residents through summer 2018.
4. Draft values and principles emerging from conversations introduced at the October 2018 NWCLC meeting.
5. Workbook and questions available in the community office from mid-October to November 2, 2018 for people to add their perspective. NWMO continued to reach out to community members in October 2018.
6. November 15, 2018 “Community Drop-in”/NWCLC discussion on emerging values and principles. The NWCLC passed Resolution #2018-93 stating their support for the joint values and principles, and recommended that Council adopt them going forward in discussions with the NWMO.
7. May 22, 2019: the Manitouwadge Township Council adopted the joint values and principles.
8. An overview of this process and the agreed-upon values and principles were presented in two of the display panels at the June 20-21, 2019 open house in Manitouwadge.

APPENDIX B: COMMENT FORM AND MAP OF PROPOSED BOREHOLE LOCATIONS

Appendix B-1: Comment Form & Map of Proposed Borehole Locations, Hornepayne (June 2019)



Township of Hornepayne

Continuing community conversations on borehole plans and additional studies

We need your input

Updated – June 2019

The Nuclear Waste Management Organization (NWMO) is conducting geoscientific studies in the area to determine if there are rock formations that have the potential to satisfy safety requirements for a deep geological repository for the long-term management of Canada's used nuclear fuel. The next site evaluation activity in this region could involve drilling initial boreholes at a potential repository location to further understand the geology.

Conversations about borehole studies are continuing in both the Hornepayne and Manitouwadge areas. We shared the sites for three potential locations for boreholes last year; this year, we would like to discuss a series of related studies that may also be conducted. The NWMO may focus borehole studies in just one location in the region, depending on the outcome of engagement in the area and the potential to meet project requirements. After reviewing the findings, additional borehole drilling and testing in one or more locations may be warranted in the future.

1. Are you aware of any social, economic, cultural, or natural environment matters in relation to the proposed sites for potential locations for boreholes 1, 2 and 3, or the temporary access roads that may be needed?

2. If so, what are they, and how should they be addressed?

Additional studies support data collection on the geosphere and natural environment. The next phase of studies may involve surface- and subsurface-based seismic data collection along access roads, and a meteorological monitoring station and micro-seismic monitoring station at or close to a borehole site.

3. Do you have any comments on the studies that may be undertaken and how they would be conducted?

Contact information:

All comments will be shared with the township. However, your name and contact information will be treated as confidential unless you indicate otherwise by checking the box below.

Name (required): _____ Affiliation (if any): _____

Address: _____

Tel.: (____) _____ Fax: _____ Email: _____

☐ Please share my name and contact information with municipal representatives.

Thank you! Please drop off the comment sheet at the NWMO community office or send to:

Nuclear Waste Management Organization
22 St. Clair Avenue East, Sixth Floor, Toronto, ON M4T 2S3 Fax: 647.259.3692 Email: learnmore@nwmo.ca

October 2019

[illegible]

Appendix B-2: Comment Form & Map of Proposed Borehole Locations, Manitouwadge (June 2019)

Township of Manitouwadge

Continuing community conversations on borehole plans and additional studies



We need your input

Updated – June 2019

The Nuclear Waste Management Organization (NWMO) is conducting geoscientific studies in the area to determine if there are rock formations that have the potential to satisfy safety requirements for a deep geological repository for the long-term management of Canada's used nuclear fuel. The next site evaluation activity in this region could involve drilling initial boreholes at a potential repository location to further understand the geology.

Conversations about borehole studies are continuing in both the Hornepayne and Manitouwadge areas. We shared the sites for three potential locations for boreholes last year; this year, we would like to discuss a series of related studies that may also be conducted. The NWMO may focus borehole studies in just one location in the region, depending on the outcome of engagement in the area and the potential to meet project requirements. After reviewing the findings, additional borehole drilling and testing in one or more locations may be warranted in the future.

1. Are you aware of any social, economic, cultural, or natural environment matters in relation to the proposed sites for potential locations for boreholes 1, 2 and 3, or the temporary access roads that may be needed?

2. If so, what are they, and how should they be addressed?

Additional studies support data collection on the geosphere and natural environment. The next phase of studies may involve surface- and subsurface-based seismic data collection along access roads, and a meteorological monitoring station and micro-seismic monitoring station at or close to a borehole site.

3. Do you have any comments on the studies that may be undertaken and how they would be conducted?

Contact information:

All comments will be shared with the township. However, your name and contact information will be treated as confidential unless you indicate otherwise by checking the box below.

