

Proposed Draft Terms of Reference

Mayer Waste Management - Landfill Expansion Environmental Assessment

781998 Ontario Inc.

October 05, 2023

Project name Mayer Waste Management - Landfill Expansion Environmental Assessment							
Document title		Proposed Draft Terms of Reference Mayer Waste Management - Landfill Expansion Environmental Assessment					
Project number		12607403					
File name		12607403-RPT-Terms of Reference EN.docx					
Status	Revision	Author	Reviewer		Approved t	for issue	
Code			Name	Signature	Name	Signature	Date
S3							October 5, 2023

GHD

179 Colonnade Road South, Suite 400 Ottawa, Ontario K2E 7J4, Canada

T +1 613 727 0510 | F +1 613 727 0704 | E info-northamerica@ghd.com | ghd.com

© GHD 2023

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Executive Summary

781998 Ontario Inc. also known as Mayer Waste Management is seeking approval under the Ontario Environmental Assessment Act (EA Act), to increase the total approved capacity for solid, non-hazardous industrial and domestic waste at the Mayer Waste Disposal Site (MWDS), by 650,000 cubic metres (m³). The increase in capacity is being sought for the continued operation of the MWDS. This Terms of Reference (ToR) sets out the proposed framework for the planning and decision-making process to be followed during the preparation of the MWDS Environmental Assessment (EA).

In 2004, the MWDS was approved for an easterly expansion of the domestic landfill to receive an additional 451,700 m³ of domestic and solid non-hazardous waste. The remaining capacity of the Domestic Landfill is approximately 84,755 m³. There is approximately six to seven years of remaining capacity at the Site based on remaining capacity and historical volumes as of the end of 2022.

Studies completed for the Township of Champlain and the Town of Hawkesbury estimate that together they will generate approximately 14,200 m³ of non-diverted waste annually in the year 2026. This represents approximately 90% of the total current annual airspace consumption for the Mayer Waste Management facility. The approximated total non-diverted waste estimate for the United Counties of Prescott and Russell (UCPR), is 71,749 m³ in the same year, which represents over 450 percent of the total current annual airspace consumption for the facility. Given that there is a continued strong market demand for waste disposal capacity within the local service area of the MWDS for the foreseeable future, (for residential, commercial, and industrial generated wastes), the Proponent wants to take advantage of the economic opportunity for capturing post-diversion solid, non-hazardous domestic and industrial waste by increasing its approved capacity for this material by 650,000 m³. This will result in approximately 20 years of additional site life when considering the current approved maximum daily capacity. The proposed undertaking will allow the facility to provide continued service to the UCPR and the Greater Gatineau Area market for residential, commercial, and industrial customers.

The EA will be prepared in accordance with Section 17.4(2)c of the EA Act. Accordingly, this ToR identifies a predetermined "Alternative To" and identifies the "Alternatives Methods" that will be evaluated through the EA process. As a private sector Proponent with an active facility, expansion of the existing facility is the most reasonable solution to addressing a defined business and economic opportunity. The options under consideration to increase capacity at the MWDS as a private facility within the Province of Ontario is highlighted in **Supporting Document #1** to the ToR.

The Alternative Methods of Carrying Out the Undertaking that will be considered by the Proponent include the following:

- Alternative Method No. 1: Southern Expansion of the MWDS
- Alternative Method No. 2: Eastern and Northern Expansion of the MWDS
- Alternative Method No. 3: Eastern Expansion of the MWDS

The assessment and comparative evaluation of the Alternative Methods will employ the following three step process:

- Step 1 Assessment of alternative methods, using criteria and indicators grouped into the five environmental components: natural, built, social, economic, and cultural.
- Step 2 Comparative evaluation of the Alternative Methods and selection of the recommended Method.
- Step 3 Identification of the Preferred Method following consultation with review agencies, indigenous communities, and the public.

Upon completion of this three-step comparative evaluation, an impact assessment of the Preferred Method will be undertaken.

Consultation with review agencies, Indigenous communities, and the public and other Stakeholders will be undertaken as part of the ToR and EA process. Consultation undertaken prior to the submission of this ToR to the Minister of

Environment, Conservation and Parks (MECP) for review and approval, were considered as part of finalizing the draft ToR.

The proposed consultation activities during EA include the following:

- Notifications
- Meetings and Presentations
- Community Liaison Committee Meetings
- Public Open Houses
- Project-specific Website and social media.

Three key decision-making milestones for when consultation events will occur during the preparation of the MWDS EA are as follows:

- 1. Alternative Methods
- 2. Impact Assessment of the Preferred Method
- 3. Pre-Submission of the Draft EA Report.

If approval of this ToR is granted by the Minister, the EA will be prepared in accordance with the approved ToR. Notwithstanding this, circumstances may arise during the process that may prevent the proposed framework from being carried out exactly as outlined in the approved ToR. As a result, flexibility has been provided in the ToR to allow the Proponent to adjust certain aspects of the proposed framework or accommodate new circumstances without the need to prepare and submit a new ToR to the Minister for approval.

Contents

Exe	cutive S	Summary	•		i
1.	Introd	luction			1
2.	Identi	fication o	of the Propo	onent	3
	2.1		=	listory of the Mayer Waste Disposal Site	3
		2.1.1		nts to the Mayer Waste Disposal Site's ECAs	4
3.	Identi	fication o	of How the I	EA Will Be Prepared	4
				r Excluding Alternatives to the Undertaking	5
	3.1	Purpos	se / Opportui	nity Statement	6
4.	Descr	iption of	and Ration	ale for the Undertaking	7
5.	Descr	iption of	and Ration	ale for the Alternative Methods	7
	5.1	-		Alternative Methods of Carrying Out the Undertaking	7
			-	Method No. 1: Southern Expansion of the MWDS	8
				Method No. 2: Eastern and Northern Expansion of the MWDS	10
			Alternative N	Method No. 3: Eastern Expansion of the MWDS	12
	5.2	Ration	ale for the A	Iternative Methods of Carrying Out the Undertaking	14
6.	Descr	iption of	the Enviror	nment and Potential Effects	15
	6.1	Prelim	inary Study <i>i</i>	Area	15
	6.2	Prelim	inary Descrip	ption of the Environment	17
		6.2.1	Natural En	vironment	17
			6.2.1.1	Geology / Hydrogeology	17
			6.2.1.2	Surface Water	17
			6.2.1.3	Atmospheric Environment — Air Quality, Odour and Noise	18
		0.00	6.2.1.4	Terrestrial and Aquatic Environment	19
		6.2.2	Built Enviro		19
			6.2.2.1	Land Use	19
			6.2.2.2 6.2.2.3	Agriculture / Soils Visual	20 21
		6.2.3	Social Envi		21
		0.2.3	6.2.3.1	Traffic	21
			6.2.3.2	Neighbourhood and Community Character	21
		6.2.4		Environment	22
		0.2. 1	6.2.4.1	Local Employment, Labour Supply and Economic Base	22
			6.2.4.2	Official Plan, Zoning By-law, and Secondary Plan Areas	22
		6.2.5	Cultural En		23
	6.3	Detaile	ed Inventory	of the Environment	23
		6.3.1		Existing Information Sources	23
		6.3.2	Potential E	· ·	24
7.	Descr	iption of	the Assess	sment and Evaluation Methodology	25
	7.1	-		Is of Carrying Out the Undertaking	25
		7.1.1		nt and Comparative Evaluation of the Alternative Methods of Carrying Out	=
			the Underta	aking	25
			7.1.1.1	Assessment of the Alternative Methods of Carrying Out the Undertaking	25

			7.1.1.2 7.1.1.3	Comparative Evaluation of the Alternative Methods of Carrying Out the Undertaking and Selection of the Recommended Method Identification of the Preferred Method of Carrying Out the Undertaking	26 26
	7.2	Impact	_	t of the Preferred Method of Carrying Out the Undertaking	26
	7.3	-	and Post C	, ,	27
_	_				
8.			and Monitor		27
	8.1			e and Environmental Assessment Commitments	27
	8.2	Environ	mental Effe	cts and Environmental Assessment Compliance Monitoring	27
9.				ıltation and Consultation Plan for the Mayer Landfill Expansio	
			Assessmer		28
	9.1			e Consultation	28
		9.1.1	_	encies, Indigenous Communities and the Public Consulted	28
			9.1.1.1	Review Agencies	28
			9.1.1.2 9.1.1.3	Indigenous Communities Public	29 29
		9.1.2		n Activities Carried Out with Review Agencies, Indigenous Communities,	23
		9.1.2	and the Pub		29
			9.1.2.1	Notifications (completed)	30
			9.1.2.2	Notifications (planned)	30
			9.1.2.3	Meetings (completed)	30
			9.1.2.4	Meetings (planned)	31
			9.1.2.5	Terms of Reference Public Open House 1	31
			9.1.2.6 9.1.2.7	Terms of Reference Public Open House 2 Project-specific Website and Telephone Number	31 31
		9.1.3		Consulting with Review Agencies, Indigenous Communities, and the Publi	
		0.1.0	9.1.3.1	Review Agencies	31
			9.1.3.2	Indigenous Communities	32
			9.1.3.3	Public	32
		9.1.4	Comments	Received on the Proposed Terms of Reference	33
			9.1.4.1	Review Agencies	33
			9.1.4.2	Indigenous Communities	33
			9.1.4.3	Public	33
	9.2			or the Mayer Waste Disposal Site Expansion EA	33
		9.2.1	•	onsultation Activities	33
			Notifications	I Para satations	34
			Public Open	d Presentations	34 34
				fic website and Social Media	34
		9.2.2		put from Interested Participants	34
		7	9.2.2.1	Review Agencies	35
			9.2.2.2	Indigenous Communities	35
			9.2.2.3	Public	35
		9.2.3	Key Decision	n-Making Milestones when Consultation Will Occur	35
		9.2.4	Proposed Is	sue Resolution Strategy	35
10.	Flexibil	ity of thi	is Terms of	Reference	36
11.	Other A	pproval	s Required		37

Table index

Table 6.1	Potential Environmental Effects	24
Table 9.1	Review Agencies Involved in the preparation of the proposed Terms of Reference	28
Table 9.2	List of the Indigenous communities consulted during the preparation of the ToR	29
Table 9.3	Summary of Comments Received from Review Agencies	32
Table 9.4	Summary of the comments received from the Indigenous communities	32
Table 9.5	Summary of Comments Received from Review Agencies	33
Table 9.6	Summary of Comments Received from the Indigenous Communities	33
Table 9.7	Summary of Comments Received from the Public	33
Table 10.1	Flexible Aspects/Circumstances of the Terms of Reference	36

Figure index

Figure 1.1	Location of Site	2
Figure 5.1	Existing Approved Waste Disposal Area at the Mayer Waste Disposal Site	7
Figure 5.2	Alternative Method No. 1 Southern Expansion of the MWDS	9
Figure 5.3	Alternative Method No. 2 Eastern and Northern Expansion	11
Figure 5.4	Alternative Method No. 3 Eastern Expansion of the MWDS	13
Figure 6.1	Location of the preliminary site study area of the MWDS EA	16

Appendices

Appendix A Glossary of Terms

Appendix B Preliminary Evaluation Criteria and Indicators for Assessing the Alternative Methods

of Carrying Out the Undertaking

Appendix C Proposed Work Plans

Supporting Documents

Supporting Document 1 Rationale and Needs Assessment (outlining the market and business case/analysis)

1. Introduction

The Proposed Terms of Reference (ToR) sets out the proposed framework that will be followed during the preparation of the Mayer Waste Disposal Site (MDWS), Environmental Assessment (EA), to satisfy the applicable requirements of the *Ontario Environmental Assessment Act* (*EA Act*). For proposed "undertakings/projects" in the Province of Ontario that are subject to Part II.3 of the *EA Act*, a ToR is the first step of a two-step environmental approval process. A ToR is a document prepared by a Proponent that sets out the framework or work plan for the planning and decision-making process to be followed during preparation of the EA. A ToR is submitted to the Ontario Minister (Minister), of the Environment, Conservation and Parks (MECP), for approval.

