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Community Well-Being Assessment

TOWNSHIP OF MANITOUWADGE, ONTARIO



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Preliminary Community Well-Being Assessment: Manitouwadge, ON

DECEMBER, 2014



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TABLE OF CONTENTS

LIST OF TABLES.....	II
LIST OF FIGURES.....	II
1.0 INTRODUCTION	1
2.0 THE APM PROJECT	4
3.0 VALUES AND ASPIRATIONS OF MANITOUWADGE.....	6
4.0 SUMMARY OF COMMUNITY ASSETS – KEY ISSUES, ASPIRATIONS, CAPABILITIES AND CAPACITIES	9
5.0 COMMUNITY WELL-BEING ASSESSMENT	16
5.1 <i>Implications for Human Assets</i>	16
5.2 <i>Implications for Economic Assets.....</i>	19
5.3 <i>Implications for Infrastructure.....</i>	24
5.4 <i>Implications for Social Assets.....</i>	27
5.5 <i>Implications for Natural Environment</i>	30
5.6 <i>Community Well-Being Summary.....</i>	33
6.0 CRITERIA TO ASSESS FACTORS BEYOND SAFETY - SUMMARY	35
7.0 RELATIONSHIP BUILDING AND ENGAGEMENT SUMMARY.....	39
7.1 <i>Overview of Engagement</i>	39
7.2 <i>Summary of Issues and Questions Raised.....</i>	40
7.2.1 <i>Key Challenges, Issues and Opportunities.....</i>	40
7.2.2 <i>Summary of Key Interests/Questions.....</i>	40
7.2.3 <i>Ongoing Engagement</i>	43
8.0 COMMUNITY WELL-BEING SUMMARY FINDINGS.....	44
9.0 REFERENCES	47

LIST OF TABLES

Table 1: Estimate of On-Site Labour Workforce Required by APM Project	4
Table 2: Summary of Priorities and Key Issues	10
Table 3: Summary of Community Aspirations	13
Table 4: Summary of Community Capabilities	15
Table 5: Implications for Human Assets	18
Table 6: Implications for Economic Assets	22
Table 7: Implications for Infrastructure.....	26
Table 8: Implications for Social Assets.....	29
Table 9: Implications for Natural Environment	32
Table 10: Overall Community Well-Being Implications	34
Table 11: Summary Table of Criteria to Assess Factors Beyond Safety – Manitouwadge	36

LIST OF FIGURES

Figure 1: Manitouwadge, Ontario	1
Figure 2: Direct and Indirect Effects of APM Project in Manitouwadge	5

1.0 INTRODUCTION

This Preliminary Community Well-being Assessment Report aims to provide a summary of the expected influences that the implementation of the Adaptive Phased Management (APM) Project would have on the overall community well-being of Manitouwadge, Ontario (see Figure 1). This report also seeks to answer some fundamental questions to assist the NWMO and the community in understanding the suitability of Manitouwadge to move forward in the siting process. While each of the communities currently participating in the 'Learn More' process will likely benefit in many ways from the APM Project and the economic development and employment opportunities associated with it, there are certain unique uncertainties and priorities to be managed for each community.

Figure 1: Manitouwadge, Ontario



Source: DPRA Canada, 2013.

Work has been completed to understand the community profile of Manitouwadge¹, and also to understand and summarize the ways in which the APM Project might affect the community and the surrounding areas. In concert with the community, NWMO worked to develop an understanding of the community today and its

¹ DPRA Canada. December 2014. *Community Profile, Manitouwadge Ontario*. Prepared for the Nuclear Waste Management Organization.

goals and aspirations for the future. To this end, information has been assembled and studied through a variety of means including, engagement activities, community visits and tours, one-on-one discussions, Community Liaison Committee meetings, open houses and the development of a community profile. All of this research and study, along with professional judgement, is used in this report to understand the potential implications of the project to the community's well-being and gain insights into the unique uncertainties and priorities that need to be managed.

As outlined at the inception of this step in the site selection process, the objective of the social, economic and cultural assessment is to assess both the potential to foster the well-being of the community and surrounding area and the potential to create the foundation for community and surrounding area confidence and support needed to implement the project. In Phase 1 of this assessment, which is the focus of this report, the intent is to explore the potential to foster the well-being of the community and, for this reason, the subset of factors and considerations related to the community are addressed at this time. Regional considerations are noted where early insight is available, however more detailed work would be conducted in Phase 2 should the community be selected to proceed to this phase of work and agree to do so.

A number of factors were identified as minimum criteria to consider in the site selection process in assessing the potential to foster well-being:²

- Potential social, economic and cultural effects during the implementation phase of the project;
- Potential for enhancement of the community's and the region's long-term sustainability through implementation of the project;
- Potential to avoid ecologically sensitive areas and locally significant features;
- Potential for physical and social infrastructure to adapt to changes resulting from the project; and,
- Potential to avoid or minimize effects of the transportation of used nuclear fuel from existing storage facilities to the repository site.

In order to ensure that a broad, inclusive and holistic approach is being taken to assessment in these areas, a 'community well-being' framework was identified to help understand and assess the potential effects of the APM Project. This includes exploring the project, understanding how the community may be affected were the project to be implemented in the area, and identifying opportunities to leverage the project to achieve other objectives the community considers important. The framework is also used to explore the relative 'fit' of the APM Project for the community and the potential to create the foundation of confidence and support required for the implementation of the APM Project.

² NWMO. 2010. *Moving Forward Together: Process for Selecting a Site for Canada's Deep Geological Repository for Used Nuclear Fuel*.

The framework is designed to encourage exploration of the project through five different ‘lenses’:

- **People or Human Assets** – How might the implementation of the project affect people?
- **Economics or Economic Assets** – How might the implementation of the project affect economic activity and financial health of the area?
- **Built Environment or Physical Assets** – How might the implementation of the project affect infrastructure and the physical structures which the community has established?
- **Society and Culture or Social Assets** – How might the implementation of the project affect the sense of belonging within the community, and among residents, and the services and network of activities created to serve the needs of community members?
- **Natural Environment or Natural Assets** – How might the implementation of the project affect the natural environment and the community’s relationship with it?

This report begins with an overview of the basic assumptions about the Project and potential effects used for the preliminary assessment. The community’s priorities/key issues, aspirations, capabilities and capacities are described. Next, the report explores the implications of the implementation of the APM Project on the well-being of the community in terms of the five ‘lenses’ or asset categories. The preliminary findings are also considered in terms of the ‘criteria to assess factors beyond safety’ identified by NWMO prior to the initiation of the siting process. A summary of relationship building and engagement activities, and the issues and questions raised to date, is provided. The report concludes by addressing key questions framed by NWMO at the outset of the site selection process.

Ultimately, the potential effect of the Project on the well-being of a community needs to be identified and assessed by the community itself. This includes identifying the broad range of factors that need to be considered, the approach to measuring potential effect on well-being and judgements about the magnitude of this effect. It is also recognized that more detailed studies and further investigations of community specific risks and uncertainties will be required if the community continues in the siting process.

This report reflects the insight from desktop research and professional judgement, as well as reports shared by the community, insight provided by Community Liaison Committee members through their regular meetings, and individual discussions with community leaders and residents and others in the surrounding area. In preparing this report, we have been welcomed into the community and community members have graciously shared their time. We are extremely grateful for their time and participation.

2.0 THE APM PROJECT

The APM Project is currently in early stages of design thus there remains flexibility in the nature and scope of its implementation. This provides an opportunity for the project to be structured and operated in a manner that suits the conditions and aspirations of the host community and surrounding area. However, it is important at this early stage of the preliminary assessment to understand the potential implications of the project on the community and its surroundings. This requires some basic assumptions about the project and initial effects. The starting assumptions for this preliminary assessment include the following:

1. The on-site labour workforce required by the APM Project (see Table 1) is in the range of 400 – 1,200 jobs and further jobs (indirect and induced) and community wealth creation will result from project spending for goods and services and employee income spending.³ The following table summarizes the estimated number of direct, on-site jobs throughout the life of the APM Project, which spans over 150 years.

Table 1: Estimate of On-Site Labour Workforce Required by APM Project

APM Phase	Number of Years (approx.)	Direct Jobs per Year (approx.)	Primary Skills Required
Construction	10	400-1,200	Mining, engineering, geoscience, safety assessment, manufacturing, construction, trades, project management, social science, engagement, communication, transportation
Operation	30 or more	700-800	Mining, engineering, geoscience, safety assessment, manufacturing, trades support, project management, social science, engagement, transportation
Extended Monitoring	50 or more	100-150	Geoscience, safety assessment, mining
Decommissioning and Closure	30	200-300	Mining, construction trades, geoscience, safety assessment, regulatory affairs
Long term monitoring	100 or more	25-50	Environmental and health and safety monitoring

Source: NWMO. 2012. *Description of Canada's Repository for Used Nuclear Fuel and Centre of Expertise*.

2. Realization of employment benefits within a community will depend on a variety of factors such as:
 - A. Preference for local hiring and sourcing from local businesses,
 - B. Training of local residents for positions in the project or in supporting services, and
 - C. Planning to prepare for and leverage future opportunities.

This Project will be implemented through a long-term partnership involving the community, neighbouring communities and Aboriginal peoples in the area and the NWMO. Only through engagement, dialogue and collaboration will the NWMO ensure that needs are addressed at each stage of the process, and determine the specifics of how a partnership arrangement would work. For

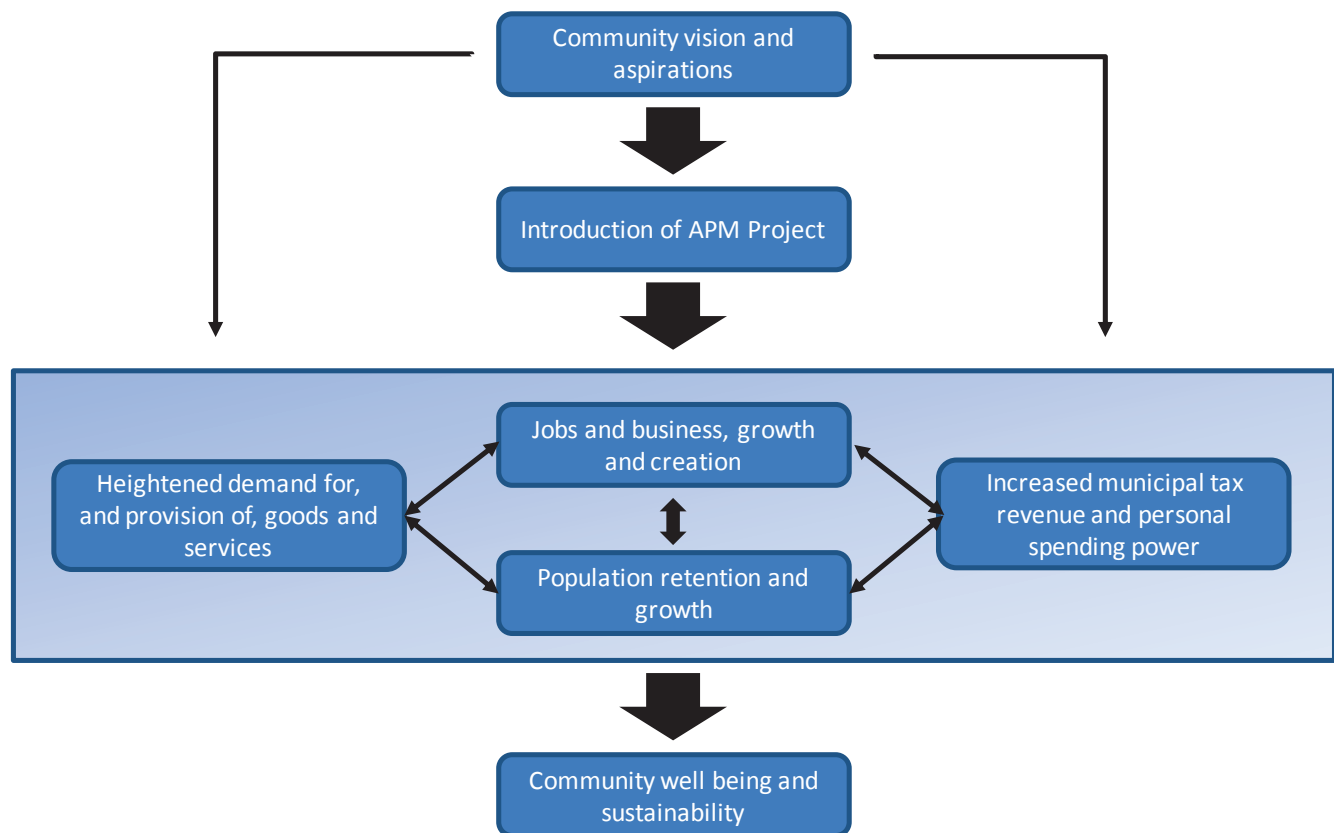
³ NWMO. 2012. *Description of Canada's Repository for Used Nuclear Fuel and Centre of Expertise*. Available online at <http://www.nwmo.ca/brochures>.

illustration purposes only, employment opportunities could be in the order of hundreds of new jobs (direct, indirect and induced) within the local area.⁴ However, it will be up to the community to determine the nature and scope of how it wishes to grow in discussions with the NWMO.