Name (required): _____ Affiliation (if any): _____

Address: _____

Tel.: (____) _____ Fax: _____ Email: _____

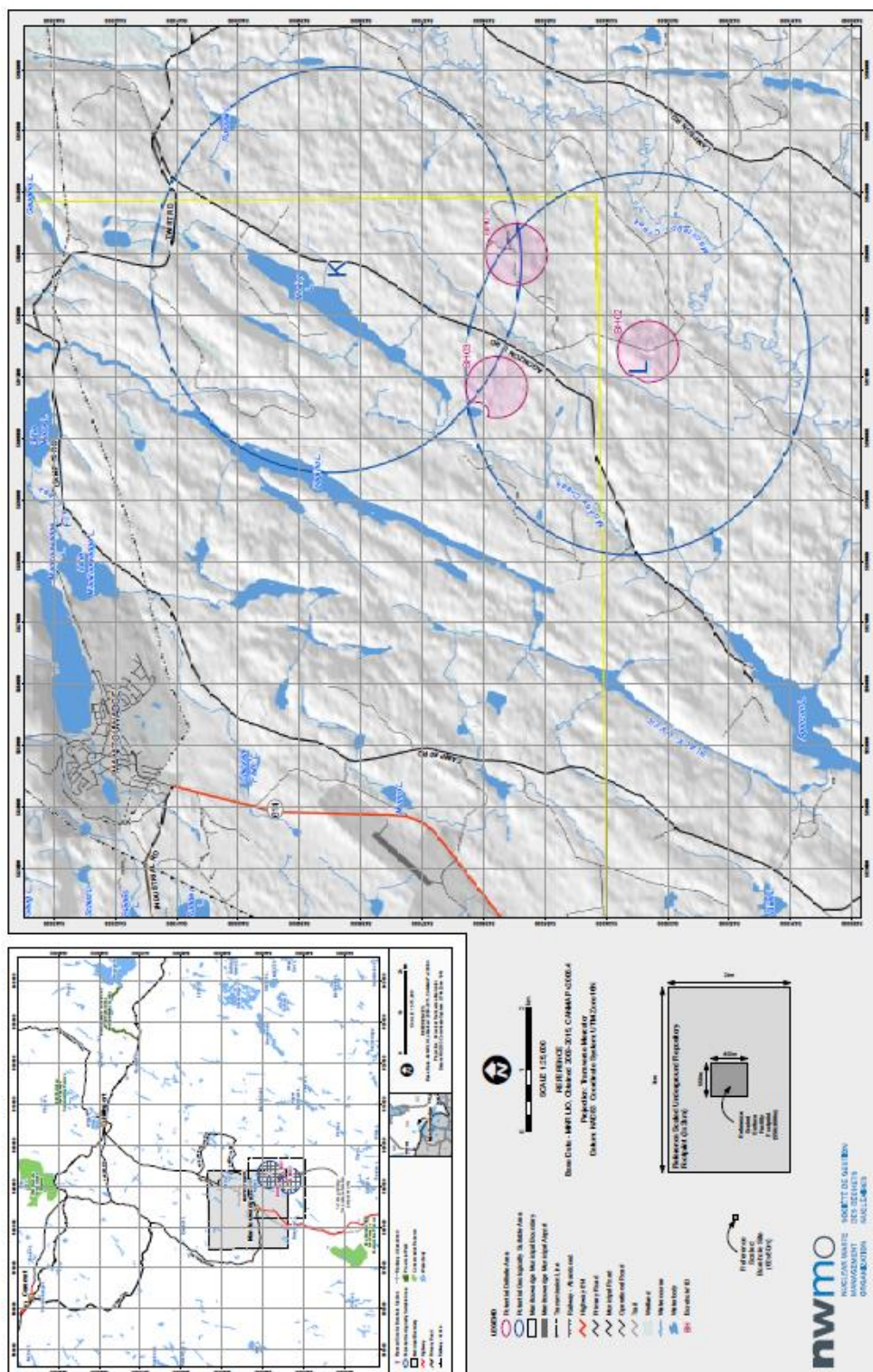
☐ Please share my name and contact information with municipal representatives.

Thank you! Please drop off the comment sheet at the NWMO community office or send to:

Nuclear Waste Management Organization
22 St. Clair Avenue East, Sixth Floor, Toronto, ON M4T 2S3 Fax: 647.259.3692 Email: learnmore@nwmo.ca

Locations for boreholes

For discussion with people in the area



APPENDIX C: 'ADDITIONAL BOREHOLES & STUDIES' BROCHURES

Appendix C-1: Additional Boreholes and Studies, Hornepayne Brochure



July 2019

Adaptive Phased Management: Additional boreholes and studies – Hornepayne

Why are boreholes being proposed in the Hornepayne area?

The Nuclear Waste Management Organization (NWMO) is proposing to undertake borehole drilling in the vicinity of the Township of Hornepayne. This drilling would be conducted in support of the Adaptive Phased Management siting process for a deep geological repository for the long-term management of Canada's used nuclear fuel. The initiation of borehole drilling is one of the means to better understand the geological and physical conditions of the rock at a potential repository site, and potential to meet the robust safety requirements of the project.