If the ToR is approved by the Minister, then the preparation of the EA follows as the second step of the EA Act approvals process. The MWDS EA is then prepared in accordance with the approved ToR.

The MWDS is owned by 781998 Ontario Inc. and known as Mayer Waste Management (the Proponent). The MWDS is operated by Gilles R. Mayer Sanitation Ltd. (Mayer Sanitation). The Site is located east of the Town of Hawkesbury along County Road 17 and is geographically situated within the Township of Champlain (Figure 1.1) and has been in operation since 1955. The Site is approved to accept domestic waste generated within the Town of Hawkesbury and the Township of Champlain and solid non-hazardous industrial waste generated within the County of Prescott and Russell, County of Stormont, Dundas and Glengarry, County of Hastings, County of Leeds and Grenville, County of Frontenac, County of Lennox and Addington, City of Ottawa, County of Lanark, and Canton de Grenville, Québec. The landfill operates under an Amended Environmental Compliance Approval (ECA), No. A471506 issued on 14 April 2020.

Mayer Waste Management is seeking to increase the approved capacity for non-hazardous solid residual waste of the Domestic Landfill by 650,000 cubic metres (m³), to continue to operate their business and provide disposal capacity for waste generated by industry and residents within a defined service area. The proposal would not change the type or maximum approved annual volume of waste accepted at the Site.

The proposed comprehensive EA Project List Regulation identifies the projects that are subject to Part II.3 of the EA Act. Under the proposed Regulation if a Proponent is proposing to increase the total waste disposal volume of an existing landfill by more than 375,000 m³ then the "undertaking" is subject to Part II.3 of the EA Act. For projects subject to Part II.3 of the EA Act a Comprehensive EA¹ is to be completed in accordance with a ToR that have been approved by Minister. As Mayer Waste Management is seeking to increase the Site's approved waste disposal capacity by 650,000 m³, this Undertaking is subject to Part II.3 of the EA Act.

¹ Previously referred to as an Individual Assessment

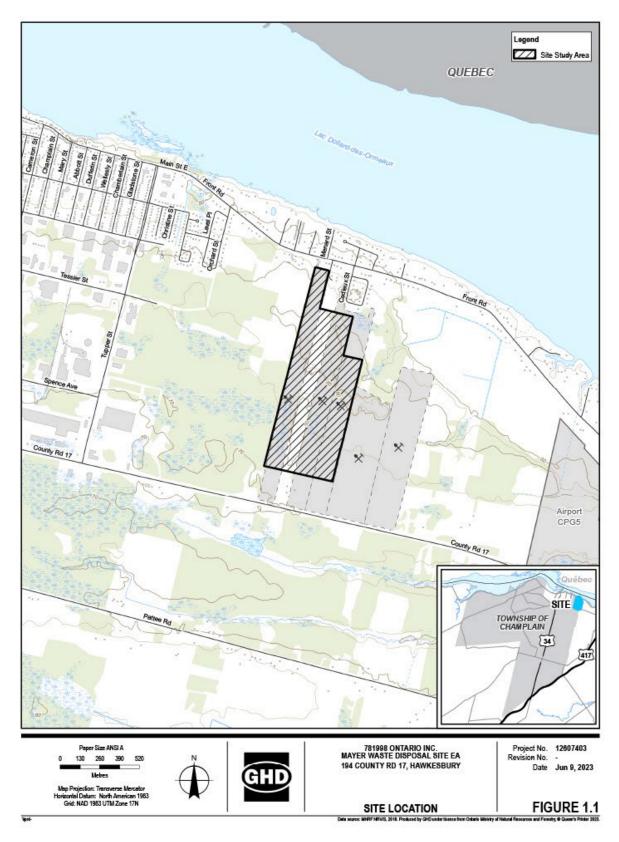


Figure 1.1 Location of Site

2. Identification of the Proponent

The Proponent for the MWDS EA is 781998 Ontario Inc. known as Mayer Waste Management, the owner of the MWDS. As the Proponent, Mayer Waste Management will be responsible for the preparation of the EA in accordance with the approved ToR.

Mayer Waste Management has retained GHD Limited (a third-party professional services consulting team), to undertake the EA on their behalf. The Proponent's contact information is as follows:

Gilles Mayer
Office: 613-632-2581
Email: gilles_r_mayer@live.ca
781998 Ontario Inc.
194 County Rd 17
Hawkesbury, ON K6A 2R2

2.1 Background and History of the Mayer Waste Disposal Site

The MWDS is located immediately east of the Town of Hawkesbury on the north side of County Road 17. The Site is geographically situated within the Township of Champlain in the United Counties of Prescott and Russell. The site location is shown on Figure 1.1.

The Site encompasses 36.34 hectares (ha) of land, consisting of 11.94 ha of waste disposal area and 24.4 ha of combined buffer zone and Contaminant Attenuation Zone (CAZ).

The Site contains two distinct landfills; the Domestic Landfill and the Industrial Landfill, which have separate Approvals. The Domestic Landfill, which is the subject of this EA, is 5.53 ha in size and operates under Amended ECA No. A471506 issued on 14 April 2020. Landfilling at the Domestic Landfill was approved for an additional capacity of 451,700 cubic metres (m³) in accordance with Condition No. 7(2) of the ECA.

The Industrial Landfill operates under Amended ECA No. A471507 issued on 15 March 2021. Landfilling at the Industrial Landfill was completed in June 2003 and has been closed in accordance with the Closure Plan, Industrial Landfill (Conestoga-Rovers & Associates (CRA), March 1995). Placement of final cover over the Industrial Landfill was completed in 2008.

Other permits and approvals applicable to the Site include:

- ECA 5786-666R45 for Industrial Sewage permitting the construction and operation of the storm water management system.
- ECA 4191-9JTNTW for Air, permitting the construction and operation of the passive landfill gas venting system.
- Aggregate Extraction Permits issued under the Aggregate Resources Act: Permit 6007 for the extraction of aggregates from the eastern buffer zone, permit 5852 for the extraction of aggregate from the western buffer zone, and Permit 5879 for the extraction of aggerate from the central buffer zone.

The Domestic Landfill is approved to accept domestic waste generated within the Town of Hawkesbury and the Township of Champlain and solid non-hazardous industrial waste generated within the County of Prescott and Russell, County of Stormont, Dundas and Glengarry, County of Hastings, County of Leeds and Grenville, County of Frontenac, County of Lennox and Addington, City of Ottawa, County of Lanark, and Canton de Grenville, Québec.

The MWDS operates Monday to Friday, from 8:00 am to 4:30 pm and on Saturdays, from 8:00 am to 11:30 am. The Site is permitted to receive up to 480 tonnes per day. Equipment operates at the Site up to one hour before and one hour after the hours of operations to complete required maintenance and cover soil placement operations. A

comprehensive groundwater, surface water and landfill gas monitoring programs are conducted at the Site and the results are reported annually to the MECP on or before 31 March following the reporting period.

The Mayer Waste Transfer Station also owned by Mayer Waste Management is located adjacent to the MWDS. The Waste Transfer Station is approved for construction and operation under ECA 4462-AD6P6S issued 18 May 2023. The transfer station is currently under construction and is anticipated to commence operation in late Summer 2023. The transfer station will be used for the receipt, processing, and transfer of solid non-hazardous waste.

2.1.1 Amendments to the Mayer Waste Disposal Site's ECAs

Since opening in the mid-1950s, the MWDS ECA has been amended several times to reflect development and operation changes to the Site. On 11 May 2001, the Proponent submitted to the Minister of the Environment a document entitled ToR for Completion of an EA for an Expansion in the Landfill Capacity of the Mayer Waste Disposal Site – Domestic Landfill, Township of Champlain, Ontario (CRA, May 2001). The ToR were prepared in consultation with the Ministry of the Environment and Energy (MOEE), in accordance with the Guide to Preparing Terms of Reference for Individual Environmental Assessments (MOEE, Draft, February 1997).

This EA was completed in accordance with clause 6(2)(c) of the *EA Act* by way of TOR, which set out in detail the requirements for the preparation of the EA. The EA was approved with conditions on 4 June 2003 under the EA Act (Government of Ontario, 2023).

In June 2003, landfilling at the Domestic Landfill was approved for an additional capacity of 451,700 m³ in accordance with Condition No. 7(2) of the ECA. The approved 451,700 m³ capacity is represented by the final contours provided in the Amended Design and Operations (D&O) Plan – Domestic Landfill Expansion (GHD, June 2014). An increase of 29,500 m³ to the approved capacity was accepted on 9 April 2021 for the relocation of on-Site historical buried waste to the Domestic Landfill and an updated D&O was submitted in April 2023.

3. Identification of How the EA Will Be Prepared

The MWDS EA will be prepared in accordance with subsections 17.4(2)c of the EA Act and would be developed in consultation with the Ministry of Environment, Conservation and Parks (MECP). Under this Section of the EA Act, the proposed terms of reference must (c) specify in detail the requirements for the preparation of the environmental assessment, which may include requirements to provide information that is greater than or less than what is required under subsection 17.6(2). As a result, the requirements for preparing the MWDS EA are detailed in the following elements specified in this ToR:

- Purpose of the undertaking (Section 3.1)
- Description of and rationale for the undertaking (Section 4)
- Description of and rationale for the alternative methods of carrying out the undertaking (Section 5)
- Description of the existing environment and potential effects of carrying out the undertaking (Section 6)
- Description of the assessment and evaluation methodology (Section 7)
- Commitments and monitoring (Section 8)
- Consultation plan for the EA (Section 9)
- Flexibility for accommodating new circumstances (Section 10)
- Other approvals required (Section 11).

As permitted by subsection 17.4(2)c of the EA Act, this ToR excludes the generic requirement of the alternatives to the undertaking in the preparation of the MWDS EA. **Supporting Document #1** provides the rationale for excluding the requirements as part of following subsection 17.4(2)c.