3. The NWMO is committed to working with communities and those in the surrounding area to optimize the benefits associated with the project in a manner that will directly and positively contribute to the overall well-being of not only the host community, but also other communities within the surrounding area, and as much as possible, drive future growth, capabilities and expertise that will sustain the community over a long period of time.

The following figure provides a graphical representation of the direct and indirect effects that may result from the siting of the APM Project (see Figure 2). The figure illustrates how the project could be the impetus for growth in population, business activity and municipal finances.

Figure 2: Direct and Indirect Effects of APM Project in Manitouwadge



⁴ AECOM. 2010. *A Preliminary Assessment of Illustrative Generic Community Economic Benefits from Hosting the APM Project*. Available online at: http://www.nwmo.ca/uploads_managed/MediaFiles/1497_nwmosr-2010-09_preliminary_ass.pdf

3.0 VALUES AND ASPIRATIONS OF MANITOUWADGE

The values and aspirations of the Township of Manitouwadge have been identified through discussion with community members and documented in the Manitouwadge Community Profile⁵ and other community reports. The preliminary assessment, which is the topic of this report, is measured against these values and aspirations.

Manitouwadge began as a mining community, and although the mines in the Township have closed, many residents still work in the industry elsewhere in northern Ontario or elsewhere in Canada. Forestry in the area is beginning to recover from recent downturns. The community's population is declining, as families and youth have had to move elsewhere for employment and educational opportunities. There is a desire to maintain, if not grow, the population to better support the schools, community organizations, facilities and services. Manitouwadge is seeking to diversify the economy and to identify local employment opportunities for new and existing residents, and to address the out-migration of community members (particularly youth) in search of employment or education. An improved municipal finance position is desired in order to redistribute the tax burden, and to provide opportunity to improve community facilities, programs and services. Overall, Manitouwadge wants to reverse the trend of declining population through sustainable economic growth, diversification and stability.

Residents highly value the natural amenities that contribute to their quality of life, and have a strong connection to hunting, fishing, trapping and other outdoor activities. Community members enjoy the relative isolation and uninterrupted access to the pristine natural environment afforded by their geographic location away from the main provincial Highways 11 and 17.⁶

Manitouwadge is guided by a number of planning documents:

- Strategic Plan 2007
- Needs and Gap Analysis 2013
- Official Plan and Zoning By-Law (under review)

Strategic Plan 2007

The Township of Manitouwadge has a Strategic Plan "*Providing for Life as it Should Be: Strategic Directions for the Township of Manitouwadge*".⁷ The Plan outlines the vision, mission and values for the community and identifies the strategic directions for the Township for the planning period of 2007-2011; however, the Township of Manitouwadge continues to implement its actions.⁸ Manitouwadge's vision statement is:

⁵ DPRA Canada. December 2014. *Community Profile, Manitouwadge Ontario*. Prepared for the Nuclear Waste Management Organization.

⁶ DPRA Canada. December 2014. *Community Profile, Manitouwadge Ontario*. Prepared for the Nuclear Waste Management Organization.

⁷ Township of Manitouwadge. 2007. *Providing for Life as it Should Be: Strategic Directions for the Township of Manitouwadge*. Website: <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/Strategic%20Plan%202007%20-%202011.pdf> Accessed October 2013.

⁸ This information was obtained from Manitouwadge community discussions November 2013.

“Trusting, secure, affordable, healthy, inclusive and spirited communities of opportunity where residents look out for each other, share a strong sense of camaraderie and community and are proud to call Manitouwadge home”.⁹

The mission of the Municipal Corporation is:

“The Municipality, working together with our partners, will provide open, accountable, accessible, responsive and visionary local government, a mix of reliable services that support a safe, healthy, affordable and spirited living environment, while positioning the community for economic expansion, and a rewarding, team-oriented workplace that produces value for taxes”.¹⁰

Strategic directions for the Municipality are:

- **Work Environment** – Council recognizes the strategic importance of establishing and maintaining a healthy and effective work environment in the corporation. The goal is to ensure that Council is more informed, to improve teamwork between Council and the administration, and to increase employee satisfaction;
- **Financial Health** – Focuses on maintaining the financial health of the corporation through better reporting practices and by identifying new or enhanced revenue sources;
- **Quality of Life** – Continue to support an exceptional quality of life in the community by providing services tailored to the needs of the community. This includes maintaining a clean community, establishing appropriate services and facilities to meet the needs of the community, adapt facilities and services to the needs of an aging population, and increasing volunteerism in the community;
- **Local Economy** – Position the community to attract and to expedite the development of new or expanded economic endeavours by updating the official plan, improvements to the transportation network, building relationships with local businesses, establish a marketing plan, and capitalizing on the demand for outdoor recreational opportunities; and,
- **Open and Effective Local Government** – Determine and meet the needs of the community through effective, open and accountable local government by developing and implementing an accountability and delegation policy, maintain strong presence on district and provincial committees or working groups, and to provide the public with information about Council functions and decisions through the Township website.¹¹

⁹ Township of Manitouwadge. n.d. *Providing for Life as it Should Be: Strategic Directions for the Township of Manitouwadge*. Website: <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/Strategic%20Plan%202007%20-%202011.pdf> Accessed October 2013.

¹⁰ Township of Manitouwadge. n.d. *Providing for Life as it Should Be: Strategic Directions for the Township of Manitouwadge*. Website: <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/Strategic%20Plan%202007%20-%202011.pdf> Accessed October 2013.

¹¹ Township of Manitouwadge. 2012. *Background Report for Official Plan and Zoning By-Law Review*. Website: <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/2012%20Background%20Report.pdf> Accessed: October 2013.

Needs and Gap Analysis/Marketing Study 2013

This Study identifies target sectors and specific opportunities to focus on and support economic development programs. Target sectors are:

- Mining;
- Forestry;
- Tourism; and,
- Retail and Service Sector.¹²

Opportunities for economic growth in Manitouwadge are:

- *To encourage local business investment;*
- *To continue to pursue new investment attraction opportunities and become more investment ready;*
- *Connect local entrepreneurs with new business opportunities; and,*
- *To encourage new residents to locate in Manitouwadge.*¹³

Official Plan and Zoning By-Law

Manitouwadge is currently reviewing the Official Plan and Zoning Bylaw for the Township, approved September 31, 1986. It is anticipated that the Official Plan review will be completed sometime in 2014, following the update of the Provincial Policy Statement.¹⁴ A background document has been prepared to assist with the review, documenting the community's history as well as the current context¹⁵. Manitouwadge's 1986 Official Plan promotes four key component areas: future land use for urbanized areas; future land use for rural areas; transportation network; and community improvement area.¹⁶

The Township has undertaken a number of projects in order to position itself as more attractive to investment opportunities. These projects include: rehabilitation of select buildings in the downtown area, and upgrades to the airport and wastewater treatment facility.¹⁷

¹² Millier Dickinson Blais. February 2013. *Needs and Gaps Analysis – Township of Manitouwadge Needs and Gaps Analysis and Marketing Study*.

¹³ Millier Dickinson Blais. February 2013. *Needs and Gaps Analysis – Township of Manitouwadge Needs and Gaps Analysis and Marketing Study*. P. 4.

¹⁴ This information was obtained from Manitouwadge community discussions in February 2014.

¹⁵ Township of Manitouwadge. September 2012. *Background Report for Official Plan and Zoning By-Law Review*. Website. <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/2012%20Background%20Report.pdf>

¹⁶ Township of Manitouwadge. September 31, 1986. *The Township of Manitouwadge Official Plan*. Prepared by: Colin Engineering & Planning Ltd.

¹⁷ Township of Manitouwadge. n.d. *Providing for Life as it should be: Strategic Directions for the Township of Manitouwadge*. Website: <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/Strategic%20Plan%202007%20-%202011.pdf>
Accessed: October 2013.

4.0 SUMMARY OF COMMUNITY ASSETS – KEY ISSUES, ASPIRATIONS, CAPABILITIES AND CAPACITIES

As described in the Community Profile¹⁸, Manitouwadge has several priorities, aspirations, capabilities and capacities that are most vital to the well-being of the community. These are organized to describe the characteristics of the community through five different perspectives or ‘lenses’:

- **Human:** Skills, knowledge and essential services supporting the well-being of the community;
- **Economic:** Monetary or financial resources supporting the well-being of the community;
- **Infrastructure:** Basic physical infrastructure supporting the well-being of the community;
- **Social:** Social and community activities in which people participate and the services and programs they draw upon to support well-being; and,
- **Natural environment:** Nature and the natural environment important to well-being.

The characteristics of the community are referred to as “assets” throughout the report. This is intended to highlight their importance and pave the way for a broad and holistic discussion of how the community may be affected by the APM Project, or other large projects which the community may consider.

Table 2 below summarizes the priorities and key issues as understood through desktop research, review of documentation, and discussions with community leaders and residents. Table 3 sets out the aspirations of the community that have been articulated in the Strategic Plan for the Community of Manitouwadge and in discussions with community leaders and representatives. Table 4 describes some of Manitouwadge’s capabilities to overcome key issues, address main priorities and achieve aspirations as understood through discussions with the community.

The findings in these tables provide the foundation for this preliminary assessment of community well-being and the potential implications of the APM Project.

¹⁸ DPRA Canada. December 2014. *Community Profile, Manitouwadge Ontario*. Prepared for the Nuclear Waste Management Organization.