What activities have occurred to date, and what else is planned?

As part of the NWMO's Phase 2 preliminary assessments, geoscientific studies have commenced to determine if there are rock units that have the potential to satisfy the safety requirements for a deep geological repository. To date, this has involved activities such as airborne surveys and detailed geological mapping. The next step in these studies involves drilling initial boreholes at a potential repository location to further understand the geology. Through discussion with people in the area, we identified initial borehole locations.

We are planning for the next steps of studies that involve:

- Up to three boreholes in the study area; and
- Temporary access roads to these borehole locations.

Additional studies in the area are also being planned and are briefly described in this document. We need your input to help plan this work.

How would long-term testing and monitoring at borehole sites be implemented?

The NWMO is planning to conduct long-term testing and monitoring at borehole sites. Site access would be maintained to the boreholes and equipment used for monitoring and taking fluid samples at depths of up to 1,000 metres. A monitoring well installation may be placed inside the borehole to measure pressures at isolated intervals in the rock and could be used to take water samples, if possible. This could involve a capped borehole with a small concrete pad. The station would be accessed for quarterly testing and sampling for approximately five years.



Example of borehole with enclosure



Example of borehole with a cap

What additional studies are planned as part of the borehole drilling project?

Additional studies conducted relative to the study area may include:

1. **Surface and subsurface geophysical studies** – Geophysical studies such as 2D seismic studies would contribute to the understanding of the land and geology, and would help us identify and interpret structures below the surface. Geophones would be used to record induced ground vibrations and allow mapping of underground features. Studies are planned to be performed along access roads. Path cutting may be required for off-road seismic source locations.

2. **Micro-seismic monitoring station** – A monitoring station would be installed in proximity to the drill pad. This would be used to confirm the low long-term risk (frequency and magnitude) of seismic events. The seismic monitoring installation would be installed either in small concrete vaults in contact with the bedrock or in shallow (at a depth of a few metres) drilled bedrock wells.



3. **Meteorological monitoring station** – Atmospheric conditions would be monitored to understand the above-ground portion of water balance in the study area. A meteorological monitoring station would be installed to monitor weather conditions (e.g., wind, temperature, atmospheric pressure, and relative humidity). The monitoring station would have instrumentation and data loggers that are powered by solar panels, and would be installed in proximity to the drill pad.



When will a site be selected for a repository?

Confirming a safe site will take several years of progressively more detailed technical, scientific, social, cultural, and economic studies, as well as engagement of people from the area, including the interested community, and First Nation and Métis communities. The NWMO is conducting studies to explore suitability to host the project in a number of areas in Ontario. If findings from drilling and testing initial boreholes provide strong confidence that a location may be potentially suitable to host a repository, and if strong partnerships reflecting area support can be developed, detailed site characterization activities could be conducted and would require several more years. During detailed site characterization, the NWMO would collect additional information and complete analyses required to assemble a safety case for a deep geological repository at that location.

Learn more. Be involved.

NWMO representatives are now working in the area. You can also find us at the Learn More Centre and at a number of community events throughout the year.

For more information, please contact:

Hornepayne Learn More Centre
247 Third Avenue, Hornepayne, Ontario P0M 1Z0
Tel.: 1.807.868.9997

Nuclear Waste Management Organization
22 St. Clair Avenue East, Sixth Floor
Toronto, Ontario M4T 2S3, Canada
Tel.: 416.934.9814 Toll Free: 1.866.249.6966
Email: contactus@nwmo.ca
Website: www.nwmo.ca

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 /company/nwmocanada

Appendix C-2: Additional Boreholes and Studies, Manitouwadge Brochure



July 2019

Adaptive Phased Management: Additional boreholes and studies – Manitouwadge

Why are boreholes being proposed in the Manitouwadge area?

The Nuclear Waste Management Organization (NWMO) is proposing to undertake borehole drilling in the vicinity of the Township of Manitouwadge. This drilling would be conducted in support of the Adaptive Phased Management siting process for a deep geological repository for the long-term management of Canada's used nuclear fuel. The initiation of borehole drilling is one of the means to better understand the geological and physical conditions of the rock at a potential repository site, and potential to meet the robust safety requirements of the project.

What activities have occurred to date, and what else is planned?

As part of the NWMO's Phase 2 preliminary assessments, geoscientific studies have commenced to determine if there are rock units that have the potential to satisfy the safety requirements for a deep geological repository. To date, this has involved activities such as airborne surveys and detailed geological mapping. The next step in these studies involves drilling initial boreholes at a potential repository location to further understand the geology. Through discussion with people in the area, we identified initial borehole locations.