This ToR identifies a predetermined "Alternative To" and identifies the "Alternatives Methods" that will be examined during the preparation of an EA. This approach is consistent with the MECP Code of Practice: Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario (January 2014) (Government of Ontario, 2014), herein referred to as the Code of Practice, which outlines how a Proponent can proceed under subsections 17.4(2)c if the Proponent is further along in the defined planning process and additional detail is known regarding its proposal. As an example, the Code of Practice states:

...what is reasonable for one Proponent to implement may not be reasonable for another when trying to solve a similar problem because the circumstances between Proponents may vary widely. A private sector Proponent's inability to expropriate land or implement public programs will influence the range of alternatives it may examine...²

As it relates to the Proponent and its business, the Code of Practice also refers to private sector Proponents in the waste industry as follows:

The ministry recognizes that there may be restrictions on some proponents that will limit the range of alternatives examined. The proponent must provide justification in the terms of reference for limiting the examination of alternatives. For example, a municipality and a private sector proponent would both like to increase waste disposal capacity in a semi-rural community. The municipality might consider one or more of the following as a reasonable range of alternatives to:

- Waste diversion program;
- Export;
- Landfill; or,
- Thermal technology.

The private sector proponent may only consider landfill or on-site diversion because:

- It cannot implement a municipal waste diversion program such as curbside recycling;
- Export would affect their business; and,
- Thermal technology is not economically viable because waste volumes are too small.
- Alternative methods for the municipality could include a site selection process for the alternative chosen, as they have the ability to expropriate land. For a private sector proponent, there may be different designs on one site as they only own one site and cannot expropriate...³

Rationale for Excluding Alternatives to the Undertaking

Mayer Waste Management is a privately owned and operated company, conducting business in the Province of Ontario and servicing the waste management needs of areas within Ontario and Quebec. As such, the question as to whether there is a need for the services that Mayer Waste Management provides is largely based on business decisions. Similarly, the question as to how the company provides these services is a business decision.

There is an economic opportunity associated with the ability of the existing Mayer Domestic Landfill to accept additional domestic waste and solid non-hazardous industrial waste. This opportunity is based, in part, on an internal business case for adding disposal capacity at the existing Domestic Landfill, which included a review of waste generation in the Greater Ottawa-Gatineau Area. The Greater Ottawa-Gatineau Area is defined as the City of Ottawa,

² Codes of Practice, Preparing and Reviewing terms of Reference for Environmental Assessments in Ontario, January 2014. Pg. 33

³ Codes of Practice, Preparing and Reviewing terms of Reference for Environmental Assessments in Ontario, January 2014, Pg. 33-34

the City of Gatineau, and the surrounding municipalities adjacent to the two cities⁴. Metropolitan areas are defined by the level of economic interdependence between a central city and surrounding municipalities.

This analysis clearly predicted a continued demand for disposal capacity for this type of waste. The EA process has been initiated to examine the various alternative methods available to Mayer Waste Management to develop increased capacity for the disposal of domestic and solid non-hazardous industrial waste to implement Mayer Waste Management's internal business plan.

As a private sector Proponent with a current facility (i.e., the Mayer Waste Disposal Site), there are a limited number of reasonable ways of approaching or dealing with the opportunity of providing increased disposal capacity. These would typically include the establishment of a new landfill or expanding the capacity of an existing site, such as the MWDS Domestic Landfill. Given the capital costs associated with the development of a new landfill, and the difficulties in securing an adequate or suitable site, it is reasonable that the creation of a new landfill may not be a practical alternative to address the economic opportunity of providing increased disposal capacity for a private sector Proponent compared to expansion of the existing landfill. Accordingly, it is generally accepted that the most reasonable way of approaching this opportunity of providing increased capacity by a private sector Proponent with an existing, permitted, and operational facility, would be to look at the various ways in which capacity can be increased at an existing site.

Based on the opportunity that has prompted the initiation of the EA process and the fact that Mayer Waste Management is a private sector Proponent, there are a limited number of reasonable ways in which the economic opportunity can be addressed; and, that the most reasonable way of addressing the opportunity is to examine the various ways in which capacity at the existing Mayer Domestic Landfill can be increased. Accordingly, as the ToR identifies that a predetermined "Alternative To" has been determined, approval is being sought to prepare an EA in accordance with subsections 17.4(2) of the EA Act.

Discussion on the business plan and economic opportunity (Purpose of the Undertaking), as well as what options (Alternatives To), Mayer Waste Management to consider, was prepared within the context of Mayer Waste Management operating the Mayer Waste Disposal Site as a private facility within the Province of Ontario and is highlighted in the Supporting Document #1 of this ToR and sections that follow.

3.1 Purpose / Opportunity Statement

The purpose of the undertaking is to increase the approved capacity of the Domestic Landfill at the MWDS by 650,000 m³ to enable Mayer Waste Management can continue to receive domestic and solid non-hazardous waste. In 2004, the air space for the disposal of waste and daily cover soil at the MWDS was approved for an additional capacity of 451,700 m³ and in 2020, an increase in waste capacity of 29,500 m³ to the approved capacity was accepted for the relocation of on-Site historical buried waste to the Domestic Landfill. Based on historic annual disposal fill rates there is approximately six to seven years of waste capacity remaining at the Mayer Waste Disposal Site as of the end of 2022.

Given that there is a continued strong market demand for non-hazardous solid residual waste for the foreseeable future, Mayer Waste Management is looking to modify the existing Domestic Landfill to respond to the economic opportunity of providing additional disposal capacity of non-hazardous solid residual waste for local municipalities and private customers. This option would allow for Mayer Waste Management to continue to provide the Town of Hawkesbury and other local and regional costumers a cost effective and an environmentally sound manner to dispose of their waste.

The purpose statement will be reviewed and finalized as part of preparing the MWDS EA.

⁴ City of Ottawa Planning, Infrastructure, and Economic Development. 2019. New Official Plan - The Greater Ottawa-Gatineau Area. Retrieved from: New Official Plan - The Greater Ottawa-Gatineau Area (ehg-production-canada.s3.ca-central-1.amazonaws.com)

4. Description of and Rationale for the Undertaking

The preliminary description of the proposed undertaking is an expansion of the existing Domestic Landfill at the MWDS to increase its approved capacity by 650,000 m³. A detailed description of and the rationale for the proposed undertaking will be provided as part of preparing the MWDS EA once a specific undertaking is selected from the Alternative Methods that are to be considered.

5. Description of and Rationale for the Alternative Methods

5.1 Description of the Alternative Methods of Carrying Out the Undertaking

Mayer Waste Management has determined through their business case that increasing the approved capacity of the Site's Domestic Landfill by 650,000 m³ to receive additional non-hazardous solid residual waste is the most reasonable solution for addressing the economic opportunity available to the company. **Figure 5.1** highlights the existing approved area for waste disposal at the Mayer Waste Disposal Site.



Figure 5.1 Existing Approved Waste Disposal Area at the Mayer Waste Disposal Site

Based on the capacity increase described above, there are three proposed Alternative Methods of Carrying Out the Undertaking being considered by Mayer Waste Management as part of the EA, these are as follows:

- Alternative Method No. 1: Southern Expansion of the MWDS
- Alternative Method No. 2: Eastern and Northern Expansion of the MWDS
- Alternative Method No. 3: Eastern Expansion of the MWDS

Each of these proposed options are examined in the following sections.

Alternative Method No. 1: Southern Expansion of the MWDS

This proposed option includes:

- The first alternative is a predominantly Southern expansion, with a slight portion expanding to the East of the current approved limit of refuse.
- Alternative Method No. 1 includes a horizontal expansion only, increasing the overall footprint by 6.72 ha.
- This alternative will require the Southern buffer zone to be changed as it will expand beyond the current 30 metres (m) zone that is established. This will make the new Southern buffer zone approximately 100 m from the Site entrance (County Road 17). The Eastern buffer zone will be reduced from the current 162 m to 98 m.

Figure 5.2 provides a diagrammatic representation of the proposed Alternative Method No. 1 – southern Expansion of the MWDS.



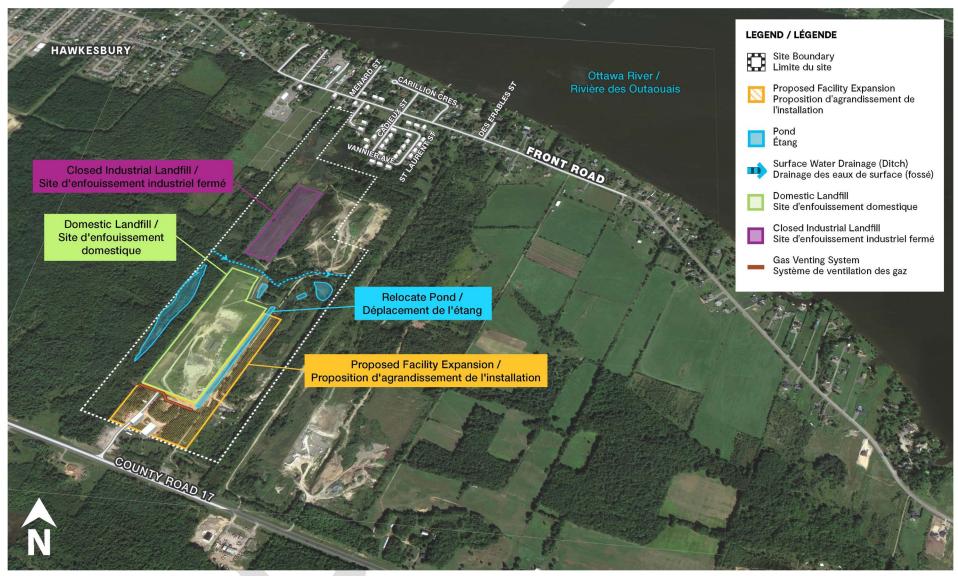


Figure 5.2 Alternative Method No. 1 Southern Expansion of the MWDS

Alternative Method No. 2: Eastern and Northern Expansion of the MWDS

This proposed option includes:

- The second alternative is an Eastern and Northern expansion to the current approved limit of refuse.
- Alternative Method No. 2 includes both horizontal and vertical expansions:
 - The horizontal expansion will increase the overall footprint by 6.4 ha.
 - The vertical expansion will increase the top of refuse elevation by 0.375 m.
- This alternative will not change the Southern buffer, it will stay at 30 m from the Site Limit. The Eastern buffer will be reduced from 160 m to 53 m.

Figure 5.3 provides a diagram showing the proposed Alternative Method No. 2 – Eastern and Northern Expansion of the MWDS.