Table 2: Summary of Priorities and Key Issues

Asset Category	Overall Priorities and Key Issues
Human	<p>In 2011, Manitouwadge's population was 2,105. This was significantly lower than in 1996 (3,395); however, it has been noted that the population has stabilized in recent years. The population is aging at a greater rate than either the Census Division or Ontario as a whole. Many residents have moved to Manitouwadge from elsewhere in Ontario or Canada. Manitouwadge is seeking to reverse the trend of declining population.</p> <p>Many residents have been forced to leave the community to seek employment following the closure of the GECO Mine (1995) and Golden Giant Mine (2006); a number of families remain in the community while a member is 'working away' at elsewhere in Northern Ontario, Alberta, or Africa. Between 2006 and 2011, the community's labour force size decreased and the types of occupation in the community shifted away from those associated with <i>agricultural/resource based</i> (previously the predominant occupational categories in Manitouwadge, other than <i>health and education, business services, and other services</i>).</p> <p>In 2011, the highest level of educational attainment in Manitouwadge, when compared to the Census Division and Ontario, was generally similar. The exception was 'university certificate, diploma or degree', where Ontario exceeded both the Census Division and Manitouwadge. Fewer Manitouwadge residents have a university certificate/diploma or degree in 2011 than in 2006. Enrollments in the community's schools have been falling as the population declines and young families leave the community.</p> <p>Manitouwadge is well serviced by the Manitouwadge General Hospital, the Family Health Team and the ambulance, police and volunteer fire department.</p>
Economic	<p>Manitouwadge was established as a mining town, and many still have ties to that sector of the economy. Following the closure of the GECO Mine in 1995, local unemployment was reportedly very high; many residents had to leave the community to find work. By 2006, unemployment numbers returned to levels similar to the province and were well below those in the District. 2011 unemployment data for Manitouwadge is not available, although community representatives have noted there seems to be little unemployment. Those who cannot find work locally move, or may commute elsewhere in the region (e.g., to Barrick Gold Mines south of town, mines in Northwestern Ontario) or beyond (e.g., to Alberta or Africa), while choosing to keep their families in Manitouwadge. There is a desire for local or regional employment opportunities for existing or returning residents – in particular for youth and younger families.</p> <p>There has also been a recent increase of seniors, pensioners, and families reliant on social assistance moving to town, due to the number of amenities, attractions and services offered in the community and affordability of housing. An advertising</p>

Asset Category	Overall Priorities and Key Issues
	<p>campaign undertaken in Southern Ontario assisted this trend.</p> <p>In recent years, local forestry activity has increased in Manitouwadge as a result of several mills re-opening along the North shore of Lake Superior due to increased demand and favorable prices for forest products. Many other existing businesses are in the service and retail sector. Today, Manitouwadge is looking for new economic development opportunities, as well ways to strengthen existing economic sectors (e.g., regional mining; tourism and local businesses). Many residents are hopeful of a new resource development or other type of project will commence in the region and provide new long-term employment opportunities. A lack of retail and comparative shopping alternatives in Manitouwadge makes it difficult for existing and new businesses due to 'out-shopping' and competitive markets.</p> <p>Manitouwadge's tourism sector continues to experience challenges as a result of the relative isolation (at the terminus of Highway 614, and distance from Highway 17). Tourism in Manitouwadge is geared towards outdoor recreation such as skiing, golfing, hunting, fishing, snowmobiling and the use of All Terrain Vehicles [ATVs]. The opportunity for increased tourism in Manitouwadge is seen as a potential contribution to the economy. A number of lodges/resorts operate in the Manitouwadge area, e.g., in nearby White Lake and Hillsport. The Select Inn Motel in Manitouwadge also opened in 2013, providing additional accommodation options.</p> <p>The majority of the tax burden for the Township is placed on residential ratepayers. As the population in the Township declined in recent years, so too has its property tax base. It has been noted that maintaining the current level of community services is becoming difficult, especially since 1995 when the GECO Mine closed. There is limited industrial and commercial assessment base in Manitouwadge.</p>
Infrastructure	<p>Discussions with community representatives indicate that while housing is relatively inexpensive in Manitouwadge, property taxes and fuel costs are high. There is also a decline in the number of houses in the community. The low cost of housing has attracted retirees and others on fixed income to the community. Aging municipal infrastructure is a challenge; a current priority is the need to improve the drying of the wastewater lagoon beds.</p>

Asset Category	Overall Priorities and Key Issues
Social	<p>The community identifies with the natural environment and a tradition of outdoor activities such as hunting, fishing, and trapping - a lifestyle that many people continue to enjoy, and that is essential for maintaining local tourism activity. They also enjoy many amenities such as a ski hill, golf course and recreation complex.</p> <p>With a declining population and tax base, it is becoming more difficult to maintain, let alone improve, community facilities, programs, and events. Maintaining the communities' volunteer base is also becoming a challenge. Many work out of town for weeks or months on end, creating a challenge for recruiting new people to provide ongoing support for the many activities and organizations in Manitouwadge.</p>
Natural Environment	<p>The Natural Assets in Manitouwadge are highly valued by residents. Manitouwadge is located approximately 55 kilometres north of the Trans-Canada Highway 17, surrounded by wilderness, lakes, and rivers that provide outdoor opportunities for residents and tourists. The community is situated on the southern end of Lake Manitouwadge; numerous other lakes also surround the community. North of town there are a number of natural waterfalls and hiking trails. Many residents also have camps at nearby lakes. Participatory management of natural resources through the forest management process is important.</p>

Table 3: Summary of Community Aspirations

Asset Category	Overall Community Aspirations
Human	<p>The vision statement in the 2007 Strategic Plan reflects the community's aspirations: <i>"Trusting, secure, affordable, healthy, inclusive and spirited communities of opportunity where residents look out for each other, share a strong sense of camaraderie and community and are proud to call Manitouwadge home"</i>.</p> <p>Community participation in activities such as curling, hockey, and figure skating and other activities at the recreation centre have declined significantly in recent years. This is attributed to the aging population, and the number of residents that work out of town and/or the surrounding area for weeks/months at a time, and are no longer present in the community to participate. Residents have noted a desire to increase the number of families and children in the community as this would contribute to the ongoing viability of services and programs, including schools, the hospital/medical services, and community organizations and programs.</p> <p>Manitouwadge is seeking to reverse the trend of declining population.</p>
Economic	<p>Many residents have expressed a desire for local employment opportunities to retain existing youth, workers and their families, and to attract new people to the community. These opportunities may relate to the existing sectors of mining and forestry, and to a lesser extent for tourism; however, Manitouwadge is open to diversification into other sectors. The community has a strong mining history, and many residents are still involved in this sector. Entrepreneurship is viewed as necessary to grow Manitouwadge's local economy in the future.</p> <p>Manitouwadge residents highly value the natural amenities that contribute to both their quality of life and tourism potential. The future potential for tourism in Manitouwadge may be limited due to its location off the main highways and broader trends in that sector, although some view it as an opportunity that should continue to be pursued.</p> <p>An improved municipal finance position is desired in order to redistribute the tax burden, and to provide opportunity to improve community facilities, programs and services.</p> <p>Overall, Manitouwadge is seeking sustainable economic growth, diversification and stability, and the associated opportunities for community development that would result.</p>

Asset Category	Overall Community Aspirations
Infrastructure	Improving the municipal revenue stream to allow for continued maintenance or improvement of infrastructure is an objective for the Township. Manitouwadge is encouraging the province to assist with transportation improvements, such as the maintenance of the Caramat Road.
Social	Many residents have noted a desire to increase the number of families and children in the community. Some feel that doubling the current population back to peak levels would be desirable. This would contribute to the ongoing viability of community facilities, culture and recreational programs, and community organizations.
Natural Environment	The protection and enhancement of the natural environment is a priority for the community, including access for hunting, fishing, and trapping. As a whole, community members appreciate their relative isolation and the ease of access to recreational activities afforded by their location away from the main provincial Highways 11 and 17. The Perry Lake Trail created at the centre of town adds to the overall beautification of the community and enhancement of the natural environment.

Table 4: Summary of Community Capabilities

Asset Category	Community Capabilities and Capacities
Human	Manitouwadge is in the process of updating their Official Plan, which, when complete, will further articulate goals for the community. Other recent planning initiatives undertaken by Manitouwadge include a Strategic Plan and a gaps analysis/marketing plan.
Economic	<p>Given its history, and a workforce that is still involved in mining elsewhere, the mineral sector remains of interest in Manitouwadge. There is a general understanding of working in underground environments. Recent planning initiatives, such as the 2007 Strategic Plan, the 2013 gaps analysis/marketing study, and the ongoing current review of the Official Plan will help Manitouwadge chart a clear direction in terms of economic development for the community. The support of the Economic Development Office and the Economic Development Committee will further assist in that regard.</p> <p>Manitouwadge has a number of tourism brochures and advertising materials available to attract tourist and new residents alike.</p>
Infrastructure	Manitouwadge has available infrastructure capacity (housing, water, waste and wastewater management) to support additional population. However, housing stock is declining in quality and quantity. The seniors housing complex is a valued community asset.
Social	The extensive community facilities in Manitouwadge include a community centre (with hockey rink, curling, outdoor pool and outdoor tennis courts), library, golf course/cross-country ski area, ski hill, community dock, and several playing fields. The Manitouwadge community is actively engaged in year-round outdoor recreational pursuits, many of which focus on the surrounding natural amenities.
Natural Environment	Given its importance to the community, there are a number of mechanisms available for individuals and organizations to participate in environmental protection/management activities, such as the MOE and forest management planning through the Pic River Public Consultation Committee.

5.0 COMMUNITY WELL-BEING ASSESSMENT

In this section, implications of the APM Project on the well-being of the community are examined through each of the five different perspectives or “lenses”. These are referred to as “assets”. Additional detail on these is provided in the Manitouwadge Community Profile.¹⁹

5.1 IMPLICATIONS FOR HUMAN ASSETS

For the purpose of this analysis, the Human Assets within a community are understood to include the skills and knowledge inherent in it and the ability of a community to provide its residents with access to other skills, knowledge and essential services that are fundamental to maintaining community well-being, quality of life or a desired standard of living. In this analysis, the specific indicators examined included:

- Population Size and Demographics;
- Skills and Labour Supply;
- Education; and,
- Health and Safety Facilities and Services.

Table 5 summarizes observations with respect to the APM Project for the human assets of Manitouwadge.

Manitouwadge and many Northern Ontario communities have experienced major declines in population. In 2011, Manitouwadge’s population was 2,105 residents – a decline of 1,300 since 1996. The community is experiencing an aging trend due to outmigration of youth and other workers, as well as seniors (attracted by low housing costs) moving to the community. Manitouwadge recently ran a marketing campaign, which attracted retirees from Southern Ontario. Population decline is a primary concern for the people of Manitouwadge, and there is a strong desire to grow. The community has expressed a desire to return to previous population levels and former prosperity.

With the population decline, retail establishments have closed; in particular, restaurants, a grocery store, and clothing store. Concurrently there have been reductions in recreational and community services and facilities.

Manitouwadge has experienced out-migration because of decreased opportunities due to mine closures and forestry cycles. Out-migration began after the GECO Mine closed in 1995, continuing with the closure of the Golden Giant Mine in 2006. Residents have noted that there are limited local employment opportunities able to attract and/or retain a diverse and growing workforce.

The APM Project has the potential to bring in a large enough population to achieve the community’s goal of increasing its population to historical levels. This growth will rejuvenate the schools, retail options and community facilities and services. The APM Project would likely utilize any existing and available skilled labour force and attract a new skilled and diverse workforce as well as attracting new families. The APM Project offers the opportunity for local residents to obtain opportunities in direct, indirect and induced jobs.

¹⁹ DPRA Canada. December 2014. *Community Profile, Manitouwadge Ontario*. Prepared for the Nuclear Waste Management Organization.

Manitouwadge's four schools have experienced declining enrolment and staffing in recent years. Community education facilities are underutilized given the current population levels. It is expected that the APM Project will attract young families to the area, increasing enrolment, and would stimulate career aspirations and interest in education and training. Manitouwadge may require investment for new training facilities in the local region or the community.

Manitouwadge has an aging population, which is putting an increased strain on the hospital and local medical services. Specialty healthcare requires residents to travel outside the community; airport and helipad allow for emergency air medevac transport. Local emergency services (ambulance, OPP, volunteer fire department) are adequate for the community at this time. With growth, demand for health and safety services will increase in the community. Growth may also stimulate planning and expansion of health and safety facilities and services, and an increased ability to attract and retain highly qualified health-care professionals.