We are planning for the next steps of studies that involve:

- Up to three boreholes in the study area; and
- Temporary access roads to these borehole locations.

Additional studies in the area are also being planned and are briefly described in this document. We need your input to help plan this work.

How would long-term testing and monitoring at borehole sites be implemented?

The NWMO is planning to conduct long-term testing and monitoring at borehole sites. Site access would be maintained to the boreholes and equipment used for monitoring and taking fluid samples at depths of up to 1,000 metres. A monitoring well installation may be placed inside the borehole to measure pressures at isolated intervals in the rock and could be used to take water samples, if possible. This could involve a capped borehole with a small concrete pad. The station would be accessed for quarterly testing and sampling for approximately five years.



Example of borehole with enclosure



Example of borehole with a cap

What additional studies are planned as part of the borehole drilling project?

Additional studies conducted relative to the study area may include:

1. **Surface and subsurface geophysical studies** – Geophysical studies such as 2D seismic studies would contribute to the understanding of the land and geology, and would help us identify and interpret structures below the surface. Geophones would be used to record induced ground vibrations and allow mapping of underground features. Studies are planned to be performed along access roads. Path cutting may be required for off-road seismic source locations.
2. **Micro-seismic monitoring station** – A monitoring station would be installed in proximity to the drill pad. This would be used to confirm the low long-term risk (frequency and magnitude) of seismic events. The seismic monitoring installation would be installed either in small concrete vaults in contact with the bedrock or in shallow (at a depth of a few metres) drilled bedrock wells.
3. **Meteorological monitoring station** – Atmospheric conditions would be monitored to understand the above-ground portion of water balance in the study area. A meteorological monitoring station would be installed to monitor weather conditions (e.g., wind, temperature, atmospheric pressure, and relative humidity). The monitoring station would have instrumentation and data loggers that are powered by solar panels, and would be installed in proximity to the drill pad.



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Confirming a safe site will take several years of progressively more detailed technical, scientific, social, cultural, and economic studies, as well as engagement of people from the area, including the interested community, and First Nation and Métis communities. The NWMO is conducting studies to explore suitability to host the project in a number of areas in Ontario. If findings from drilling and testing initial boreholes provide strong confidence that a location may be potentially suitable to host a repository, and if strong partnerships reflecting area support can be developed, detailed site characterization activities could be conducted and would require several more years. During detailed site characterization, the NWMO would collect additional information and complete analyses required to assemble a safety case for a deep geological repository at that location.

Learn more. Be involved.

NWMO representatives are now working in the area. You can also find us at the Learn More Centre and at a number of community events throughout the year.

For more information, please contact:

Manitouwadge Learn More Centre
3-12 Huron Walk, Manitouwadge, Ontario P0T 2C0
Tel.: 1.807.826.3255

Nuclear Waste Management Organization
22 St. Clair Avenue East, Sixth Floor
Toronto, Ontario M4T 2S3, Canada
Tel.: 416.934.9814 Toll Free: 1.866.249.6966
Email: contactus@nwmo.ca
Website: www.nwmo.ca

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 /company/nwmoCanada

APPENDIX D: GUIDING PRINCIPLES FOR EXPLORING PARTNERSHIP – COMMUNITY CONVERSATIONS

Appendix D-1: Guiding Principles for Exploring Partnerships, Hornepayne



November 2018

Guiding principles for exploring partnership – Community conversations update

In 2018, engagement was conducted in Hornepayne with a focus on development of a set of values and principles that will guide the way we talk together and further explore the Adaptive Phased Management project. This is important as we begin a new phase of more detailed exploration of the project.

The principles will help guide community and NWMO discussions to explore what it would mean if the Adaptive Phased Management project were implemented in Hornepayne, including how we might come together in a partnership to implement the project. Over time, these discussions will also need to involve First Nation and Métis communities, as well as others in the area.

Values and principles to guide discussions

- **Safety** – Safety is paramount.
- **Learning and communication** – Continuous learning is needed for informed decisions.
- **Trust and accountability** – Mutual trust, respect and accountability are essential for success.
- **Inclusive collaborative relationships** – The broad range of interests and different points of view must all be at the table.
- **Environment** – Protection of the environment is a priority.
- **Community well-being** – The project must benefit the community during all phases.
- **Regional involvement** – Regional communities must be engaged in order to understand the project and effectively participate.

Summary of activities and community discussions about principles

Purpose of these community discussions

Hornepayne is one of several communities in Ontario learning about Canada's plan for the safe, long-term management of used nuclear fuel (Adaptive Phased Management), and exploring the possibility of hosting the associated deep geological repository, Centre of Expertise, and other project components.