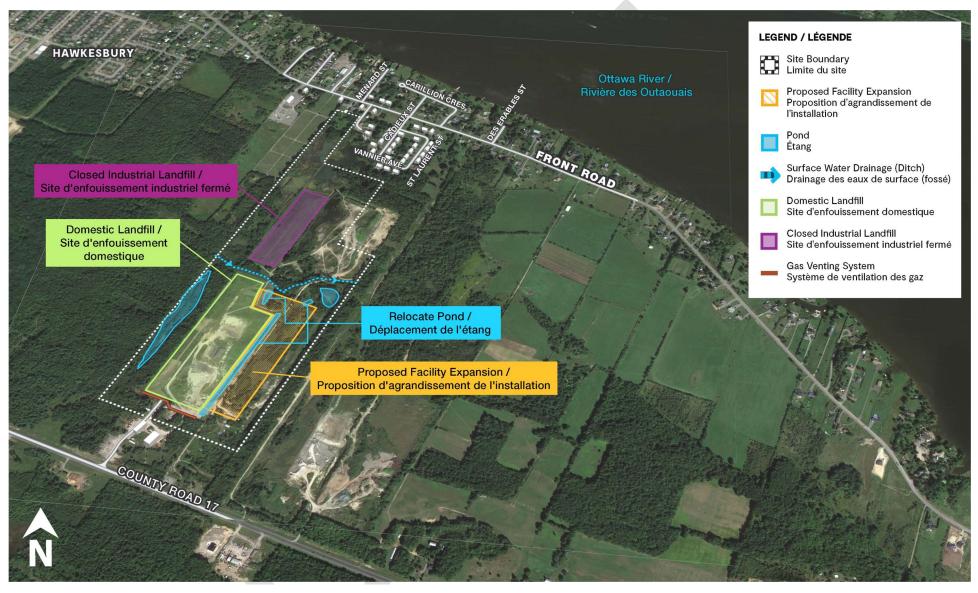


Figure 5.3 Alternative Method No. 2 Eastern and Northern Expansion

Alternative Method No. 3: Eastern Expansion of the MWDS

This proposed option includes:

- The third alternative is an Eastern expansion to the current approved limit of refuse.
- Alternative Method No. 3 includes both vertical and horizontal expansion:
 - The horizontal expansion will increase the overall footprint by 5.1 ha.
 - The vertical expansion will increase the top of refuse by 1 m over a small portion of the landfill.
- This alternative will not change the Southern buffer, it will remain at 30 m from the Site Limit. The Eastern buffer will be reduced from 160 m to 32 m.

Figure 5.4 shows the proposed Alternative Method No. 3 – Eastern Expansion of the MWDS.



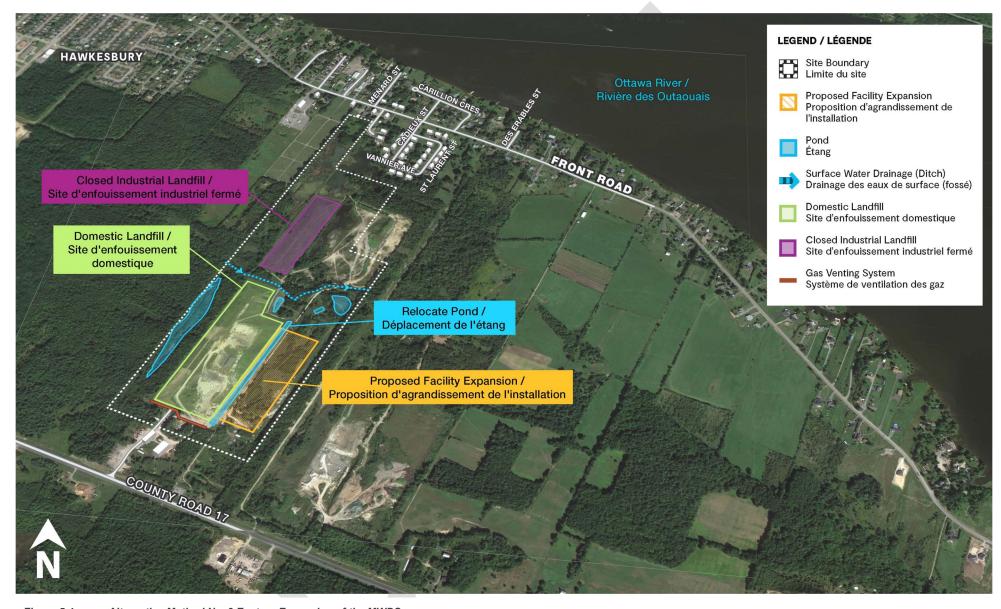


Figure 5.4 Alternative Method No. 3 Eastern Expansion of the MWDS

The intent of each of the preceding Alternative Methods is to provide a maximum increase in capacity of 650,000 m³ at the Site. In addition, a "Do Nothing" alternative will be included as part of the MWDS EA to represent what is expected to happen if none of the Alternative Methods being considered is carried out. Although the "Do Nothing" alternative does not address the Purpose of the Undertaking and is therefore not a viable option, it is included in EAs as a matter of best practice to represent the benchmark against which the advantages and disadvantages of the Alternative Methods being considered can be measured and compared.

A detailed description of each of the Alternative Methods of Carrying Out the Undertaking will be provided as part of preparing the MWDS EA along with the assessment and comparative evaluation. The detailed description of each Alternative Method will be based on a conceptual level of design, reflecting regulatory requirements (i.e., O. Reg. 232/98), and operational aspects at the Site (e.g., required on-site infrastructure). Each of the conceptual designs will incorporate the following elements:

- Buffer zones between the Domestic Landfill footprint and the property boundary
- Setbacks to surrounding developments
- Contours and slopes of the final cover
- Peak elevation and height relative to surrounding landscape
- Footprint size
- Leachate generation rates
- Infrastructure requirements

An assessment of the existing leachate collection and treatment system relative to the Alternative Methods will be carried out as part of the MWDS EA to determine if any modifications or additions are required. Any modifications or additions to the existing leachate collection and treatment system that are required for the preferred Method will be identified as part of the MWDS EA.

5.2 Rationale for the Alternative Methods of Carrying Out the Undertaking

The preceding Alternative Methods of Carrying Out the Undertaking were included for consideration in the MWDS EA for the following reasons:

- Each of the Alternative Methods represent different ways of performing the same activity (i.e., increasing the approved capacity of the Site by approximately 650,000 m³ to enable Mayer Waste Management to continue to receive non-hazardous solid residual waste).
- Each of the Alternative Methods are situated within Mayer Waste Management's existing property boundary.
- The Alternative Methods each reflect the regulatory design requirements under O. Reg. 232/98: Landfilling Sites (e.g., setbacks, slopes, etc.).
- All the Alternative Methods are within the ability of Mayer Waste Management to implement.

6. Description of the Environment and Potential Effects

6.1 Preliminary Study Area

The area within the one-kilometre (km) radius of the Site Study Area has been identified as the Preliminary Study Area for the MWDS EA. The preliminary study area boundaries extend within the Town of Hawkesbury to the west, Township of Champlain to the south, and Town of East Hawkesbury to the east. Towards the north, the boundary expands in the Ottawa River (Figure 6.1). Taking this into consideration the preliminary study area has been defined based on the following:

- The range of Alternative Methods that will be considered as part of preparing the MWDS EA (all the Alternative Methods are situated within the confines of the Preliminary Study Area).
- The data from monitoring and existing MWDS for the past five years, which demonstrates compliance with the approved ECA for the facility and limited potential for and extent of off-site adverse environmental effects.

The preliminary study area will be reviewed, modified (as required), and finalized during preparation of the MWDS EA when the Alternative Methods have been confirmed, a more detailed description of the environment has been prepared reflecting field investigations and the potential environmental effects (both direct and indirect) are better known including their extent.



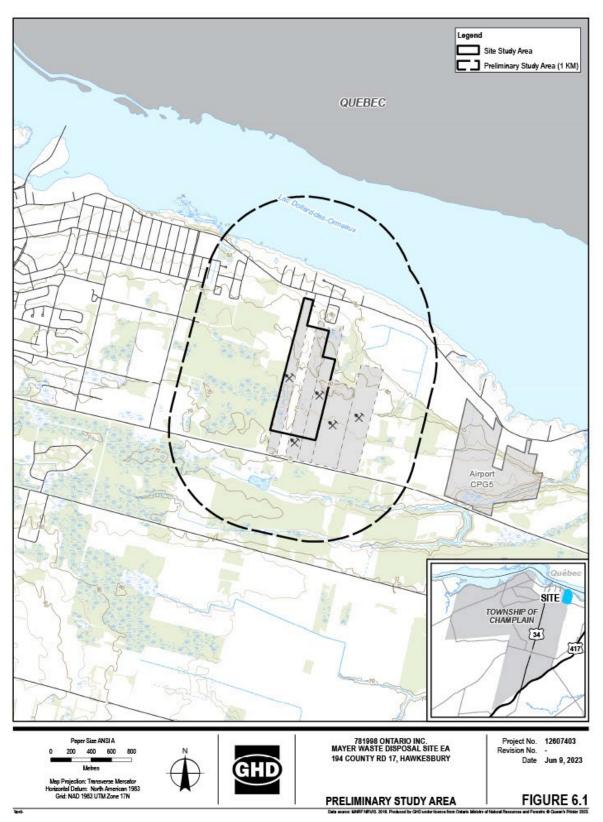


Figure 6.1 Location of the preliminary site study area of the MWDS EA

6.2 Preliminary Description of the Environment

A brief preliminary description of the environment within the preliminary study area addressing all components of the EA Act definition of the environment (i.e., natural, built, social, economic, and cultural), is provided in the following sections.

6.2.1 Natural Environment

The Site is topographically characterized by the landfill mounds of both the Domestic and Industrial Landfills which are separated by an eastward flowing drainage channel. Portions of the Site that are not landfilled are generally characterized by remnant aggregate extraction pits and/or undeveloped sections of land. The undeveloped portions of the Site are further characterized by the presence of low to medium canopy and deciduous vegetation, particularly to the northeast of the Site.

6.2.1.1 Geology / Hydrogeology

The soil stratigraphy at the Domestic Landfill consists of three main geological units, a surficial deltaic sand overlying a marine clay unit (Leda Unit), which in turn overlies a sand deposit. Overburden at the Site is underlain by limestone bedrock. The surficial sand and marine clay are absent beneath the Industrial Landfill.

Three overburden aquifers are identified beneath the Domestic Landfill; an upper unconfined (Water Table Aquifer) aquifer located within the surficial sands, a lower confined overburden aquifer (Lower Overburden Aquifer) also consisting of sands, and a Bedrock Aquifer.

The groundwater flow within the water table aquifer near the Domestic Landfill is generally to the north-northeast. This flow pattern follows the top of the underlying clay aquitard, indicating that the water table aquifer behaves as a perched water table system.

In accordance with the Site Groundwater Management Plan, contaminants are managed through attenuation occurring within a primary CAZ (water table aquifer) and a secondary CAZ (lower overburden aquifer). The Site is designed to maximize the natural attenuation potential of the Site through controlled management of the leachate-impacted groundwater downgradient of the landfill within both the water table and the lower overburden aquifers. Groundwater quality at the Site has been assessed on a semi-annual basis and the results are reported annually as required under Condition No. 8 of Amended ECA No. A471506 and Condition No. 2 of Amended ECA No. A471507 since 1994 by GHD (CRA prior to 1 July 2015). This database has been used in support of a Trigger Level Assessment Program and to determine the nature and extent of any incremental groundwater quality impact due to landfill operations.