The APM Project has the potential to bring positive net benefits to the Human Assets of Manitouwadge were the Project to be implemented in the area. It would help the community realize its aspiration and goals, and it would drive development and expansion in other aspects of its community well-being.

With the possible introduction of the APM Project and its associated local and regional economic opportunities there is the potential in the community for:













- Population growth
- Creation of jobs; attraction and retention of a diverse and highly-skilled work force.
- Diverse career opportunities for local residents in direct and indirect jobs
- Stimulate career aspirations and interest in training and education
- Increased demand and potential resources for growth in health and safety, recreation, and education services in response to population growth and project activity

Manitouwadge may require assistance to effectively manage implications of the APM Project. This could include:

- Assistance to plan for and manage growth
- Assistance to train and engage any available local workforce
- Planning and support to educate and train any available workforce and future generations to take advantage of career opportunities; require investment for new training facilities in the community

The APM Project has the potential to bring positive net benefits to the Human Assets of Manitouwadge were the Project to be implemented in the area.

Table 5: Implications for Human Assets

Criteria / Measures	Ideal CWB Condition	Current Manitouwadge Profile	Possible Manitouwadge Profile with APM Project	Observations
	HUMAN ASSETS:			
Population Size and Demographics	Increase population to 3,000 -5,000 Retention and attract youth and young families	Declining population between 1996 and 2011	 Growth in population and diversity	 <ul style="list-style-type: none">Population has declined by 1,300 people since 1996 to 2,105 in 2011.Manitouwadge has experienced out-migration because of decreased employment opportunities due to mine closures and forestry cycles, as well as youth outmigration for education and work opportunities.The community is experiencing an aging trend due to outmigration of youth and other workers, as well as seniors moving to the community attracted by low housing costs. The community has expressed a desire to return to previous population levels and former prosperity.APM Project offers potential to create new jobs and attract and retain a younger and more balanced population.Manitouwadge may require assistance to plan for, and manage growth.
Skills and Labour Supply	Presence of a diverse, skilled workforce	Constrained opportunities for employment Decline in experienced workforce with mine closures	 Enhanced job creation for youth, as well as opportunities for all other parts of the labour force	 <ul style="list-style-type: none">In 2001 and 2006, the largest industry in Manitouwadge was <i>agriculture and other resource-based industries</i> (the focus would be on forestry, mining, rather than agriculture). In 2011, mining continued to be the main industry however the category name changed to “mining, quarrying; and oil and gas extraction”.Job types are changing in Manitouwadge as “trades, transport and equipment operators and related occupations” were most common in 2001, while “sales and service occupations” were most common in 2006. In 2011, the main job type of residents changed to “trades, transport and equipment operators and related occupations”. Limited local employment opportunities to attract a diverse and growing workforce.APM Project would likely attract new skilled and diverse workforce and bring in new families.The APM Project offers diverse career opportunities for existing local residents in direct and indirect jobs.Manitouwadge would require assistance to train and engage the available local workforce.
Education	Access to education and training Increased enrolment and programming	Declining enrolment in local schools No local post-secondary education Constrained programing	 Increased enrolment and opportunities for education and training Broader range of programming and potentially facilities	 <ul style="list-style-type: none">Manitouwadge’s four schools have experienced declining enrolment and staffing in recent years. Community education facilities are underutilized given current population levels.Post-secondary education is available in regional centres such as Thunder Bay and Sault Ste. Marie.Contact North distance education facility is located in the Township.Wide range of new local employment/career opportunities with the APM Project will attract young families to the area, increasing enrolment.The APM Project will stimulate career aspirations and interest in project-related training and education.Manitouwadge would require planning and support to educate and train its current workforce and future generations to take advantage of career opportunities.Manitouwadge may require support for new training facilities in the local region or the community.
Health & Safety Facilities and Services	Access to full range of health services 24/7 Fully serviced by emergency responders	Local hospital is increasingly strained from aging population Some specialty care not available within the community Emergency response needs adequately met	 Increased demand on services and facilities Catalyst to broaden supply of services and facilities, particularly healthcare	 <ul style="list-style-type: none">An aging population is putting an increased strain on the hospital/medical services.Specialty healthcare requires travel outside the community; airport and helipad allow for air medevac transport.Emergency services (ambulance, OPP, fire department) are adequate for community at this time.With growth, demand for health and safety services will increase; growth may also stimulate planning and expansion of health and safety facilities and services.
Declining-Negative				
Neutral-Stable				
Increasing-Enhanced-Positive				
Uncertain				

5. 2 IMPLICATIONS FOR ECONOMIC ASSETS

The Economic Assets within a community are understood to include the monetary or financial related resources that people use to achieve their well-being objectives. It includes cash or equivalents to individuals and/or their community, and the availability of financial and economic resources that allow the community and residents to manage their finances and wealth. In this analysis, the specific indicators examined included:

- Employment;
- Business Activity;
- Income;
- Tourism;
- Economic Development Services; and,
- Governance and Municipal Finance.

Table 6 summarizes observations with respect to the APM Project for the economic assets of Manitouwadge.

At the moment, employment in Manitouwadge has been increasing slightly due to an upswing in local forestry activity/operations. This is likely a result of mill re-openings across the region. Manitouwadge's unemployment rate decreased considerably between 1996 and 2006 (due in part to out-migration /population decline).²⁰ With the current construction, forestry and mining activities in the region, it has been noted there is a shortage of trades/skilled workers at this time. No major employers are located in town since the GECO Mine closed in 1995. Some residents work at the Hemlo mines, others have left the community to seek employment elsewhere; some residents remain in the community but work in other locations in Northern Ontario, Alberta or further afield. There is a growing trend of youth out-migration for post-secondary education as well as in search of jobs and career opportunities.

The APM Project will give the community a significant boost in population with the concurrent expansion of retail and services, and new demands for education and community services.

Average household incomes are declining in Manitouwadge. A recent influx of retired and low-income families has also been observed in the community; however, recent increase in forestry activity may help to stabilize the declining household incomes.

Many downtown businesses have closed or are struggling to stay open. Mining-related business activity was impacted when the GECO Mine closed in 1995, followed by the Golden Giant Mine closure in 2006. The decline in business activities have had a ripple affect across the community causing job loss and further population decline. The APM Project would create local direct and indirect jobs and stimulate business activity across the community. By reversing population decline and raising incomes, local market opportunities would present themselves and these in turn will stimulate business growth and diversity in employment.

²⁰ The 2011 unemployment rate is unavailable in 2011 NHS data. In addition, employment data obtained using Environics Analytics CensusPlus data estimations appear to be inaccurate, and are not reported here.

Overall, residents have noted that it is difficult to attract visitors off Highway 17 to visit Manitouwadge. The recent Gateway Project was constructed on the Trans-Canada Highway at the junction of 17 and 614. The Select Inn Motel opened in 2013, which may help increase tourism. Several cabins and Bed and Breakfasts also operate in the area. Although there is some concern that negative perceptions associated with the APM Project may impact the tourist industry, there is also the potential for niche markets associated with APM to increase tourism. In principle, there is the potential that visitation to the area may experience some decline as tourists might choose to avoid the area because of the presence of the facility. It is expected that through working with local communities and relevant authorities and clearly communicating with the public, any effects of the project on tourism can be mitigated. Further study is required to better understand and predict the potential effects of the Project on visitor perception and use of the area.

Manitouwadge has had difficulty hiring a new Economic Development Officer due to funding constraints. The Economic Development Office has remaining funding from the GECO Mine closure that is directed towards economic development opportunities of projects such as re-opening the Select Inn Motel. Economic development has been difficult given the overall economy and the ongoing local attrition in business and jobs. Manitouwadge's financial position has been affected by population decline, business closures, vacant properties and tax arrears, which have left the community with a weak revenue base. Municipal services must remain operational despite fiscal challenges and long term capital needs. The APM Project will allow Manitouwadge to increase the municipal revenue base to support maintenance and growth of community infrastructure and services.

Should the APM Project locate in Manitouwadge, there will be direct and indirect job creation and a diversity of career opportunities. Further induced employment will also occur as a result of income spending by direct and indirect workers. Jobs and business opportunities will be created and incomes will grow, as will household expenditures. The presence of additional long term and stable job opportunities will change the economic complexion of the community. Out-migration of youth will slow and in-migration will occur as Manitouwadge becomes a larger employment centre. More households and greater expenditures open up market opportunities for local businesses to service the expanding needs of a growing and more affluent population. The Project would be compatible with Manitouwadge's desire for sustainable economic growth, diversification and stability, and the associated opportunities for community development that would result.

With the possible introduction of the APM Project in Manitouwadge and its associated local and regional economic opportunities there is the potential for:









- Growth in the number and diversity of stable employment and career opportunities in the community;
- Stimulation of growth in employment and household income and elevate revenues for the Township;
- Local market opportunities would present themselves which would stimulate business growth and diversity;
- New visitors travelling to the area who come to learn more about the APM Project; and
- Provision of a catalyst for economic development through its own presence and creation of associated business opportunities.

Manitouwadge may require assistance to effectively manage implications of the APM Project. This could include:

- Ensuring local residents are able to realize project direct and indirect employment opportunities;
- Planning, implementing and managing economic development;
- Manitouwadge and tourism organizations may require assistance to manage the presence of APM Project constraints and opportunities;
- Planning and implementing a strategy that would realize the economic development opportunities presented by the APM Project;
- Assistance to understand the fiscal implications of the APM Project and to how best to manage its finances to ensure upside potentials are fully realized and downside risks are minimized;
- Further evaluation of the potential for changes in perceptions that may affect tourism; and
- Some residents may benefit from assistance and counselling regarding wealth and debt management.

Overall, the changes in community well-being related to the Economic Assets of Manitouwadge as a result of the APM Project are expected to be positive.

Table 6: Implications for Economic Assets

Criteria / Measures	Ideal CWB Condition	Current Manitouwadge Profile	Possible Manitouwadge Profile with APM Project	Observations
ECONOMIC ASSETS:				
Employment	Increasing employment for residents	Recent increase in local forestry activity Improving Unemployment rate, with some skilled trades in demand regionally	 Growth in the number of and diversity of employment opportunities in the community and region	 <ul style="list-style-type: none">Manitouwadge’s unemployment rate decreased considerably over the past decade.With the current construction, forestry and mining activities in the region, it has been noted there is a shortage of trades/skilled workers at this point in time.Increased forestry operations as a result of mill re-openings across the region, although there are no major employers in town since GECO Mine closed.Some residents work at Hemlo mines, while others have left the community to seek employment elsewhere (e.g., Alberta or other locations in Northern Ontario).The participation rate decreased from 67.9% in 2001 to 66.5% in 2006. This may be linked to a large senior’s population that is not in the workforce, as well as wage earners working outside the community to support families remaining in Manitouwadge. Out-migration of youth in search of job and career opportunities is prevalent.APM Project would offer a diverse range of employment opportunities and careers for both community and area residents.Manitouwadge may require assistance to ensure local residents are able to realize project direct and indirect employment opportunities.
Income	Household income growth and diminished need for social assistance	Decreasing household incomes	 Growth in good paying jobs will raise household incomes	 <ul style="list-style-type: none">Average household incomes are declining; a recent increase in the number of retirees has been observed in the community.Recent increase in forestry activity may help to stabilize the declining household incomes.APM Project would create local jobs and as a result will stimulate growth in medium household income and wealth creation.Some residents may benefit from assistance and counselling regarding wealth and debt management.Manitouwadge may require assistance to help residents realize employment opportunities and manage their finances.
Business Activity	Business growth and increasing business diversity	Many businesses in decline Downsizing and closures have been commonplace	 Growth in business activity leading to growth in the number and diversity of businesses	 <ul style="list-style-type: none">Some downtown businesses have closed or are struggling to stay open.Mining-related business activity was impacted when the GECO Mine closed in 1995, followed by the Golden Giant mine closure in 2006.There is little business diversification occurring in the community at this time; however, there is growth in the forestry activity in the surrounding area.Decline in business activities have had a ripple affect across the community causing job loss and further population decline.APM Project would create local direct and indirect jobs and stimulate business activity across the community.By reversing population decline and raising incomes, local market opportunities would present themselves and these in turn will stimulate business growth and diversity in employment.Manitouwadge may require assistance to plan, implement and manage economic development.
Recreation and/or Tourism	Stability or growth in area tourism	Tourism facing challenges and change It is a challenge attracting visitors to the community from of Highway 17	 Potential deterioration in tourism as a result of negative perceptions and project concerns Potential increase in tourism with niche market	 <ul style="list-style-type: none">It is difficult to attract visitors from Highway 17. A Gateway Project on the Trans-Canada Highway at junction of 17 and 614 has been completed.Manitouwadge has some accommodations, including the Select Inn Motel, as well as several cabins and bed and breakfast facilities.There is the potential for niche markets associated with the APM Project to increase tourism; further study is required to better understand the potential effects on visitor perception and use of the area.Manitouwadge and tourism organizations may require assistance to manage the presence of APM Project constraints and opportunities.