Since 2011, Hornepayne has been involved in a process of learning about the project and assessing whether it could be a good fit for the community, as part of the site selection process led by the NWMO. Preliminary studies conducted to date suggest the project has the potential to be implemented safely in Hornepayne, and align with Hornepayne's long-term objectives. Hornepayne and the NWMO are working together to begin more detailed discussions to explore, over the next several years, what it would mean if the project were implemented in the community.

The purpose of the recently completed community engagement was to develop guiding values and principles to set the groundwork for these more detailed conversations. These principles will set the foundation for the way in which Hornepayne and the NWMO will talk and work with each other during more detailed conversations about the project.

Exploring the potential for partnership

The project will only be implemented at a site that meets robust safety criteria. Once safety criteria have been met, the ability to develop a supportive partnership is an important consideration in selecting a preferred location for the project. This partnership would need to begin with Hornepayne, and also seek involvement of First Nation and Métis communities and others in the area.

In order to explore the potential for partnership, this next phase of more detailed discussions will consider how the project might be configured in order to align with Hornepayne's priorities and objectives. It will also explore the investments associated with the project which would be made in the near term and the longer term, and how the broader area would be involved.

Ultimately, the project will only be implemented in the area if a safe site for the repository can be identified, if Hornepayne is willing, and if a supportive partnership can be developed.

Engaging the community

Over the past several months, the NWMO and Township of Hornepayne engaged in conversations to gather community member input and feedback on the values and principles that should guide future discussions. Community liaison committee meetings and a drop-in session were advertised in the local newspaper (the Wicksteed Weekly), through the Hornepayne Nuclear Waste Community Liaison Committee's (NWCLC) website, and via posters in the community.

Activities included the following:

- The NWMO presented the "Partnership – Roadmap for Discussions" at the Hornepayne NWCLC's February 2018 meeting. The first step in the road map involves identification of common values and principles to guide more detailed conversations about the project.

- Preliminary conversations with a cross-section of residents occurred in summer 2018 through one-on-one discussions. A workbook seeking input on values and principles was used to guide the conversations; participants could provide their immediate feedback verbally, and/or had the options of providing written feedback and leaving it at the Learn More Centre, or emailing it to the NWMO by September 4. Staff were also available at the Learn More Centre to engage people who dropped by in discussion.
- Initial draft values and principles began to emerge through these conversations. The emerging values and principles were summarized and shared at the October 2018 NWCLC meeting, and the NWMO and Township of Hornepayne continued to seek input from community members. The initial draft values and principles, and the workbook, were available in the community office for people to add their perspectives, and there was continued outreach to community members to discuss values and principles in late October. Feedback was taken throughout the discussions, including comments and priorities that emerged during the review of the values and principles. In addition to the meetings with community members, some residents shared their comments and questions via email.
- Based on the engagement up until the end of October 2018, the initial draft values and principles were revised. On November 13, 2018, a community drop-in session was held in advance of the NWCLC meeting. The drop-in session at the Legion was publicly advertised through the Wicksteed Weekly newspaper, online through the NWCLC's Facebook page and website, and through posters distributed in the community. Residents were invited to review and comment on the revised draft values and principles. A workbook was used to support this discussion. The workbook was also distributed to NWCLC members in advance of their meeting.
- At the November 2018 NWCLC meeting, the NWMO and Township of Hornepayne provided an update presentation on the community conversations on values and principles, including the community drop-in session. The NWCLC passed a resolution stating acceptance of the values and principles, recommending that Council adopt them going forward in conversations with the NWMO.

Focus of discussion

The principles emerged from community discussions on three key questions:

1. Values and principles are important because they will guide the way Hornepayne and the NWMO talk and work with each other during more detailed conversations about the project. What values or principles – i.e., rules or requirements – should guide discussions and future decision-making between Hornepayne and the NWMO? Why are these values and principles important?
2. What should we avoid doing while having partnership discussions?
3. Other suggestions or rules that should be considered?

These principles were the focus of further discussion at a community drop-in session in November:

1. Have we covered what is most important? Are there important values and principles that should be added?
2. Each value and principle has a short description. Can you suggest refinements to these descriptions that would make them clearer or the principles stronger?
3. Do you have any other comments or suggestions?

Values and principles identified by the community

Seven principles emerged from these community discussions and are listed below in no particular order.

→ **Safety – Safety is paramount.**

There is a need to be flexible/adaptable as science and technology changes in the future – to continuously improve the project to maximize safety. Ongoing “learning and communication” includes enhancing understanding of the safety of the project, including transportation. Ongoing national and international co-operation will contribute to confidence in safety.

→ **Learning and communication – Continuous learning is needed for informed decisions.**

Ongoing, mutual learning and timely sharing of information is needed to support informed decision-making. A variety of engagement techniques and approaches must be used to meet the needs and expectations of a range of audiences that are at different stages in the learning process. Be open to opportunities afforded by an expanded suite of communication tools, building upon what has worked to date. Different perspectives on any topic need to be presented for discussion, and all questions answered.