6.2.1.2 Surface Water

Important surface water features within the Preliminary Study Area, as it relates to the assessment of potential impacts to surface water, includes small, slow flowing creeks and streams, numerous wetlands (classified as swamps or marshes), and the Bruno-Lauzon Drain that was established under the *Municipal Drainage Act 1990*.

The Site Study Area is characterized by the landfill mounds of both the operating Domestic Landfill and closed Industrial Landfill. The Site topography is variable having a general downward slope toward the Ottawa River. The main surface water course on-Site is an easterly flowing drainage channel that bisects the Site between the landfill mounds. This drainage channel discharges to the Bruno-Lauzon Drain.

Surface water from the southern portion of the Site, and adjacent properties south of the drainage channel, are controlled by infiltration and/or discharge to the drainage channel. Surface water from the northern portion of the Site, north of the drainage channel, is controlled by infiltration and/or flows northerly to a seasonally wet, undrained area north of the closed Industrial Landfill. Surface water from the Domestic Landfill and closed Industrial Landfill are conveyed via swales to one of four stormwater management ponds located on-Site. Surface water exiting the Site is

limited to water discharging from the drainage channel. As such, off-Site discharge from the Site's Stormwater Management System (SWM) ponds, is limited to evapotranspiration and infiltration.

In addition to groundwater quality, surface water quality at the Site has been assessed on a semi-annual basis and the results are reported annually as required under Condition No. 8 of Amended ECA No. A471506 and Condition No. 2 of Amended ECA No. A471507 since 1994 by GHD (CRA prior to 1 July 2015). This database has been used in support of a Trigger Level Assessment Program and to determine the nature and extent of any incremental surface water quality impact as a result of landfill operations.

6.2.1.3 Atmospheric Environment — Air Quality, Odour and Noise

Air quality

Air sampling provides a clear depiction of the particulate emissions from the site as well as allow an understanding of where the emissions are coming from and how they can be mitigated. Air sampling also allows Mayer to confirm if the MWDS is the source for particulate emissions or if it is coming from construction on adjacent properties within the preliminary study area.

The regional monitoring data collected from the NAPS stations in Quebec and Ontario for areas representative to the Site locale represent the existing and naturally occurring sources and contributions from long range transport into the region. The emissions transported into the region could be the "existing air quality". Based on prior experience, the 90th percentile of the available monitoring data is considered a conservative estimate of existing air quality.

Odour

There have been a limited number of recorded odour complaints in the past. The previous recorded odour complaints were attributed to the Site when it was accepting biosolids. The Site has taken steps to mitigate odour complaints and no longer accepts biosolids. The Site has not accepted biosolids since 2015 and since that time there have been minimal recorded odour complaints associated with the Site and its operations.

Noise

Landfill activities and on-Site operations are compared directly against a daytime one-hour Leq sound level limit of 55 dB(A) for landfill operations that are limited to 7:00 a.m. to 7:00 p.m. under the Noise Guidelines for Landfill Sites⁵ The significant noise sources at the site are –

- Caterpillar D6T LGP Waste Handler Dozer
- Case 850K Dozer
- Caterpillar 826H Landfill Compactor
- Caterpillar 315GC Excavator
- Case CX210 Excavator
- Case CX135SR Excavator
- Komatsu PC210LC Excavator
- Caterpillar 950F Wheel Loader
- 2x Caterpillar D350D Articulated Dump Truck

Komatsu WA200PZ Wheel Loader

- John Deere 5115 M Utility Tractor
- Garbage Truck Haul Route
- Site Truck Haul Route

⁵ Landfill standards: A guideline on the regulatory and approval requirements for new or expanding landfilling sites | ontario.ca (January 2012)

- Bulldozer Route 1
- Bulldozer Route 2

Based on historic background noise studies and evaluation, the Existing Conditions at the Site are below the 55 dB(A) noise limit.

6.2.1.4 Terrestrial and Aquatic Environment

Habitats identified within the Site Study Area include two drains, deciduous forest, a manmade pond and settling basins. The Preliminary Study Area contains a variety of land uses including large forest blocks, the Ottawa River, agricultural and some residential uses. The Site Study Area is widely occupied of disturbed area with the existing and previous uses as a landfill, however the presence of the large forest block to the west, wetland, drains, and manmade pond provides some opportunity for wildlife and fish habitat.

No Provincially Significant Wetlands (PSWs), or provincial Life Science or Earth Science Areas of Natural and Scientific Interest (ANSIs), are identified within the Study Areas.

Two artificial watercourses (drains), and one industrial landfill surface water management pond are identified within the subject property. Background review using the Aquatic Species at Risk map – Fisheries and Oceans Canada identifies six significant species within a one km circumference containing the study area, River redhorse (*Moxostoma carinatum*), Northern brook lamprey (*Ichthyomyzon fossor*), Channel darter (*Percina copelandi*), Hickorynut (*Obovaria olivaria*), Cutlip minnow (*Exoglossum maxillingua*), and Silvery Lamprey (*Ichthyomyzon unicuspis*). No critical habitat for Aquatic Species at Risk⁶ is identified within the Study Areas. The above fish and molluscs species and their habitat are found in the Ottawa River located directly north of the Site Study Area. The drains and pond occurring on site do not provide suitable habitat for above fish species.

Schedule B Natural Resources of the United Counties of Prescott and Russell Official Plan (United Counties of Prescott and Russell, 2018) identifies Significant Woodlands to the south of County Rd 17, within the Preliminary Study Area but absent from the Site Study Area.

The Natural Heritage System (NHS), has not been identified within the current Official Plan of Prescott and Russell (2018) (United Counties of Prescott and Russell, 2018) on Schedule B, however, within Schedule B1 of the NHS of the Draft Official Plan (2022) the southern portion of the Site Study Area is included within the Linkage Natural Area. The NHS has identified Regional Cores and linkage areas between natural heritage features. The connectivity of this corridor is limited based on its location traversing the active landfill in an unvegetated/disturbed area. It is important to note the schedule B1 indicating Linkage Natural Area is still in draft form and has not been adopted by the Council.

6.2.2 Built Environment

6.2.2.1 Land Use

The following land uses are within the Preliminary Study Area:

North of SCRF Property Boundary

Lands located to the north of the MWDS are primarily residential uses, comprised of single residential dwellings and a few public facilities. These properties are located within the Rural Policy Area, as identified in the United Counties of Prescott and Russell Official Plan. The nearest existing residential dwelling in relation to the northern MWDS property boundary is approximately 50 m (from the MWDS property line to the nearest existing residential property line), and approximately 140 m from Site infrastructure (i.e., closed industrial landfill and approximately 85 m from surface water ponds) near the intersection of Front Road and Cadieux St. Public facilities existing within the preliminary study area includes:

⁶ Fisheries and Oceans Canada (DFO). 2022. Aquatic Species at Risk. Retrieved from: http://www.dfo-mpo.gc.ca/species-especes/sara-lep/index-eng.html

- St-Alphonse Catholic Cemetery (340 Front Road)
- Hillside Cemetery (488 Front Road)
- Miner Park This park features an outdoor skating rink, play structures, and picnic area.

South of MWDS Property Boundary

The south of the MWDS consist of Hwy 17 and Lands located within the Rural Policy Area, as identified in the United Counties of Prescott and Russell Official Plan. The land is a forested area without any development except for a couple of businesses located on County Road 17, including:

- Larocque Engine Rebuilders (245 County Road 17)
- Axl Designs (3790 County Road 17)
- Esso Gas Station (345 County Road 17)

East of MWDS Property Boundary

Lands to the east of MWDS and within the preliminary study area are designated as Active Pit and /or Quarry within the Official Plan.

West of MWDS Property Boundary

Lands to the west of the MWDS are designated under the Official Plan as Rural Policy Area and Trade and Industry Policy Area. A cluster of residential use and commercial operations exists within the preliminary study area including local businesses and public facilities as follows:

- Lone Wolf (430 Marc Andre Street)
- Cox's Bazar Trading Inc (413 Christine Street)
- Dollarama Discount Store (460 County Road)
- Mac Ewen Hawkesbury Gas Station (414 County Road 17)
- DM Etching Monuments (383 County Road 17)
- Hawkesbury Janitorial Svc (30 St Laurent Street)
- Distributions Pure-Chem Distributions (3765 Front Road)
- Zeebra Storage (323 Front Road)
- Desjardins Laurentian Park This is a small park that features a play structure, swings, and green space for picnics.

6.2.2.2 Agriculture / Soils

Some land use to the east of the MWDS site generally appears to be agricultural. The land is zoned under Rural Zone and Mineral Extraction Zone under the Township of East Hawkesbury Zoning By-law. Agricultural activity is a permitted use under both the Zones.

This assessment identifies soil classifications within the Preliminary Study Area, as in accordance with Canadian Land Inventory, which is part of the National Soil Database. The following soil classes occur within the Preliminary Study Area:

Class 4 - Soils in this class have severe limitations that restrict the choice of crops, or require special conservation practices and very careful management, or both. The severe limitations seriously affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. These soils are low to medium in productivity for a narrow to wide range of common field crops but may have higher productivity for a specially adapted crop.

The following subclasses are present within the Preliminary Study Area:

- Subclass F Low natural fertility: This subclass is made up of soils having low fertility that is either correctable
 with careful management in the use of fertilizers and soil amendments or is difficult to correct in a feasible way.
 The limitation may be due to a lack of available plant nutrients, high acidity, low exchange capacity, or presence
 of toxic compounds.
- Subclass M Moisture deficiency: Soils in this subclass have lower moisture holding capacities and are more prone to draughtiness.

6.2.2.3 Visual

A combination of earth berms, vegetation, and fences has been previously established around the perimeter of the site to screen views of the MWDS from the surrounding built-up areas such as the existing residential properties located at the northern end of the site and County Road 17 to the south. These features will continue to be maintained throughout the life of the MWDS operation and would be left in place for as long as practical until the final cover has been constructed or as directed in the closure plan. These features will also be upgraded periodically as required to accommodate changes in site operations or changes to the surrounding land uses.

6.2.3 Social Environment

6.2.3.1 Traffic

From a traffic perspective, the preliminary study area is focused on County Road 17, as this is where the waste vehicles currently access the site. The road network within the preliminary study area outside of this major thoroughfare is not utilized by waste vehicles accessing the site. Main intersections around the MWDS, include Tupper Street and County Road 17 (signalized), and Landfill Access Road and County Road 17 (free). Based on traffic studies, all intersections and individual movements are expected to be operating very well with ample reserve capacity, and low levels of delay.

It is evident that existing truck traffic volumes servicing the MWDS are not having any negative identifiable operational impact on the Preliminary Study Area intersections, including the Site access. It is expected that the the MWDS access could accommodate a substantial increase in truck traffic volumes without operational concerns.

6.2.3.2 Neighbourhood and Community Character

According to 2021 census data⁷, the population of the Township of Champlain is reported to be 8,665 persons, the Town of Hawkesbury registered 10,194 persons, and the Town of East Hawkesbury reported the population of 3,418 persons. Over the past five years since the 2016 Census, there has been a 0.5 percent and 0.7 percent population decrease in the Township of Champlain and Town of Hawkesbury, respectively. During this period, there have been a 3.7 percent population increase experienced in the Township of East Hawkesbury.