Criteria / Measures	Ideal CWB Condition	Current Manitouwadge Profile		Possible Manitouwadge Profile with APM Project		Observations
Economic Development and Services	An active economic development organization that has demonstrated success in attracting businesses to the community	Economic Development Office, but difficulty attracting an Economic Development Officer		Businesses will want to locate in the community to take advantage of the business opportunities directly and indirectly created by the APM Project		<ul style="list-style-type: none">. The Economic Development Office has remaining funding from the GECO Mine closure that is directed towards economic development opportunities or projects such as re-opening the motel.Economic development has been difficult given the overall economy and the ongoing local attrition in business and jobs.Recent marketing campaign attracting retirees from Southern Ontario.As a means for attracting new opportunities, the community is looking to organize a new initiative to provide training opportunities for operation of forestry equipment.APM Project would provide a catalyst for economic development through its own presence and creation of associated business opportunities.Manitouwadge may need assistance to plan and implement a strategy that will fully realize the economic development opportunities presented by the APM Project.
Governance and Municipal Finances	Community is financially sustainable over short and long term	Declining financial position Declining tax base due to business attrition and vacant properties		An enhanced tax base with solid contributions from industrial and commercial properties Additional revenues to cover operating and capital requirements associated with growth		<ul style="list-style-type: none">Business attrition, vacant properties and tax arrears have left the community with a weak revenue base.Municipal services must remain operational despite fiscal challenges and long-term capital needs.APM Project by its presence would elevate revenues available to the Township.Manitouwadge may need assistance to understand the fiscal implications of the APM Project and to how best manage its finances to ensure upside potentials are fully realized and downside risks are minimized.
Declining-Negative						
Neutral-Stable						
Increasing-Enhanced-Positive						
Uncertain						

5.3 IMPLICATIONS FOR INFRASTRUCTURE

The Infrastructure or Physical Assets within a community is understood to include the basic infrastructure needed to support well-being and the tools or equipment that people use to function more productively. Infrastructure is a basic public good and improved access to it increases community well-being and quality of life. In this analysis, the specific indicators examined included:

- Housing;
- Municipal Infrastructure and Services; and,
- Transportation Infrastructure.

It should be noted that while these indicators are a subset of those included in the Community Profile, these are the key indicators that are thought to be most important to Manitouwadge in terms of its Physical well-being.

Table 7 summarizes observations with respect to the APM Project for the physical assets of Manitouwadge.

There is development potential in the Township, as new areas for residential development are available. Housing prices are relatively low, but have stabilized and increased slightly in recent years. Approximately 45 houses are currently vacant on the market. If the Project were to be implemented in Manitouwadge, there is the potential to increase the cost of housing, depending on the size and rate of labour in-migration. Moreover, there may be instances where low-cost housing would be taken up by Project workers. Further study and management of housing issues would be appropriate to ensure effects on housing affordability are minimized.

Basic municipal infrastructure is in place in Manitouwadge. The current landfill was constructed 10 years ago and has expected capacity to last another 20 years. The water and waste water systems have a designed capacity for 6,000 residents.

Manitouwadge is located 55 km north of the Trans-Canada Highway 17. Industrial roads (primarily used for logging) provide links between Manitouwadge, Hornepayne, Hillsport, Caramat, and the Trans-Canada Highway 11. The municipal airport operates for private charters, local aircraft, and MNR firefighting operations. The community previously had scheduled passenger air service by Bear Skin Airlines. Existing rail beds from Canadian National and Canadian Pacific spur lines remain linking to the GECO Mine site; however, the railway tracks have been decommissioned.

With the possible introduction of the APM Project and its associated local and regional economic opportunities there is the potential for:

- In-migration of individuals and families who will absorb the available housing stock;
- Increase in housing demand and prices if supply remains limited;
- Greater demand for a mix of housing types and tenure arrangements;
- Increased demands on existing infrastructure, as well as increased resources and funding to support facility improvements;

- Generate municipal revenues (directly and indirectly); and
- Increased road and rail usage and this may necessitate upgrading and expansions along with additional potential funding and revenue streams to support new infrastructure.

Manitouwadge may require assistance to effectively manage implications of the APM Project. This could include:

- Maintaining a supply/demand balance of housing to ensure there is a strong supply of affordable housing and a supply of rooms available for tourists and general travelling public;
- Assistance planning, developing and maintaining a sustainable housing portfolio;
- Assistance planning, operating, and maintaining service demands associated with the APM Project; and
- Assistance from the community and relevant authorities to create a multimodal transportation plan.

Overall, the changes in community well-being related to the Infrastructure or Physical Assets of Manitouwadge as a result of the APM Project appear to be positive.

Table 7: Implications for Infrastructure

Criteria / Measures	Ideal CWB Condition	Current Manitouwadge Profile	Possible Manitouwadge Profile with APM Project	Observations
	INFRASTRUCTURE OR PHYSICAL ASSETS:			
Housing	<p>Sufficient housing stock to meet all needs and incomes</p> <p>Average house values increase over time in line with household incomes</p>	<p>Housing prices relatively inexpensive</p> <p>Housing stock declining as older homes are being torn down</p>	<p>Strong absorption of available housing and stimulus to housing prices</p> <p>New housing development</p> <p>Potential shortage of supply if development does not keep pace with demand</p>	<ul style="list-style-type: none">There is development potential in the Township as new areas for residential development are available.Housing prices are relatively low, but have stabilized and increased slightly in recent years. Approximately 45 houses are currently on the market.There is a diversity of housing stock in the community, with ownership more common than renting.APM Project would see the in-migration of individuals and families who will absorb the available housing stock. As vacancy rates fall and housing supply becomes constricted, housing prices might increase.APM Project would create a demand for a mix of housing types and tenure arrangements.A supply/demand balance of housing would need to be maintained to ensure there is a strong supply of affordable housing.Manitouwadge may need assistance to plan, develop and maintain a sustainable housing portfolio.
Municipal Infrastructure and Services	<p>Infrastructure assets are in good condition, well maintained and adequately sized to meet the short and long term needs of the community</p>	<p>The water system and landfill are in good condition and have surplus capacity</p>	<p>Increased demand for infrastructure and services</p> <p>Enhanced opportunities for new and renewed infrastructure</p>	<ul style="list-style-type: none">The current landfill was constructed 10 years ago and has an expected capacity to last another 20 years.The water and waste water systems have a designed capacity for approximately 6,000 residents.APM Project may place increased demands on existing infrastructure and may necessitate facility replacement or upgrading in some cases.APM Project would generate municipal revenues directly and indirectly that can be applied to facility operation and maintenance, upgrading and replacement.Manitouwadge may need assistance to plan, operate, maintain, and build new as required to meet service demands associated with the APM Project.
Transportation Infrastructure and Services	<p>A strong complement of transportation facilities and services to meet the needs of the residents and businesses within the community</p>	<p>A local municipal airport is available</p> <p>Approximately 60 km from TransCanada Highway</p> <p>No railway service, however there are decommissioned spur lines in the area</p>	<p>Upgrading and rehabilitating the airport</p> <p>Road and rail upgrading</p>	<ul style="list-style-type: none">Manitouwadge is located 55 km north of the TransCanada Highway.Industrial roads (used for logging) provide links between Manitouwadge and Hornepayne, and Caramat.The municipal airport operates for private charters, local aircraft, and MNR firefighting operations. The community previously had scheduled passenger air service operated by Bear Skin Airlines.Existing rail beds from Canadian National (CN) and Canadian Pacific (CP) spur lines remain linking to the GECO Mine; however, the railway tracks have since been decommissioned.APM Project would increase road, rail and airport usage and this may necessitate upgrading and expansions along with additional potential funding and revenue streams to support new infrastructure .
Declining-Negative				
Neutral-Stable				
Increasing-Enhanced-Positive				
Uncertain				

5. 4 IMPLICATIONS FOR SOCIAL ASSETS

For the purpose of this analysis, the Social Assets within a community are understood to include the social and community activities in which people participate and the resources that they draw upon in pursuit of their well-being. These activities and resources create networks within and between communities, enhance cohesion and generate trusting relationships and community pride. In this analysis, the specific indicators examined included:

- Community Recreational Facilities and Programs;
- Social Services and Organizations; and,
- Community Character.

It should be noted that while these indicators are a subset of those included in the Community Profile, these are the key indicators that are thought to be most important to Manitouwadge in terms of its Social well-being.

Table 8 summarizes observations with respect to the APM Project for the social assets of Manitouwadge.

Manitouwadge has very good community facilities. The decline in population has caused reductions in recreational programming. The financial circumstances of the Township do not permit continued investments in some services and associated infrastructure. The decline in population has made it difficult to support many recreational programs. For example, the tennis courts can no longer be maintained and the ski hill operates on weekends only. A number of recreational programs have ceased in recent years, such as figure skating and men's hockey. However, the increased population associated with the APM Project would also be expected to heighten participation rates, and create a larger base of volunteers. Increased funding and participation would allow Manitouwadge to maintain facilities and expand its recreational and social programs. School enrollments would rise.

Manitouwadge has a strong sense of pride associated with the surrounding natural environment, mining history and culture, and recreational amenities and facilities. Manitouwadge is felt to be a safe, quiet and friendly community for new and existing families. The community is cohesive and has a diversity of cultural backgrounds. The Project would be expected to have a positive influence on the dynamics of the community by providing a more stable population base and the retention of younger families and youth, and by providing the ability to support its middle-aged and senior populations. The APM Project will be compatible with Manitouwadge's aspirations related to growth, local employment and economic development.

With the possible introduction of the APM Project and its associated local and regional economic opportunities there is the potential for:

- Population growth, which may place demands on existing facilities and services and may create need for new facilities and services, as well as increased funding to support the growth; and
- Growth and stability if carefully managed to ensure community pride is maintained.

Manitouwadge will require assistance to effectively manage implications of the APM Project. This could include:

- Assistance planning, developing and operating the recreational facilities and services needed in light of the APM Project;
- Assistance planning and developing social services and organizations; and
- Assistance planning for and accommodating growing population.

Overall, the changes in community well-being related to the Social Assets of Manitouwadge as a result of the APM Project would be positive.