→ **Trust and accountability – Mutual trust, respect and accountability are essential for success.**

There must be clear understanding of the roles and responsibilities of all parties in the discussion process. Certainty about “the rules” for the detailed conversations regarding the project will result in a more effective process, but flexibility may be needed to adapt as appropriate. Participants need to fully understand the process and timelines, so there are no surprises. Mutual respect, honesty, transparency, and accountability are essential for success.

→ **Inclusive collaborative relationships – The broad range of interests and different points of view must all be at the table.**

All sectors of the community must be provided the opportunity to be engaged – e.g., youth, seniors, elected leadership, land users, community groups, the general public, and others. All points of view – supportive, neutral or otherwise – must be heard with open minds and considered. The community must have the capacity – expertise and financial – required to participate equally and effectively.

→ **Environment – Protection of the environment is a priority.**

The social and economic benefits associated with the project must be balanced with the protection of other values such as wilderness. Appropriate policies and procedures must be in place to prevent or mitigate impacts, and effectively communicated to ensure community understanding.

→ **Community well-being** – The project must benefit the community during all phases.

Community well-being in Hornepayne must be enhanced by the project. People need to understand the changes the project could bring in terms of the economy, demographics, required infrastructure and services, as well as the challenges that will need to be addressed. Planning for the future – with or without the project – is required. Hornepayne must have a strong voice in ensuring its needs and aspirations are adequately met.

→ **Regional involvement** – Regional communities must be engaged in order to understand the project and effectively participate.

As the project has the potential to transform the community and the surrounding area, it is important that the larger region – including Indigenous communities – is involved in planning and implementation. Neighbours who have or are participating in the siting process should also be involved. The potential benefits of the project, as well as any potential impacts/risks, must be understood by neighbours.

Next steps

With these guiding principles as a foundation, next steps involve getting into the details of the individual facilities and components associated with the project. This will help build community understanding of the project and its various components, and pave the way for reflecting on where facilities might be located in the area, investments that would be required in the near and longer term to support implementation of the project, and how others in the area might be involved if the project were implemented in the area.

Ongoing engagement, discussions and learning may suggest refinements to these principles over time. These principles will be reviewed and refined as needed through these detailed discussions.

Other comments

During engagement, people also shared suggestions on next steps, and how to get more people involved in learning and discussions.

- Broaden the audience for engagement, and use a suite of tools and information sources that recognizes different ways of learning and levels of interest in the community.
- Increase emphasis on proactive engagement where the NWMO reaches out to community groups and individuals, in addition to open houses or community liaison committee meetings. This would allow for convenience, as well as an opportunity for additional one-on-one or informal group discussion; e.g., meetings with organizations in the community as part of their regular meetings or at special presentations.
- Consider use of livestreaming or webcasts for the NWCLC meetings, similar to those done for the recent municipal election “all candidates” meetings, and as planned for Township Council. This would allow people to watch from home at their convenience.
- Continue to build understanding of:
 - The project timelines and components, including the Centre of Expertise, in terms of the social and economic opportunities and challenges that need to be planned for. People need to understand the changes the project could bring in terms of the economy, demographics, required infrastructure and services, and who needs to be involved in planning.
 - The future steps in the siting process, including regional engagement with municipalities and Indigenous communities.

Learn more

Review the history of Hornepayne's involvement in the site selection process: www.nwmo.ca/hornepayne

Review the activities of the Hornepayne NWCLC: <http://clinfo.ca/hornepayne>

Read about the NWMO, Canada's plan and the site selection process: www.nwmo.ca

Appendix D-2: Guiding Principles for Exploring Partnerships, Manitouwadge



November 2018

Guiding principles for exploring partnership – Community conversations update

In 2018, engagement was conducted in Manitouwadge with a focus on development of a set of values and principles that will guide the way we talk together and further explore the Adaptive Phased Management project. This is important as we begin a new phase of more detailed exploration of the project.

The principles will help guide community and NWMO discussions to explore what it would mean if the Adaptive Phased Management project were implemented in Manitouwadge, including how we might come together in a partnership to implement the project. Over time, these discussions will also need to involve First Nation and Métis communities, as well as others in the area.

Values and principles to guide discussions

- **Community well-being** – The changes associated with hosting the project, and how to optimize benefits and mitigate challenges, must be understood.
- **Effective communication** – Maximize the effectiveness of mutual open communication and learning with a range of audiences in a variety of settings.
- **Environment** – Protect or enhance the environment that is so important to our quality of life.
- **Involving neighbours** – Regional communities must learn about the project and be involved.
- **Respect and transparency** – In order to succeed, there must be mutual respect and transparency.
- **Safety** – Confidence in safety is essential.
- **Strong relationships** – Strong relationships are necessary to effectively engage in productive future discussions.