Much of the population in the Township of Champlain (59.8 percent), Town of Hawkesbury (56.4 percent), and Township of East Hawkesbury (61.3 percent) falls in the 15 to 64 years old age group. French is the first official language spoken by the greater part of the population within these three municipalities. Most of the population lives in a single-detached house. Married residents account for 47.8 percent of the total population within the Township of Champlain, 32.5 percent in the Town of Hawkesbury, and 45.6 percent in the township of East Hawkesbury. An average of 20.6 percent% of the married couples in the three municipalities have children.

https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=East%20Hawkesbury&DGUIDIist=2021A00053502010,2021A00053502008,2021A00053502001&GENDERlist=1,2,3&STATISTIClist=1,4&HEADERlist=0

⁷ Census Profile, 2021 Census of Population. Retrieved from:

6.2.4 Economic Environment

6.2.4.1 Local Employment, Labour Supply and Economic Base

Land uses within the Preliminary Study Area include residential, commercial, recreational, and institutional uses. In 2016, more than 30 percent of the Town of Hawkesbury's workforce were aged over 55 years. Over 40 percent of workers in educational services, 41 percent of workers in personal services, and more than 1 in 3 workers in professional services and health care were closing in on retirement⁸. There are several local businesses situated to the southeast and east, as well as a few located to the north of the Site.

Local Businesses (within 500 m)

- Hawkesbury Janitorial Svc (30 St Laurent Street)
- Distributions Pure-Chem Distributions (3765 Front Road)
- Zeebra Storage (323 Front Road)

Local Businesses (within 1 km)

- Lone Wolf (430 Marc Andre Street)
- Cox's Bazar Trading Inc (413 Christine Street)
- Dollarama Discount Store (460 County Road)
- Mac Ewen Hawkesbury Gas Station (414 County Road 17)
- DM Etching Monuments (383 County Road 17)
- Esso Gas Station (345 County Road 17)
- Larocque Engine Rebuilders (245 County Road 17)
- Axl Designs (3790 County Road 17)

The MWDS directly employees approximately 15 people on a full-time basis.

6.2.4.2 Official Plan, Zoning By-law, and Secondary Plan Areas

The MWDS is under the jurisdiction of the United Counties of Prescott and Russel Official Plan (UCPR Official Plan)⁹ and Township of Champlain Zoning By-Law. The preliminary study areas fall within the jurisdiction of Town of Hawkesbury Official Plan, Town of Hawkesbury Zoning By-law, and Township of East Hawkesbury Zoning By-Law.

The MWDS falls within the jurisdiction of the UCPR Official Plan. The Domestic Landfill is within an area designated as Waste Management Policy Area (Landfill Sites) and Mineral Aggregate Resource Policy Area – Pits.

The Township of Champlain Zoning By-Law <u>No. 2000-75</u> (consolidated version from June 2019) (Township of Champlain, 2019) provides for the implementation of the objectives and policies under the UCPR Official Plan generally to regulate the use of land.

The Domestic Landfill is within an area designated as listed below:

- WD Waste Disposal Zone
 - Current uses: waste disposal; and material recovery for recycling
- RU Rural Zone
 - Current uses: administrative trailer; mechanic shop; and vacant site residence

⁸ Immigration, Refugees and Citizenship Canada (IRCC), 2020. Retrieved from:

https://www.canada.ca/content/dam/ircc/migration/ircc/english/pdf/immigration-matters/economicprofile-hawkesbury-ontario-en-final.pdf

⁹ United Counties of Prescott and Russel Official Plan 2018 Retrieved from:

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_2375121/File/Stay/planning_forestry/official_plan_accessible_document.pdf

- AP-1 Special Exception Zone within Mineral Aggregate Pit zone
 - Current uses: surface water management ponds; ancillary activities supporting landfill operations such as transfer/processing station; and contaminant attenuation.

6.2.5 Cultural Environment

The MWDS is situated within a previously disturbed area and no archaeological or built heritage features are anticipated to reside on-site. Notwithstanding the above, should any potential archaeological resources be discovered during other field investigations, the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI), would be contacted, and any required archaeological assessment work will be undertaken. Further, notification to potentially affected Indigenous communities will occur should any potential archaeological resources be discovered during other field investigations.

6.3 Detailed Inventory of the Environment

A more detailed description of the environment will be provided during the preparation of the MWDS EA reflecting the final study area using available existing information sources and investigative studies.

6.3.1 Available Existing Information Sources

Given that the MWDS has been in operation for over 60 years, existing data and information from available reports will be utilized during the preparation of the MWDS EA. This includes the annual monitoring reports that are prepared and submitted to the District Manager of the MECP. In these present and assess monitoring data for landfill gas, leachate, groundwater, and surface water. Other existing information sources that may be utilized in the MWDS EA include the following:

- Environment Canada and MECP hourly meteorological data
- Emissions Summary and Dispersion Modelling (ESDM) reports
- Provincial Water Quality Monitoring Network (PWQMN)
- MECP water well records
- MNRF databases
- Local Conservation Authority databases
- Planning documents including Provincial Policy Statement, 2020, local municipal Official Plans and Zoning By-Laws
- Annual site reports
- Acoustic assessment reports
- Odour assessment reports
- Previous traffic studies
- Leachate generation assessments
- Hydrogeological and geotechnical studies
- Census information
- Published water quality and flow information from MECP, Environment Canada and Conservation Authorities
- Published data on public recreational facilities/ activities.
- Site odour complaints history
- Site-specific equipment noise measurements
- Waste materials and leachate characterization and sampling data
- Aerial photographic mapping

Topographic maps

Additional investigative Studies may to be undertaken as part of the preparation of the EA including:

- Geology & Hydrogeology
- Surface Water Resources
- Terrestrial & Aquatic Environment
- Land Use and Socio-Economic Environment
- Atmospheric Environment (including Air Quality, Odour and Noise)
- Transportation
- Archaeology and Built Heritage
- Visual Impacts and Amenity Assessment
- Design and Operations

The details associated with each of these investigative studies are outlined in proposed Work Plans (refer to Appendix C). These proposed Work Plans outline what is proposed to generate a more detailed description of the environment and how that information will be utilized in the assessment and evaluation of alternatives, as well as the assessment of impacts associated with the preferred alternative. The proposed work plans will be finalized as part of the MWDS EA once existing source information is evaluated and incorporated.

6.3.2 Potential Effects

The types of potential environmental effects that will be assessed during preparation of the MWDS EA include those that are summarized in Table 6.1. The rationale for these initial potential environmental effects is based on the Alternative Methods presented in Section 5.1 and preliminary description of the environment provided in Section 6.1. The types of potential environmental effects have been grouped into the five environmental components: natural, built, social, economic, and cultural. The specific potential environmental effects will be determined during the preparation of the MWDS EA.

Table 6.1 Potential Environmental Effects

Natural	Built	Social	Economic	Cultural
 Temporary and/or long-term change in groundwater quality and/or quantity Temporary and/or long-term change in surface water quality and/or quantity Temporary or permanent loss of aquatic features or categorical loss of functions Temporary or permanent disturbance to aquatic and/or terrestrial species and habitat 	 Temporary or permanent disruption to residences, businesses, and/or community, institutional, and recreational facilities Alteration to roadways Disruption to utilities Temporary or permanent property easements 	 Temporary or permanent disturbance to sensitive receptors due to dust, odours, and noise Temporary disruption to traffic Temporary or permanent alteration to existing views 	Changes to approved/ planned land uses affected Increase in capital/ operating cost at the MWDS	 Disturbance to lands with significant archaeological potential (i.e., lands with potential for the presence of archaeological resources) Displacement or disruption of built heritage features Removal of cultural landscape units

Natural	Built	Social	Economic	Cultural
Temporary or permanent loss of recharge and discharge areas				
Temporary and/or permanent loss of natural heritage features				
Temporary and/or permanent change in air quality				

7. Description of the Assessment and Evaluation Methodology

7.1 Alternative Methods of Carrying Out the Undertaking

The Alternative Methods will be assessed and evaluated to identify the proposed undertaking for which *EA Act* approval will be sought.

The MWDS EA will consider potential effects on the environment associated with the following timeframes:

- Construction
- Operation
- Closure/Post-closure

7.1.1 Assessment and Comparative Evaluation of the Alternative Methods of Carrying Out the Undertaking

The assessment and comparative evaluation of the Alternative Methods will utilize the following three (3) steps:

- Assessment of the Alternative Methods.
- Comparative evaluation of the Alternative Methods and selection of the Recommended Method.
- 3. Identification of the Preferred Method.

Further details on each of the preceding steps are provided in the following sub-sections.

7.1.1.1 Assessment of the Alternative Methods of Carrying Out the Undertaking

The Alternative Methods will be assessed through a "net effects analysis" consisting of the following activities:

- 1. Develop appropriate evaluation criteria and indicators based on the purpose of the undertaking, environmental conditions within the final study area, develop Alternative Methods (i.e., conceptual designs), and type of potential environmental effects from the Alternative Methods. Preliminary evaluation criteria and indicators have been developed as set out in Appendix B. The preliminary evaluation criteria and indicators will be finalized during preparation of the MWDS EA. Further details on the finalization of preliminary criteria and indicators are provided in Section 9 and Section 10 of the Proposed ToR.
- 2. Identify potential effects on the environment (both positive and negative) by applying the finalized evaluation criteria and indicators to each Alternative Method taking environmental conditions into consideration.

- 3. Develop impact management measures based on current procedures, historical performance, and environmental conditions to avoid/minimize potential adverse environmental effects. In addition, impact management measures other than those currently utilized at the existing Site will be developed and assessed as part of the EA.
- 4. Apply the impact management measures to the identified potential adverse environmental effects to identify residual or remaining net effects on the environment (both positive and negative).

In addition, Mayer Waste Management will review the Alternative Methods from a climate change adaptation and mitigation perspective. This will include identifying historical climate/meteorological trends, as well as the potential for extreme weather events that may have an effect on the Alternative Methods through power outages, physical damage, stormwater management, and reduced access to the Site.

7.1.1.2 Comparative Evaluation of the Alternative Methods of Carrying Out the Undertaking and Selection of the Recommended Method

Once the assessment of the Alternative Methods has been completed, they will be compared using a "Reasoned Argument" or "trade-off" method to select a Recommended Method. Application of this method will identify the advantages or disadvantages of each Alternative Method based on their respective net effects. The advantages and disadvantages will be used to identify preferences among the Alternative Methods in order to establish the Recommended Method. The rationale for selecting the Recommended Method will be provided as part of the MWDS EA.

7.1.1.3 Identification of the Preferred Method of Carrying Out the Undertaking

The Recommended Method will be provided to review agencies, Indigenous communities, and the public for comment during preparation of the MWDS EA, following which a Preferred Method will be identified.