Table 8: Implications for Social Assets

Criteria / Measures	Ideal CWB Condition	Current Manitouwadge Profile	Possible Manitouwadge Profile with APM Project	Observations
	SOCIAL ASSETS:			
Community Recreational Facilities and Programs	A strong complement of recreational facilities and programs to meet the needs of the residents	Very good community facilities, but recent program reductions Population decline is making it less viable to operate some facilities and programs	Increased demand for and patronage of recreation programs Enhanced opportunities for new and renewed facilities	<ul style="list-style-type: none">Very good community facilities. The decline in population has caused reductions in recreational services offered (tennis courts no longer maintained and the ski hill operates on weekends only).A number of recreational programs have ceased in recent years (i.e., figure skating and men’s hockey) as the population is aging and many residents work outside of the community.The financial circumstances of the Township do not permit continued investments in some services and associated infrastructure.APM Project would bring population into the community and this population may place demands on existing facilities and services and may create both the need for new facilities and services, as well as the resources to provide them.Manitouwadge may need assistance to plan, develop and operate the recreational facilities and services needed in light of the APM Project.
Social Services and Organizations	A wide range of services, organizations and media outlets present to support the social fabric and needs of the community	Has a range of organizations and services present Some organizations have declining membership	Increased demand for and use of social services and organizations Enhanced opportunities for new services and organizations	<ul style="list-style-type: none">Manitouwadge has several organizations that provide social services to the community.There have been mixed changes to social services and organizations in the community as some have opened and others have closed due to a lack of government funding.APM Project would bring population in to the community and this population may place demands on existing services and organizations and may create a need for new services and organizations as well as new funding and participation to help grow services and organizations.Manitouwadge would need assistance to plan, develop and resource the services and organizations needed in light of the APM Project.
Community Character and Cohesion	Strong sense of community identity Cohesive community Stability of population	Strong sense of pride in the natural environment, community and mining history Cohesive and safe community	Increased youth /family retention to strengthen pride in place Maintain character of the natural environment	<ul style="list-style-type: none">Manitouwadge has a strong sense of pride associated with the surrounding natural environment, mining history and culture, recreational amenities and facilities.Manitouwadge is felt to be a safe, quiet and friendly community for new and existing families.The community is cohesive and has a diversity of cultural backgrounds.Many residents have French, Portuguese, and Scandinavian heritage.The APM Project will be compatible with Manitouwadge’s aspirations related to growth, local employment and economic development.To ensure community character is maintained, Manitouwadge would need assistance to plan for and accommodate population associated with the APM Project.
Declining-Negative				
Neutral-Stable				
Increasing-Enhanced-Positive				
Uncertain				

5.5 IMPLICATIONS FOR NATURAL ENVIRONMENT

For the purpose of this analysis, the Natural Environment within a community is understood to include a wide range of natural assets from intangible public goods (e.g., air quality and biodiversity) to resources that are “used” by people (e.g., water, trees, land and wildlife). In this analysis, the specific indicators examined included:

- Parks and Protected Areas; and,
- Natural Areas/Features of Significance.

As would be the case with any large project, natural areas, may be negatively influenced during the construction phase of the project (e.g. noise, dust). While it is expected that effective mitigation and environmental protection measures will be in place to ensure that the overall environmental integrity of the area is maintained, at this point, further studies are required to understand the extent and scale of any effects due to changes in the atmospheric, subsurface, aquatic and terrestrial environments during normal construction activity. It is understood at this point in time that no net negative environmental effects are likely during the construction, operation and decommissioning of the used fuel repository itself.

Table 9 summarizes observations with respect to the APM Project for the natural assets of Manitouwadge.

Manitouwadge and area residents regularly use the surrounding area for recreational activities. Fishing, hunting, and trapping are important in the community, as are snowmobiling and ATVing. Municipal and local/regional trails and waterfalls provide recreation and hiking opportunities. The APM Project has the potential to increase demand on provincial parks in the region. With proper planning and dialogue, resources would remain protected and increased demand managed. These natural features and recreational activities will likely be attractive to many of the new APM Project employees.

Manitouwadge is situated in an area of natural features. The area surrounding Manitouwadge is covered by two Forest Management Plans: the Pic River Forest Management Plan and the Big Pic Forest Management Plan.

Neys Provincial Park and other natural areas including numerous lakes are valued by residents, attract visitors and contribute to a strong sense of pride for the community. Residents enjoy uninterrupted access to the natural environment and lakes.

Initial studies on the potential environmental effects associated with the Project suggest that the APM Project is unlikely to have any significant effect on the natural environment which makes up the parks and protected areas near the community taking mitigation measures into consideration. In principle, there is the potential that visitation to the area may experience some decline as tourists might choose to avoid the area because of the presence of the facility. It is expected that through working with local communities and relevant authorities and clearly communicating with the public, any effects of the project on tourism can be mitigated. Further study is required to better understand and predict the potential effects of the Project on visitor perception and use of the area.

As would be the case with any large project, natural areas might be affected during the various phases of the Project. Effective mitigation and environmental protection measures will ensure that the overall environmental integrity of the area is maintained. It is understood at this point in time that no significant environmental effects are likely during the construction, operation and decommissioning phases of the used fuel repository itself.

The APM Project contains some flexibility with respect to on-site building designs and energy use to be consistent with broad environmental and social values. For example, the ability to use renewable sources of electric power, where feasible, coupled with energy-efficient building designs might limit the overall carbon footprint of the project.

Table 9: Implications for Natural Environment

Criteria / Measures	Ideal CWB Condition	Current Manitouwadge Profile	Possible Manitouwadge Profile with APM Project	Observations and Implications
	NATURAL ENVIRONMENT:			
Natural Areas / Features of Significance	Areas and features are protected and contribute to pride of place	Residents are proud of natural areas and use features for passive and active recreation	Potential for increased demand and use of features	<ul style="list-style-type: none">Manitouwadge is situated in an area of natural features, the most prominent of which are the Big Pic and Black River Forests as well as numerous lakes and river systems.Residents enjoy access to the natural environment and lakes; many residents have camps/cabins in the surrounding area.The area surrounding Manitouwadge is covered by two Forest Management Plans: the Pic River Forest Management Plan and the Big Pic Forest Management Plan.The APM Project has the potential to have a negative effect on the area’s natural environment and features of significance; however, it is understood at this point in time that no significant environmental effects are likely during the construction, operation and decommissioning of the used fuel repository itself.
Parks and Protected Areas	Conservation reserves and parks are supported and maintained and also remain available for use	Parks are available for passive and active recreational use Municipal trails and parks	Potential for increased demand	<ul style="list-style-type: none">Manitouwadge is not near Provincial parks or protected areas. The area around the community includes many natural features, including numerous lakes that are valued by residents, attract visitors and contribute to a sense of pride for the community.Municipal and local/regional trails and waterfalls provide recreation and hiking opportunities.With proper planning and dialogue, resources would remain protected and increased demand managed.
Declining-Negative				
Neutral-Stable				
Environment – Integrity Maintained				
Increasing-Enhanced-Positive				
Uncertain				

5.6 COMMUNITY WELL-BEING SUMMARY

Based on the foregoing discussion, the APM Project has the potential to be a very good fit for the community of Manitouwadge. The APM Project has the potential to enable the aspirations of the community to be achieved and through this, foster well-being as Manitouwadge defines it. Based on discussions in the community, it is understood that the APM Project would provide economic growth, stability and growth of the population in keeping with the objectives of the community. Table 10 is a summary for all five asset categories.

The introduction of the APM Project to a relatively remote Northern Ontario community such as Manitouwadge will create significant change. Positive changes would include:

- Increased number and diversity of employment and business/commercial opportunities (direct and indirect);
- Population growth due to in-migration of workers;
- Utilization of available, serviced land;
- Ability to retain youth/young families in the community;
- Increased participation and funding available to maintain and enhance services (e.g., infrastructure, education, community/recreational facilities and programs, health /social services and organizations)
- Improved education and training, development of a skilled work force;
- Enhanced self-sufficiency for individuals, families and the community as whole; and
- Improved tax base/municipal revenues.

Potential negative effects could include:

- Increased demands on some existing infrastructure and services (e.g., housing, water and waste water systems) along with additional resources and funding to support expansion of infrastructure and services; and
- Potential effects on visitor perception and use of the area - Further study is required for better understanding.

Effective mitigation and environmental protection measures will ensure that the overall environmental integrity of the area is maintained. It is understood at this point in time that no significant environmental effects are likely during the construction, operation and decommissioning of the used fuel repository itself.

Table 10: Overall Community Well-Being Implications

Criteria / Measures	Ideal CWB Condition	Current Manitouwadge Profile		Possible Manitouwadge Profile with APM Project		Observations and Implications
OVERALL CWB IMPLICATIONS:						
Human Assets	Population growth occurs and youth are retained in the community	Declining	←	Enhanced	→	<ul style="list-style-type: none">Manitouwadge population has gradually been decreasing since 1996.The community is experiencing an aging trend and out-migration of residents.APM Project would bring population growth, which is a key priority and aspiration for the community.Youth would be retained through increased employment opportunities and new residents would be attracted to the area.Improved education and training, development of a skilled work forceEducational and healthcare resources would be enhanced.
Economic Assets	Employment opportunities are available and tax base increases to fund community services and facilities	Declining	←	Enhanced	→	<ul style="list-style-type: none">There is little business diversification occurring in the community at this time.While there is some recent growth in the forestry industry, mining activity in the Manitouwadge area continues to generally decline relative to the past.Decline in business activities have had a ripple affect across the community causing job loss and further population decline.There will be increased employment opportunities and a more diverse range of jobs.Increased funding through a wider tax base would provide additional financial resources for Manitouwadge to help fund its infrastructure projects, education, community and recreational facilities and programs and health/social services and organizations.The increased jobs from the APM Project would be the catalyst for Manitouwadge to enhance its community well-being.There is the potential for niche markets associated with the APM Project to increase tourism; further study is required to better understand the potential effects on visitor perception and use of the area.
Infrastructure	Infrastructure is maintained or improved to meet the needs of the community	Neutral	▬	Enhanced	→	<ul style="list-style-type: none">Housing prices are relatively low, but have stabilized and even increased slightly in recent years.There is also a decline in the number of houses in the community. The low cost of housing has attracted retirees and others on fixed income to the community.The APM Project, while placing increased demands on some of the infrastructure and services, would overall provide increased funding to improve and enhance existing services.
Social Assets	Opportunities exist for recreation and social networking. Community is cohesive, and community character is enhanced	Neutral	▬	Enhanced	→	<ul style="list-style-type: none">Manitouwadge is a cohesive community and has a strong sense of pride associated with the surrounding natural environment, mining history and culture, recreational amenities and facilities.The community would see an overall benefit to its Social Assets through increased participation and funding to its recreational facilities and programs as well as its social services and organizations.With proper planning and communication, support for the APM Project would be expected to remain high in the community.Interest in the Project appears to be quite positive.
Natural Environment	Natural areas, parks and conservation reserves are preserved and maintained for use and enjoyment	Maintained	■	Maintained	■	<ul style="list-style-type: none">Effective mitigation and environmental protection measures will ensure that the overall environmental integrity of the area is maintained.It is understood at this point in time that no significant environmental effects are likely during the construction, operation and decommissioning phases of the used fuel repository.
Legend						
Declining – Negative	←					
Neutral – Stable	▬					
Environment – Integrity Maintained	■					
Increasing – Enhanced – Positive	→					
Uncertain	△					

6.0 CRITERIA TO ASSESS FACTORS BEYOND SAFETY - SUMMARY

The previous discussion has taken a holistic approach to the assessment, taking into account the aspirations of the community and the implications of the Project for community well-being. The NWMO has acknowledged that the process of assessment of community well-being needs to be collaborative and reflective of the community. Before initiating the siting process, and beginning to engage interested communities in the assessment process to understand their aspirations, the NWMO identified five evaluation factors, which, at a minimum would need to be addressed.²¹

Table 11 draws on information outlined in the previous discussion to understand the potential to foster well-being in Manitouwadge against these original factors. It summarizes preliminary findings about the implications of the APM Project, were it to be implemented in the community, on various factors of well-being. For many evaluation factors, four measures are used: maintained, enhanced, diminished or uncertain. For other evaluation factors, two measures are used: Yes, or No. The overall conclusion using these evaluation factors and the understanding that has emerged to date is consistent with that outlined in the previous sections.