Summary of activities and community discussions about principles

Purpose of these community discussions

Manitouwadge is one of several communities in Ontario learning about Canada's plan for the safe, long-term management of used nuclear fuel (Adaptive Phased Management), and exploring the possibility of hosting the associated deep geological repository, Centre of Expertise, and other project components.

Since 2012, Manitouwadge has been involved in a process of learning about the project and assessing whether it could be a good fit for the community, as part of the site selection process led by the NWMO. Preliminary studies conducted to date suggest the project has the potential to be implemented safely in Manitouwadge, and align with Manitouwadge's long-term objectives. Manitouwadge and the NWMO are working together to begin more detailed discussions to explore, over the next several years, what it would mean if the project were implemented in the community.

The purpose of the recently completed community engagement was to develop guiding values and principles to set the groundwork for these more detailed conversations. These principles will set the foundation for the way in which Manitouwadge and the NWMO will talk and work with each other during more detailed conversations about the project.

Exploring the potential for partnership

The project will only be implemented at a site that meets robust safety criteria. Once safety criteria have been met, the ability to develop a supportive partnership is an important consideration in selecting a preferred location for the project. This partnership would need to begin with Manitouwadge, and also seek involvement of First Nation and Métis communities and others in the area.

In order to explore the potential for partnership, this next phase of more detailed discussions will consider how the project might be configured in order to align with Manitouwadge's priorities and objectives. It will also explore the investments associated with the project which would be made in the near term and the longer term, and how the broader area would be involved.

Ultimately, the project will only be implemented in the area if a safe site for the repository can be identified, if Manitouwadge is willing, and if a supportive partnership can be developed.

Engaging the community

Over the past several months, the NWMO and Township of Manitouwadge engaged in conversations to gather community member input and feedback on the values and principles that should guide future discussions. Community liaison committee meetings and a drop-in session were advertised in the monthly Forecaster publication, through the Manitouwadge Nuclear Waste Community Liaison Committee's (NWCLC) website, and via posters in the community.

Activities included the following:

- The NWMO presented the "Partnership – Roadmap for Discussions" at the Manitouwadge NWCLC's February 2018 meeting. The first step in the road map involves identification of common values and principles to guide more detailed conversations about the project.
- A working session to explore possible values and principles was conducted with the NWCLC at their March meeting. A workbook seeking input on values and principles was used to guide the discussion; CLC members could provide their immediate feedback verbally and/or written feedback through the workbook.

- Preliminary conversations with a cross-section of residents occurred in summer 2018 through one-on-one discussions. The workbook seeking input on values and principles was used to guide the conversations; participants could provide their immediate feedback verbally, and/or had the options of providing written feedback and leaving it at the Learn More Centre, or emailing it to the NWMO by September 4. Staff were also available at the Learn More Centre to engage people who dropped by in discussion.
- Initial draft values and principles began to emerge through these conversations. The emerging values and principles were summarized and shared at the October NWCLC meeting, and the NWMO and Township of Manitouwadge continued to seek input from community members. The initial draft values and principles, and the workbook, were available in the community office for people to add their perspectives, and there was continued outreach to community members to discuss values and principles in late October. Feedback was taken throughout the discussions, including comments and priorities that emerged during the review of the values and principles. In addition to the meetings with community members, some residents shared their comments and questions via email.
- Based on the engagement up until early November, the initial draft values and principles were revised. On November 15, 2018, a community drop-in session was held in advance of the NWCLC meeting. The drop-in session at the Council Chambers was publicly advertised in the November Forecaster publication, on the NWCLC website, and through posters distributed in the community. Residents were invited to review and comment on the revised draft values and principles. A workbook was used to support this discussion. The workbook was also distributed to NWCLC members in advance of their meeting.
- At the November NWCLC meeting, the NWMO and Township of Manitouwadge provided an update presentation on the community conversations on values and principles, including the community drop-in session. The NWCLC passed a resolution stating their support for the joint values and principles, recommending that Council adopt them going forward in discussions with the NWMO.

Focus of discussion

The principles emerged from community discussions on three key questions:

1. Values and principles are important because they will guide the way Manitouwadge and the NWMO talk and work with each other during more detailed conversations about the project. What values or principles – i.e., rules or requirements – should guide discussions and future decision-making between Manitouwadge and the NWMO? Why are these values and principles important?
2. What should we avoid doing while having partnership discussions?
3. Other suggestions or rules that should be considered?

These principles were the focus of further discussion at a community drop-in session in November:

1. Have we covered what is most important? Are there important values and principles that should be added?
2. Each value and principle has a short description. Can you suggest refinements to these descriptions that would make them clearer or the principles stronger?
3. Do you have any other comments or suggestions?