7.2 Impact Assessment of the Preferred Method of Carrying Out the Undertaking

The intent of the impact assessment is to allow for additional details to be developed on the Preferred Method from a design and operations perspective and to then review the impact management measures and resultant net effects described in the Alternative Methods stage within the context of the more detailed design for the Preferred Method. Specifically, the following can be accomplished:

- Potential environmental effects can be identified with more certainty.
- More site-specific impact assessment measures can be developed for application.
- Net environmental effects can be identified with more certainty.
- Appropriate monitoring requirements can be clearly defined.
- Specific approval/permitting requirements for the proposed undertaking can be identified.

Confirmatory environmental investigations may be carried out at this stage, if required. At the completion of the impact assessment of the Preferred Method, the advantages, and disadvantages to the environment of the Preferred Method will be identified.

During the impact assessment, the climate change adaptation and mitigation analysis undertaken during the Alternative Methods stage will be utilized and augmented as needed for the Preferred Method. Climate change mitigation and adaptation measures will be reviewed as part of the detailed site design established for the Preferred Method during the impact assessment stage of the MWDS EA. In addition, during the impact assessment stage, an assessment of the cumulative effects of the proposed undertaking and other projects/activities that are existing, planned/approved or reasonably foreseeable within the Study Area will be completed (to be finalized during the EA, as per Section 6.1 of this ToR). The impact assessment of the Preferred Method will be documented as part of the MWDS EA.

7.3 Closure and Post Closure

Closure and post-closure of the Domestic Landfill at the MWDS will take place in accordance with O. Reg. 232/98, which includes the future requirement to develop a closure plan. Mayer Waste Management is required to prepare a closure plan when the Domestic Landfill has reached 90 percent of its approved capacity or two (2) years of remaining capacity (whichever comes first).

In concert with developing conceptual designs for the Alternative Methods, broad closure and post-closure frameworks will be generated for assessment and comparative evaluation purposes. The broad frameworks may include, but not limited to, reviewing whether existing Site infrastructure will remain in place at the Site beyond the closure date, post-closure monitoring requirements, as well as the potential post-closure use. The post-closure use will need to reflect current Township of Champlain and UCPR land use planning controls.

8. Commitments and Monitoring

8.1 Terms of Reference and Environmental Assessment Commitments

As part of preparing this ToR, there are a number of commitments are being made by Mayer Waste Management that will need to be fulfilled during preparation of the MWDS EA. Appendix D lists these commitments. If approval of the proposed ToR is granted by the Minister, the list of commitments will be finalized and included in the MWDS EA, documenting where and how they were dealt with during preparation of the MWDS EA. Similarly, commitments may be made by Mayer Waste Management during preparation of the MWDS EA that will need to be fulfilled if approval of the proposed ToR is granted by the Minister. Where such commitments are made, a list of EA commitments will be documented in the MWDS EA Report, including where and how they will be dealt with if the proposed ToR is approved.

8.2 Environmental Effects and Environmental Assessment Compliance Monitoring

Mayer Waste Management is committed to developing a monitoring framework during preparation of the MWDS EA that will address environmental effects and, as applicable, EA compliance. The purpose of the environmental effects monitoring is to measure and ensure the effectiveness of any impact management measures proposed to address the potential negative effects of the preferred undertaking. Environmental effects monitoring will monitor the net effects associated with the construction, operation, and closure of the proposed undertaking, as necessary, and implement further impact management measures, monitoring, and contingency plans, where possible, so that:

- Predicted net negative effects are not more than expected.
- Unanticipated negative effects are addressed.
- Predicted benefits are realized.

The purpose of the EA compliance commitment monitoring will be to track the commitments made by Mayer Waste Management during preparation of the MWDS EA, as well as any conditions of *EA Act* approval, so that they are followed through as applicable in the construction, operation, and closure/post-closure of the proposed undertaking.

The MWDS EA Report will include a strategy on how and when the commitments will be fulfilled and how Mayer Waste Management will report on this to the MECP and other regulatory agencies, as appropriate.

9. Terms of Reference Consultation and Consultation Plan for the Mayer Landfill Expansion Environmental Assessment

9.1 Terms of Reference Consultation

Mayer Waste Management has and will continue to consult broadly with agencies that make up the government review team, as well as Indigenous communities, and the public (i.e., stakeholders) during preparation of the ToR. A description and results of the consultation carried out during preparation of the ToR will be documented in detail in the Record of Consultation (RoC), prepared under separate cover for the ToR. A summary of the RoC is provided in the following sub-sections. The consultation is being undertaken in accordance with the Code of Practice - Consultation in Ontario's environmental assessment process.

9.1.1 Review Agencies, Indigenous Communities and the Public Consulted

9.1.1.1 Review Agencies

Twelve review agencies were notified for the project commencement and will be contacted during finalization of the ToR including federal department, provincial ministries and agencies, and regional and local agencies. The following consist of the review agencies consulted and will continue to be consulted during the preparation of the ToR.

Table 9.1 Review Agencies Involved in the preparation of the proposed Terms of Reference

Review Agency	Rationale for the Agency's Involvement
Federal and Provincial Agencies	
Ministry of Environment, Conservation, and Parks (MECP)	Their mandate includes protecting, restoring, and enhancing the environment to ensure public health and environmental quality, which may be affected by the proposed undertaking. In addition, MECP is responsible for administrating the Environmental Assessment Act, which the proposed undertaking is subject to.
Environment and Climate Change Canada	Their mandate includes preserving and enhancing the quality of the natural environment including water, air, soil, flora, and fauna which may be affected by the proposed undertaking.
Ministry of Natural Resources and Forestry	Their mandate is to oversee the province's natural resources and work to safeguard Ontario's provincial parks, forests, fisheries, wildlife, mineral aggregates, Crown lands and waters, which may be affected by the proposed undertaking.
Ministry of Heritage, Sport, Tourism and Culture Industries	Their mandate includes the conservation of archaeological resources and promotion of heritage conservation, which may be affected by the proposed undertaking.
Ministry of Municipal Affairs and Housing	Their mandate includes working with municipalities to consider how decisions impact communities. They were consulted because the proposed undertaking has the potential to affect the Town of Hawkesbury, Township of Hawkesbury East, and the Township of Champlain.
Ministry of Mines	Their mandate is to oversee Ontario's mineral sector, which may be affected by the proposed undertaking.

Review Agency	Rationale for the Agency's Involvement
Federal and Provincial Agencies	
Member of Parliament (MP)	Elected official where the facility is located
Member of Provincial Parliament (MPP)	Elected official where the facility is located
Municipal and Regional Agencies	
United Counties of Prescott and Russell	As the proposed undertaking is situated within the United Counties of Prescott and Russell municipal boundaries, they were consulted as part of the ToR process to ensure their various interests were duly considered.
Township of Champlain	The proposed undertaking is situated within the boundaries of Township of Champlain. They were consulted as part of the ToR process to ensure their various interests were duly considered.
Town of Hawkesbury	The proposed undertaking is situated approximately 1 km from the Town of Hawkesbury boundary and have the potential to affect the town's residents, businesses, and property owners.
Township of Hawkesbury East	The proposed undertaking is situated approximately 300 m from the Township of Hawkesbury East boundary and have the potential to affect the town's residents, businesses, and property owners.

9.1.1.2 Indigenous Communities

A total of six Indigenous Communities were consulted and will continue to be consulted via email, telephone calls and mail distributions during preparation of the ToR including the following:

Table 9.2 List of the Indigenous communities consulted during the preparation of the ToR

Indigenous Communities	
Algonquins of Pikwakanagan First Nation	Mohawks of Kanesatake
Algonquins of Ontario	Métis Nation of Ontario – Region 6
Kitigan Zibi Anishinabeg *	Mohawk Council of Kahnawà:ke (MCK)

9.1.1.3 Public

There are approximately 50 public members included in the project contact database. The database contains members of the public that have directly requested to be added to the list, those who provided written comments and have attended events, adjacent property owners, existing public liaison committee members, and individuals known to Mayer Waste Management who have expressed interest in the past. Members of the public were consulted and will continue to be consulted via postal mail-drop, email notifications, newspapers advertisements, and project specific webpages, etc., during preparation of the ToR.

9.1.2 Consultation Activities Carried Out with Review Agencies, Indigenous Communities, and the Public

A wide variety of activities for consulting with review agencies, Indigenous communities, and the public were undertaken during preparation of the ToR. The consultation activities provided multiple opportunities and different ways for stakeholders to be involved and provide comments for consideration in preparing the ToR. Consultation activities included and will continue to include the following:

- Notifications
- Meetings

- Public Open House
- Project-specific Website and Telephone Number

9.1.2.1 Notifications (completed)

- Notice of Commencement and Public Open House A notice of Commencement and Public Open House was
 issued on 12 April 2023. The notification was provided in both English and French via one notice in 'The Review'
 and one notice provided in 'Le Carillon/Tribune Express' newspaper publications; printed hard copies and online
 digital copies were made available.
- Notice of Public Open House 2 A notice of Public Open House 2 was issued on 7 June 2023. The notification
 was provided in both English and French via one notice in 'The Review' and one notice in 'Le Carillon/Tribune
 Express' newspaper publications; printed hard copies and online digital copies were made available.

9.1.2.2 Notifications (planned)

- Notification of the Draft ToR available for agency and public review and comment
- Door Hanger and Information Package
- Terms of Reference Update Revisions & Submission Timing Notice
- Notification of ToR Submission Date
- Notification of Amended ToR

9.1.2.3 Meetings (completed)

- Pre-Commencement meetings with the Ministry of the Environment, Conservation, and Parks Meetings were held with staff from the Ministry of the Environment, Conservation, and Parks (MECP), prior to the commencement of the ToR process.
- Pre-Commencement meeting with Township of Champlain The pre-commencement meeting took place on 29 March 29, 2023, at the Township of Champlain Town Hall (948 Pleasant Corner Rd, Vankleek Hill). The purpose of this meeting was to:
 - Provide a review of background information regarding Mayer Waste Management and the Mayer Waste Disposal Site and the proposed undertaking.
 - Provide an overview of the EA process and the development of the ToR.
 - Discuss potential key issues of interest of GRT members.
- Pre-Commencement meeting with Township of Hawkesbury East The pre-commencement meeting took place on 25 April 2023, at the Township of Hawkesbury East Town Hall (5151 County Rd 14, St-Eugène). The purpose of this meeting was to:
 - Provide a review of background information regarding Mayer Waste Management and the Mayer Waste Disposal Site and the proposed undertaking.
 - Provide an overview of the EA process and the development of the ToR.
 - Discuss potential key issues of interest of GRT members.
- Public Liaison Committee Meeting Basic details of the project were shared with the MWDS Public Liaison
 Committee (PLC a representative group of broadly based interested participants residing within a 1.5 km radius
 of the MWDS, who understand the site and its operation), including representatives of the local community, prior
 to initiating commencement of the ToR process on 10 April 2023.
- Meeting with the Algonquins of Ontario on the 19 July 2023, a meeting was held with representatives of the Algonquins of Ontario, GHD and the MWDS team to discuss and provide information regarding the proposed expansion and determine the engagement to be continued with the Algonquins of Ontario as part of the EA process.