²¹ NWMO. 2010. *Moving Forward Together: Process for Selecting a Site for Canada's Deep Geological Repository for Used Nuclear Fuel*. Available online at: <http://www.nwmo.ca/sitingprocess>.

Table 11: Summary Table of Criteria to Assess Factors Beyond Safety – Manitouwadge

Factors Beyond Safety	Evaluation Factors to be Considered	Potential Effect of APM Project	Discussion Based on Preliminary Assessment
Potential social, economic and cultural effects during the implementation phase of the project, including factors identified by Aboriginal Traditional Knowledge ²²	Health and safety of residents and the community	Maintained	<ul style="list-style-type: none">There is a strong safety case and the community wants to learn more about safety and health considerations to enhance their confidence in the safety of the project.
	Sustainable built environments	Enhanced	<ul style="list-style-type: none">Community infrastructure and built fabric will be enhanced through project activities and investments in the community.
	Sustainable natural environments	Maintained	<ul style="list-style-type: none">Effective mitigation and environmental protection measures will ensure that the overall environmental integrity of the area is maintained.It is understood at this point in time that no significant environmental effects are likely during the construction, operation and decommissioning phases of the used fuel repository.
	Local and regional economy and employment	Enhanced	<ul style="list-style-type: none">Significant employment and population growth would occur in Manitouwadge and surrounding communities – hundreds of new jobs might be created in Manitouwadge.With these jobs comes the potential to significantly increase the current population of Manitouwadge.New opportunities would be created for local businesses to serve the project and growing population.
	Community administration and decision-making processes	Enhanced	<ul style="list-style-type: none">Local leadership has demonstrated interest in learning about the project and going forward it is expected that local leadership would ensure residents have opportunities to learn more and engage in community decision making.
	Balanced growth and healthy, livable communities	Enhanced	<ul style="list-style-type: none">Manitouwadge has aspirations to grow its population and economy as platforms for its strategic plan.The APM Project generally appears to be a fit with primary community goals and aspirations for economic development and growth.
Potential for enhancement of the community’s and region’s ²³ long term sustainability through implementation of the project, including factors identified by Aboriginal Traditional Knowledge	Health and safety of residents and the community	Maintained	<ul style="list-style-type: none">There is a strong safety case; however, engagement of surrounding communities is at a preliminary stage and further dialogue would be required to understand and address questions and concerns about safety and health considerations related to the repository and transportation of used nuclear fuel.
	Sustainable built environments	Enhanced	<ul style="list-style-type: none">Infrastructure and built fabric will be enhanced through project activities and investments in the community and surrounding areas.
	Sustainable natural environments	Maintained	<ul style="list-style-type: none">Some natural areas may be affected during the construction, operation and decommissioning phases of the project.Effective mitigation and environmental protection measures will be required to ensure that the overall environmental integrity of the area is maintained.
	Local and regional economy and employment	Enhanced	<ul style="list-style-type: none">Substantial employment and economic development opportunities would extend to the surrounding region.
	Community administration and decision-making processes	Maintained	<ul style="list-style-type: none">Engagement of surrounding communities is at a preliminary stage and further dialogue will be required to explore decision making issues and capacities.Surrounding communities participating in NWMO’s ‘Learn More’ process include Hornepayne, White River and Wawa.
	Balanced growth and healthy, livable communities	Enhanced	<ul style="list-style-type: none">Engagement of surrounding communities has been initiated and is coordinated and ongoing.Surrounding area communities are collectively seeking economic development and growth in the region.The APM Project generally appears to be in alignment with these aspirations.
Potential to avoid ecologically sensitive areas and locally significant features, including factors identified by Aboriginal Traditional Knowledge	Ability to avoid ecologically sensitive areas and locally significant features	Yes	<ul style="list-style-type: none">The area contains potentially suitable sites for the project thus providing flexibility in selecting specific sites that can avoid ecologically sensitive areas and local significant features.

²² As noted in S. 8 of the previous Step 1 CWBA reports, traditional knowledge work has not occurred or is very preliminary at this stage – further engagement and input is required.

²³ The neighbouring communities of Hornepayne and White River involved in Learn More process; Wawa was involved until Fall 2013.

Factors Beyond Safety	Evaluation Factors to be Considered	Potential Effect of APM Project	Discussion Based on Preliminary Assessment
Potential for physical and social infrastructure to adapt to changes resulting from the project	Potential for physical infrastructure to be adapted to implement the project	Yes	<ul style="list-style-type: none">Manitouwadge and the surrounding areas are highway accessible, have social and economic support services, and capacity to absorb the anticipated growth in population and economic activity.Some investments would be required to accommodate growth and special project needs.
	Potential for social infrastructure to be adapted to implement the project	Yes	<ul style="list-style-type: none">The community of Manitouwadge appears to have the necessary core of social infrastructure in place to plan and adapt to changes resulting from the project.
	The NWMO resources required to put in place physical and social infrastructure needed to support the project	To Be Determined	<ul style="list-style-type: none">Manitouwadge would require assistance in terms of planning, and human and financial resources.Further studies will be required to explore the specifics of these requirements.

Factors Beyond Safety	Evaluation Factors to be Considered	Potential Effect of APM Project	Discussion Based on Preliminary Assessment
Potential to avoid or minimize effects of the transportation of used nuclear fuel from existing storage facilities to the repository site	The availability of transportation routes (road, rail, water) and the adequacy of associated infrastructure and potential to put such routes in place	To Be Determined	<ul style="list-style-type: none">Manitouwadge is located approximately 55 km north of the TransCanada Highway on Hwy 614.Potential road connection (a private logging/industrial road 'Flanders Road/Lockie's Road') to Hornepayne. There is a second industrial road - the 'Caramat Road' to west/ northwest linking Manitouwadge to Hwy 625 near Caramat in Greenstone (and on to Highway 11 east of Longlac).A decommissioned rail right of way can link south to the CP line (previously used for mines); a decommissioned rail link to the CN line to the north.Manitouwadge also has the infrastructure in place to provide access through its airport.The community and region have access to multiple modes of transportation.Project transportation will need to address community, logistical and regulatory matters across multiple provinces and multiple jurisdictions including: Ontario, Quebec and New Brunswick.Engagement of surrounding communities will be required to help build understanding and address questions and concerns.
	The availability of suitable safe connections and intermodal transfer points, if required, and potential to put them in place	To Be Determined	<ul style="list-style-type: none">Engagement of surrounding communities and those on potential transportation routes is at a preliminary stage and further dialogue will be required to help build understanding and address questions and concerns.
	The NWMO resources (fuel, people) and associated carbon footprint required to transport used fuel to the site	1,890 tonnes of equivalent carbon dioxide emission is expected to be produced per year	<ul style="list-style-type: none">All-road transport of 4.6 million fuel bundles from the interim storage sites to an APM facility near Manitouwadge would produce approximately 1,890 tonnes of equivalent carbon dioxide emissions per year.Transport by mostly rail mode would produce approximately 620 tonnes of equivalent carbon dioxide emissions per year.
	The potential for effects on communities along the transportation routes and at intermodal transfer points	To Be Determined	<ul style="list-style-type: none">There is a robust technical safety case for the safe and secure transport of used nuclear fuel. However, engagement of surrounding communities and those on potential transportation routes is at a preliminary stage and further dialogue would be required to understand and address questions and concerns.

7.0 RELATIONSHIP BUILDING AND ENGAGEMENT SUMMARY

7.1 OVERVIEW OF ENGAGEMENT

NWMO has engaged with Manitouwadge leadership, community members, leaders in surrounding communities and First Nations/Aboriginal organizations through a variety of means, including:

- Several community open houses;
- Regular attendance at the Community Liaison Committee meetings;
- Both informal and structured interviews with community members;
- Facilitating the Community Liaison Committee web page and newsletters;
- Preparation of written materials;
- Informal tours and visits with local residents;
- 'Ask the NWMO' columns in regional newspapers;
- Attendance at regional meetings, conferences (e.g., with Northeast Superior Regional Chiefs' Forum, Northeast Superior Mayors' Group, and Federation of Northern Ontario Municipalities);
- NWMO Used Fuel Transportation Exhibit (June 2014); and
- Nuclear waste management facility tours.

Initial discussions with a cross-section of community leaders, briefings and conversations with community members, and conversations with residents during open houses suggest there is some interest in the community to continue to learn about the project and consider hosting the project in the area. Discussions were held with:

1. Local political leaders (e.g., Mayor and Councillors);
2. Members of the Nuclear Waste Community Liaison Committee;
3. Local business owners/operators;
4. Local service providers (e.g. emergency services, social services, education);
5. Leaders in surrounding communities; and
6. Residents.

Based on these discussions, there appears to be growing potential in the local community to sustain interest. There also appears to be strong and growing interest to continue and move forward with the siting process. Many Manitouwadge residents have a strong mining background which increases their understanding of work in the underground environment.

7.2 SUMMARY OF ISSUES AND QUESTIONS RAISED

7.2.1 KEY CHALLENGES, ISSUES AND OPPORTUNITIES

The key challenges for Manitouwadge, as identified through the various engagement activities, are to maintain - if not grow – the current population, and create community and economic growth.

Economic growth in Manitouwadge is necessary to address its most important challenges:

- A declining population;
- Need for employment and business opportunities for residents, including youth;
- Decreasing social and recreational programs;
- Out-migration of youth in search of economic opportunities;
- Constrained municipal financial circumstances; and,
- A tax base mostly dependent on residential assessments.

7.2.2 SUMMARY OF KEY INTERESTS/QUESTIONS

Throughout the various engagement activities, interests and questions expressed by Community Liaison Committee members and community members were documented. In Manitouwadge, the majority of people engaged are perceived to be supportive of the APM Project and interested in learning more. The key interests expressed included:

- Economic challenges in the community;
- Maintaining current community character (infrastructure, facilities, and services);
- Outdoor recreation (hunting, fishing, trapping, and recreational vehicles);
- Health, safety, and environmental risk;
- Transportation; and,
- Community Engagement and the NWMO Process

Economic Challenges in the Community

Community members, and discussions with the Manitouwadge CLC, identified several economic development issues:

- Unemployment or under-employment in the community;
- The need for diversification of economic development opportunities, as well as strengthening existing regional economic sectors such as mining and forestry;
- Tax debt problems;
- Funding of programs and services;
- A lack of retail and commercial/industrial services;
- Lack of industrial employment in town/inability to attract industrial employers;
- Limited number of industrial/commercial buildings; and,

- Abandoned /derelict commercial and residential properties.

The GECO Mine in Manitouwadge closed in 1995, followed by the Golden Giant Mine in 2006. Before that, the Willroy Mine closed 1978. Since GECO's closure the community has been in a general state of economic and social decline. Many residents have taken up employment outside of town at Barrick Gold's Hemlo mines;²⁴ as well as fly-in/fly-out employment at the Red Lake and Musselwhite mines in Northwestern Ontario. Other community members work as far away as Alberta (in the energy sector), or Africa (mining). Many of the remaining local work force are employed in forestry. There could be further economic declines in Manitouwadge with the closure of Barrick's David Bell Mine in 2014 (a number of Manitouwadge residents worked there at the time of closing). Residents see little likelihood of another mine opening nearby.

Forestry activity in the Manitouwadge area has increased over the past year or two. This has correlated with new jobs and some increased economic activity in the community. The recent reopening of several mills in the region (Terrace Bay, White River Forest Products, Olav Haavaldsrud Timber Company in Hornepayne) will help stabilize the forestry industry and potentially slow the rate of further economic decline by creating new jobs and increasing economic activity in the community.