Values and principles identified by the community

Seven principles emerged from these community discussions and are listed below alphabetically.

→ **Community well-being – The changes associated with hosting the project, and how to optimize benefits and mitigate challenges, must be understood.**

Comprehensive discussion of the long-term changes that would come to the community and surrounding area with the project is needed – both benefits and challenges. There are many dimensions to explore, including economics, community character, the shift from mining/forestry/tourism and potential competition for workers, housing, education and training, services and infrastructure, and more. Planning is needed to successfully capture opportunities, reach our potential, and prevent or mitigate potential impacts. Creativity and innovation will be essential to balance community well-being with safety and environmental considerations.

→ **Effective communication – Maximize the effectiveness of mutual open communication and learning with a range of audiences in a variety of settings.**

Proactively engage with individuals and organizations, and encourage ongoing learning with clear and accessible information that maintains momentum in the discussions, increases understanding, and keeps it “fresh.” Maximize regular, timely and effective communication using both “tried and true” and innovative approaches to reach a range of community members with different perspectives. Those involved in discussions need to ensure effective two-way communication with community members and interested parties. Continue to expand the audience by reaching out to people, in addition to inviting them to meetings or open houses. Enhance understanding of the interests of Indigenous neighbours, traditional knowledge and land uses to inform the future discussions about the project.

→ **Environment – Protect or enhance the environment that is so important to our quality of life.**

Important values that are central to the community's quality of life, including outdoor activities in the natural environment, must be protected or enhanced. Project planning should seek to complement or reflect the surrounding environment.

→ **Involving neighbours – Regional communities must learn about the project and be involved.**

Surrounding communities, including First Nation and Métis communities, need to be involved in discussions related to planning and implementation of a project that has the potential to transform the area. Service providers at the regional level also need to be engaged.

→ **Respect and transparency – In order to succeed, there must be mutual respect and transparency.**

To achieve pride of ownership in the process and project, there must be a clear process and decision-making structure that will demonstrate progress. Respect, transparency and accountability are essential. Periodically reflect together on the process – evaluate the plan/next steps, and what worked well or did not. Constructive criticism and respectful disagreement should be welcomed. Where the responses to questions are not fully known or understood, acknowledge uncertainty, follow up and seek the answers. All parties must keep the commitments that they make.

→ **Safety – Confidence in safety is essential.**

It is important for people to continue to learn about nuclear waste, safety, and the approaches to the management of used nuclear fuel in Canada and other countries.

→ **Strong relationships – Strong relationships are necessary to effectively engage in productive future discussions.**

The key players – those responsible for planning and decision-making – must be at the table in positions of equality, working together to achieve common goals and focus on solutions. Relationships will need to be built and maintained over the longer term. Strong professional relationships are guided by important values such as effective communication, respect and transparency. An inclusive process must welcome different sectors of the community to be engaged – e.g., the Nuclear Waste Community Liaison Committee, agencies, services, students/youth, community organizations, seniors, and others. Relationships must be built with Indigenous neighbours.

Next steps

With these guiding principles as a foundation, next steps involve getting into the details of the individual facilities and components associated with the project. This will help build community understanding of the project and its various components, and pave the way for reflecting on where facilities might be located in the area, investments that would be required in the near and longer term to support implementation of the project, and how others in the area might be involved if the project were implemented in the area.

Ongoing engagement, discussions and learning may suggest refinements to these principles over time. These principles will be reviewed and refined as needed through these detailed discussions.

Other comments

During engagement, people also shared suggestions on next steps, and how to get more people involved in learning and discussions.

- Continue to explore how to effectively engage the different audiences in Manitouwadge, and with municipal and Indigenous communities in the area, including proactive outreach, presentations by technical experts on a range of topics, and ready access to information.
- Use various engagement techniques and approaches (e.g., "hands-on" or interactive displays/activities, community events) that will support learning by a range of audiences (e.g., youth, newcomers) that have different ways of learning and levels of interest in the project.
- Keep the community up-to-date with respect to the timelines and status of the siting process, in order to ensure that people are well-informed with factual information and avoid misperceptions.
- Collaboratively build understanding of the potential partnership with the NWMO, future decision-making processes, as well as project components (including the Centre of Expertise) and timelines. There is a need to understand the changes that the project would bring, understand how to maximize opportunities, and avoid potential issues that have been experienced with large infrastructure or development projects elsewhere in Canada.
- Start exploring the Centre of Expertise and what it may look like in Manitouwadge, including how to reflect both western science and traditional knowledge.

Learn more

Review the history of Manitouwadge's involvement in the site selection process:
www.nwmo.ca/manitouwadge

Review the activities of the Manitouwadge NWCLC: <http://clinfo.ca/manitouwadge>

Read about the NWMO, Canada's plan and the site selection process: www.nwmo.ca