Questions on the APM Project focused on the types of employment opportunities that would be available to residents and the number of jobs/workers required for different project/facility phases. The APM Project is viewed as a potential means to ensure the long-term viability of Manitouwadge and reduce the dependence on resource industries such as forestry and mining. The community would like to learn more about how the Project could contribute to economic diversification and overall community revitalization through employment and other economic benefits.

Maintaining Current Community Character (Infrastructure, Facilities, and Services)

Many residents indicated that a major strength of Manitouwadge is its available facilities and services. Residents expressed a keen desire to maintain these services, and protect them from any further decline. Manitouwadge has a recreation complex complete with a hockey rink, curling sheets, community library, pool (outdoor), and tennis courts. There is also a 9-hole golf course, cross-country ski trails, and downhill ski hill located in town. Several outdoor playing fields are also located in town, as well as a community dock and beach area on Lake Manitouwadge.

Residents also expressed satisfaction with the Manitouwadge Community Health Centre, which has nine acute care and nine long-term care beds. Manitouwadge has an aging population and a large senior citizen population that depend on the hospitals' nursing and doctor care.

During engagement, residents noted that Increasing the municipal tax base would assist with maintaining, if not enhancing, community infrastructure, facilities and services.

²⁴ Barrick's David Bell Mine closed in 2014. A number of Manitouwadge residents (approximately 50) worked at David Bell.

Outdoor Recreation (Hunting, Fishing, Trapping, and Recreational Vehicles)

Access to the natural environment surrounding Manitouwadge is highly valued by the majority of residents who were engaged in discussion. Hunting, fishing, trapping snowmobiling and ATVing are very popular. Many people have camps or cabins in the area. Some residents enjoy the isolation of the community from Provincial highways 11 and 17. Residents want to learn more about how the APM Project might be implemented in a way that can co-exist with current outdoor recreational activities.

Health, Safety, and Environmental risk

Given the nature of the waste (i.e., used nuclear fuel) questions arose regarding health and environmental risks associated with the APM Project and facility location. Protection of surface water and groundwater, and ensuring no detrimental effect on natural resources (i.e., forests and wildlife), and hunting and fishing practices (i.e., trapping), were major concerns for local and area residents.

Residents emphasized that safety of the APM Project remains a source of questions for many. Some concerns focused on the fear of the unknown associated with nuclear materials and their safety, which may be hindering some public acceptance of the APM Project. Community members have noted that there is some misinformation in the community, and a sense that a small number of people are not interested in learning more about the Project.

Transportation

In general, transportation questions and concerns are process-oriented, in that they focused on how used nuclear fuel would be transported (i.e., by rail, boat, or truck) to the APM facility. Transportation safety concerns were also expressed by some residents.

Community Engagement and the NWMO Process

There is keen interest about Project timelines (e.g., site selection/approval, construction, operation, etc.), as well as the number of potential jobs and other opportunities. The decision-making process for the site selection process, and the involvement of community members in it, is of interest.

Several residents have suggested that people are misinformed about the APM Project. Providing these people – and all community members - with factual information and opportunities to learn more about the Project is key. Interest has been expressed in having materials or engagement methods that address the needs of community members, for example: more ‘plain-language’, enhanced video/graphics, and displays or models.

It was expressed that transportation options for senior citizens need to be provided to community events.

7.2.3 ONGOING ENGAGEMENT

At this stage in the process, the primary focus of engagement in Manitouwadge has been on conversations with community leaders, municipal staff, town councillors, CLC members, and other community residents. Moving forward, engagement activities will continue throughout the community and surrounding area with emphasis on safety, transportation, natural environment and economic development interests.

It will also be important to expand and continue engagement with local and area Aboriginal leaders and organizations near Manitouwadge to inform them on APM Project details and obtain their views

NWMO will continue dialogue with Manitouwadge residents, sharing information on the Learn More process, the APM Project, transportation, and other details (e.g., timeframe for project phases, potential economic opportunities). Learning will continue via the CLC newsletter, and webpage and community engagement activities.

Efforts to contact and engage with regional communities and groups should continue going forward. It will be important to engage with regional Aboriginal groups due to their proximity to Manitouwadge. Engagement with surrounding communities will continue to develop. Manitouwadge is looking forward to ongoing engagement to learn more about the APM Project and to work with the NWMO in a long-term partnership that will optimize well-being in Manitouwadge and surrounding area.

8.0 COMMUNITY WELL-BEING SUMMARY FINDINGS

At the outset of the site selection process, the NWMO framed four key questions respectively addressing safety, the well-being of the community, the well-being of surrounding area communities and the potential to foster sustained interest in exploring this project through subsequent steps in the site selection process.²⁵ The discussion which follows addresses and elaborates on a subset of these questions related to community well-being in the context of Manitouwadge.

The preceding sections have looked at implementation of the APM Project in Manitouwadge and the implications this might have on community well-being. Additionally, key issues and concerns identified through engagement activities have been highlighted. Through desktop research, dialogues with community members and leaders, and ongoing analysis, it is understood that Manitouwadge has an interest in further learning about potentially hosting the APM Project to realize growth and development opportunities within the community and surrounding areas.

The community of Manitouwadge understands that this siting process, in partnership with the NWMO, will assist their community over time to get the information they require to reflect upon their willingness to continue in the site selection process and decide whether or not they are interested in continuing to the next phase of studies.

There is a high potential for sustained interest in the local community. This is demonstrated by strong community leadership for continued participation in the site selection process. There is no indication at this time that Manitouwadge would not remain interested in learning throughout the subsequent steps in the process. The leadership seems to be supportive of the opportunity to 'Learn More'.

There is high potential for sustained interest in the surrounding communities. For example, the neighbouring communities of Hornepayne and White River are also engaged in the NWMO's Learn More process. Manitouwadge has demonstrated a proactive approach to engaging its neighbours including members of the Northeast Superior Mayors' Group.²⁶ Manitouwadge is also part of the Nawiinginokiima Forest Management Corporation, which is in partnership with other nearby municipalities (White River, Hornepayne, Marathon) and the Aboriginal communities (Ojibways of the Pic River First Nation, Pic Mobert First Nation and the Hornepayne Aboriginal community). Further discussions will be required to gain an understanding of the potential interest in surrounding communities.

There appears to be high potential for the APM Project to foster well-being in Manitouwadge. The Project is compatible with community aspirations, including the desire to see sustainable economic growth, diversification and stability. There is also an expectation that the APM Project will assist Manitouwadge in achieving these and other community goals. In addition, the Project is seen by residents and leaders as an opportunity to achieve the overall community development they desire.

²⁵ NWMO. November 2011. *Preliminary Assessment of Potential Suitability – Feasibility Studies*. Draft for Discussion with Communities Involved in the Site Selection Process.

²⁶ Other Northeast Superior Mayors' Group member communities (White River and Hornepayne) are also participating in the NWMO's 'learn more' process.

There is potential for the APM Project to foster well-being in the communities surrounding Manitouwadge. Preliminary discussions with residents and officials of the surrounding communities have revealed an interest in the potential economic development benefits offered by the Project. However, further discussions will be required to assess the implications of the Project for surrounding area communities. This Project will be implemented through a long-term partnership involving the community, neighbouring communities and Aboriginal peoples in the area and the NWMO. Only through engagement, dialogue and collaboration will the NWMO ensure that needs are addressed at each stage of the process, and identify the specifics of how a partnership arrangement could work.

There are some uncertainties associated with the analysis due to the preliminary nature of the work at this stage.

These uncertainties and challenges include:

1. Specific land areas that are socially acceptable would need to be identified:
 - a. Community input is required to identify areas that they wish to reserve for other uses or preservation. The remaining areas must overlap with potentially suitable siting areas identified through scientific and technical studies.
 - b. Further engagement with potentially affected Aboriginal communities is required, including Aboriginal Traditional Knowledge holders in the area. The NWMO has stated that they acknowledge, respect and honour that Aboriginal peoples - Indian, Inuit and Métis peoples of Canada - have unique status and rights as recognized and affirmed in s.35 of the Constitution Act (1982). The NWMO is committed to respecting the Aboriginal rights and treaties of Aboriginal peoples.²⁷
2. Project implementation (including engineering, logistics and/or community well-being) must align with specific community aspirations:
 - a. An acceptable community and regional project implementation plan must be identified which aligns ultimate project configuration with community expectations.
 - b. Effective project planning at a broader level, involving the surrounding communities and potentially affected Aboriginal peoples, will be important in successful implementation of the project.
3. Interest in the community for further learning about the project needs to be sustained:
 - a. The site selection process spans several years and interest and conversation in the community needs to be sustained throughout this process, including multiple election cycles.
 - b. The potential effects of the project on the community would be substantial and the community will need support to further explore their interest and take an active role in discussions of how the project should be implemented.

²⁷ NWMO. 2014. *NWMO Aboriginal Policy*.

- c. Opposition groups may actively seek to influence community decision-making and community leaders will need to respond to these pressures. Manitouwadge will require support to prepare for the next phases of the siting process if they are to proceed.
- 4. Transportation routes and mode(s) need to be designed and configured taking into account social values.
 - a. Transportation will be spatially extensive from current interim storage sites to the repository. Regulatory matters along routes in several Provinces including, New Brunswick, Quebec, and Ontario, would need to be addressed. Social questions and concerns would also need to be heard and taken into account.
- 5. Environmental and Safety evaluations need to be aligned with community input.
 - a. This requires regard for input from the community and surrounding communities.
 - b. This requires engagement by the NWMO and input from the host community and surrounding communities. This may require capacity building to enable this input, which could include Aboriginal Traditional Knowledge.
 - c. Input from transportation route communities will also need to be incorporated.

In summary, the Township of Manitouwadge appears to be cohesive in its support of learning more about becoming a willing host to the APM Project. Moreover, recognizing the inter-community links between Manitouwadge and surrounding communities, some communities will be supportive in participating in a wider regional discussion about hosting the APM Project.

9.0 REFERENCES

- AECOM. 2010. *A Preliminary Assessment of Illustrative Generic Community Economic Benefits from Hosting the APM Project*. Available online at: http://www.nwmo.ca/uploads_managed/MediaFiles/1497_nwmosr-2010-09_preliminary_ass.pdf
- DPRA Canada. December 2014. *Community Profile, Manitouwadge Ontario*. Prepared for the Nuclear Waste Management Organization.
- Millier Dickinson Blais. February 2013. *Needs and Gaps Analysis – Township of Manitouwadge Needs and Gaps Analysis and Marketing Study*.
- NWMO. 2012. *Description of Canada's Repository for Used Nuclear Fuel and Centre of Expertise*.
- NWMO. November 2011. *Preliminary Assessment of Potential Suitability – Feasibility Studies. Draft for Discussion with Communities Involved in the Site Selection Process*.
- NWMO. 2014. *NWMO Aboriginal Policy*.
- NWMO. May 2010. *Moving Forward Together: Process for Selecting a Site for Canada's Deep Geological Repository for Used Nuclear Fuel*. Available online at: <http://www.nwmo.ca/sitingprocess>.
- Township of Manitouwadge. 2012. *Background Report for Official Plan and Zoning By-Law Review*. Website: <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/2012%20Background%20Report.pdf> Accessed: October 2013.
- Township of Manitouwadge. n.d. *Providing for Life as it Should Be: Strategic Directions for the Township of Manitouwadge*. Website: <http://www.manitouwadge.ca/uploads/documents/Strategic%20Plan/Strategic%20Plan%202007%20-%202011.pdf>
- Township of Manitouwadge. September 31, 1986. *The Township of Manitouwadge Official Plan*. Prepared by: Colin Engineering & Planning Ltd.