9.1.2.4 Meetings (planned)

Additional stakeholder meetings are planned with the following (as part of the EA):

- Indigenous Communities (Algonquins of Ontario and Algonquins of Pikwakanagan First Nation).
- Ministry of the Environment, Conservation, and Parks (MECP).
- Residents and interested members of public.

9.1.2.5 Terms of Reference Public Open House 1

A Public Open House 1 was held on Wednesday 26 April 2023, from 6:00 p.m. to 8:00 p.m. at the Quality Inn Hotel (1575 Tupper St, Hawkesbury), to allow an opportunity for the public to learn about the MWDS EA, the ToR and EA process, the initial draft ToR elements, and content, as well as ask questions and provide comments directly to the project team. The Public Open House 1 followed a drop-in format, with the information illustrated on a set of display boards arranged around the perimeter of the room. Project Team members were available to answer questions from attendees.

9.1.2.6 Terms of Reference Public Open House 2

An additional Public Open house 2 was held on Tuesday, 20 June 2023, from 6:00 p.m. to 8:00 p.m. at the Robert Hartley Sports Complex in Hawkesbury. The objective of the Open House 2 was to introduce Mayer Waste Management and provide details of the current landfill site, provide a project description, present the proposed expansion options, Outline the EA process with anticipated project milestones, and address common questions from Public Open House #1 and request further public feedback and comments in a presentation and Q&A format as requested by the public at the Open House 1.

The second open house featured a 30-minute bilingual PowerPoint presentation conducted by GHD and Mayer, with an accompanying bilingual handout that featured expansion option visuals and other project related information. The presentation was followed by an opportunity for public comments and questions. Project team members were available to answer questions from attendees.

9.1.2.7 Project-specific Website and Telephone Number

A project-specific website (https://mayerexpansionea.com/) went live on 19 April 2023. The website houses project notifications and landfill monitoring documents. Formal comments received via the website are documented in RoC. A dedicated project-specific email account (MayerEA@ghd.com) and Telephone number (613-277-8730) have also been established.

9.1.3 Results of Consulting with Review Agencies, Indigenous Communities, and the Public

The preceding consultation activities resulted in a range of comments being received from the involved review agencies and the public. Comments were received through emails, verbally at the open house events, and via comment forms distributed at the two open houses.

9.1.3.1 Review Agencies

Seven review agencies responded to the Notice of Commencement with an interest in receiving future Project notices and updates. Table 9.2 briefly summarizes the comments received.

Table 9.3 Summary of Comments Received from Review Agencies

Review Agency	Summary of Comments Received on Notice of Commencement
Federal and Provincial Agencies	
Ministry of Environment, Conservation, and Parks	The MECP provided a list of Government Review Team, Indigenous Communities, and comments on the Draft Notice of Commencement.
MPP	The MPP office expressed interest in receiving Project notices and updates.
MP	The MP office expressed interest in receiving Project notices and updates.
Municipal and Regional Agencies	
United Counties of Prescott and Russell	The County confirmed that they are interested in receiving Project notices and updates and suggested that a traffic impact study might be required since the facility is located on a county road.
Township of Champlain	The Township suggested that an updated site plan would be required after the EA is complete.
Town of Hawkesbury	The Town provided comments in support of the proposed undertaking.
Township of Hawkesbury East	Township of East Hawkesbury expressed interest in receiving Project notices and updates, provided feedback on on-going odour issues in the area.

9.1.3.2 Indigenous Communities

Three Indigenous Communities responded to the Notice of Commencement with an interest in receiving future Project notices and updates. Table 9.3 below briefly summarizes the comments received.

Table 9.4 Summary of the comments received from the Indigenous communities

Indigenous Communities	Summary of Comments Received on Notice of Commencement	
Algonquins of Ontario (AOO)	Expressed interest in the Project and requested an introductory meeting to understand the proposed undertaking in detail.	
Mohawk Council of Kahnawà:ke (MCK)	Expressed interest in receiving Project notices but will not be providing comments on the proposed undertaking.	
Algonquins of Pikwakanagan First Nation	Expressed interest in the Project and would like to participate in the EA process.	

9.1.3.3 Public

The following is a summary of the topics that were raised by members of public in the comments received on the Notice of Commencement via email, comment forms, and verbally at the two Open Houses.

- General site operations on-going odour issues; type and source of material received; odour management at the landfill
- Environmental protection and monitoring impacts to groundwater quality.
- Impacts on Traffic increase in number of trucks.
- Current lifespan and impacts of project on future closure timing of the facility.

9.1.4 Comments Received on the Proposed Terms of Reference

9.1.4.1 Review Agencies

Table 9.5 Summary of Comments Received from Review Agencies

Review Agency	Summary of Comments Received
Federal and Provincial Agencies	
Municipal and Regional Agencies	

9.1.4.2 Indigenous Communities

Table 9.6 Summary of Comments Received from the Indigenous Communities

Indigenous Communities	

9.1.4.3 Public

Table 9.7 Summary of Comments Received from the Public

Public		

9.2 Consultation Plan for the Mayer Waste Disposal Site Expansion EA

The following consultation approach to the undertaking for the MWDS EA is proposed in accordance with the Ontario Code of Practice - Consultation in Ontario's environmental assessment process (Government of Ontario, 2014).

9.2.1 Proposed Consultation Activities

The consultation activities proposed for the Mayer waste disposal site EA will include, but will not be limited to, those carried out during preparation of the ToR, which are briefly summarized as follows:

Notifications

- Notices providing information on the Mayer waste disposal site EA to interested persons and how they can be involved. The notices will be presented through a variety of methods. Some of the methods that will be considered include the following: local area newspapers, project-specific website, Canada Post or other private distribution mail-drops, project-specific social media pages (Facebook, Twitter), outdoor signs, robo-calls.
- Information letters and flyers will be distributed to residential subdivisions directly adjacent to the Mayer waste disposal site EA, as previously distributed during the ToR, consisting of key updates and opportunities to be involved in the EA process.

Meetings and Presentations

- Individual/group meetings discussing project-specific issues with a review agency or agencies, an Indigenous
 community or communities, and the public. Meetings will occur at key milestones of the EA process.
- Public Liaison Committee (PLC) providing the existing PLC an opportunity to hold additional meetings, outside
 of the existing PLC meeting schedule, to provide a forum for in-depth discussion of project issues and act as a
 conduit with the local community.
- Presentations to the United Counties of Prescott & Russell providing status updates on the Mayer waste disposal site EA to staff and/or Councillors as required.

Public Open Houses

- Public Open Houses three drop-in style open house events are proposed during the Mayer waste disposal site
 EA for the public to view information and ask questions/make comments to the Mayer Waste Management project staff directly. Public Open House events are planned as follows:
 - Public Open House Number 1 discussion on the developed Alternative Methods, the evaluation criteria and indicators to be applied to Alternative Methods, and the evaluation methodology that will be utilized.
 - Public Open House Number 2 reviewing the comparative evaluation results of the Alternative Methods and identifying the recommended Alternative Method.
 - Public Open House Number 3 reviewing the impact assessment results of the Preferred Method, including
 potential environmental effects, recommended impact management measures, proposed monitoring
 requirements, and proposed approvals/permits required for implementing the Preferred Method.

Project specific website and Social Media

- Project-specific website will provide clear information, updates on the EA, as well as relevant EA documentation, to stakeholders as well as an opportunity for them to give feedback to Mayer Waste Management (https://mayerexpansionea.com/). A dedicated project-specific email account (MayerEA@ghd.com) has also been established as part of the Project website.
- Project-specific social media webpages (Facebook and Twitter) will provide succinct information to stakeholders
 as well as to provide updates on the EA.

9.2.2 Obtaining Input from Interested Participants

Input will be obtained from interested during the MWDS EA through a variety of means specific to each group as follows:

- Review agencies, as applicable (Federal departments, Provincial ministries and agencies, local municipalities, conservation authorities, school boards, utilities, etc.).
- Indigenous Communities, as applicable.
- Public (e.g., groups and/or associations, property owners, residents, business owners, etc.).

9.2.2.1 Review Agencies

Input from interested review agencies will be received primarily through written correspondence and e-mails, individual or group meetings (e.g., Government Review Team meetings).

9.2.2.2 Indigenous Communities

Input from interested Indigenous Communities will be obtained primarily through written correspondence and e-mails, documented telephone follow-up calls and, if interest is expressed, individual or group meetings. It is the objective of Mayer to develop meaningful opportunities to engage with Indigenous Communities throughout the EA process by providing access to technical information and the project team's technical expertise as well as receiving input and being responsive to any concerns that may arise. Mayer commit to refining the preliminary criteria and indicators as set out in **Appendix B** to this ToR should Indigenous communities request the inclusion of a suggested criteria/indicator.

9.2.2.3 Public

Input from the public will be received primarily through written correspondence and e-mails, documented telephone calls, verbal discussions held at Public Open House events, and additional individual or group meetings.

9.2.3 Key Decision-Making Milestones when Consultation Will Occur

As mentioned in Section 9.2.1 of this ToR, there are a number of key decision-making milestone points when consultation will occur during preparation of the MWDS EA. These key decision-making milestones have been grouped as follows:

- Alternative Methods (Open Houses 1 and 2 as outlined in Section 9.2.1 of this ToR)
 - Reviewing the developed Alternative Methods.
 - Confirming the evaluation criteria and indicators to be applied to Alternative Methods.
 - Confirmation of the Final Environmental Assessment Study Area.
 - Reviewing the recommended Alternative Method identified through the comparative evaluation process.
- Impact Assessment of the Preferred Method (Open House 3 as outlined in Section 9.2.1 of this ToR).
 - Reviewing the potential environmental effects, recommended impact management measures, proposed monitoring requirements, and proposed approvals/permits required for implementing the Preferred Method.
 - Final description of the Final Environmental Assessment Study Area environment.
- Pre-Submission of the Draft Mayer waste disposal site EA Report.
 - Reviewing the Mayer waste disposal site EA Report prior to its finalization and formal submission to the Minister for approval.

Notwithstanding these key decision-making milestones, consultation will be ongoing throughout the Mayer waste disposal site EA.

9.2.4 Proposed Issue Resolution Strategy

Recognizing that there may be issues raised or disputes during preparation of the MWDS EA that may be difficult to resolve, an issues resolution strategy is proposed as part of the ToR. This strategy will benefit all parties involved by providing an agreed to and well understood issues resolution process to ensure that disputes are effectively and appropriately dealt with.

Should an issue or dispute arise during preparation of the MWDS EA, Mayer Waste Management will discuss the nature of the issue or dispute with the interested persons and attempt, in good faith, to reach a resolution that is agreeable to both Mayer and the interested persons. In the event that a mutually agreeable resolution does not occur,

by the time of formally submitting the MWDS EA, the matter will be referred to MECP. With this general framework in mind, a more detailed issue resolution strategy will be developed as part of the MWDS EA.

10. Flexibility of this Terms of Reference

If approval of the ToR is granted by the Minister, then the MWDS EA must be prepared in accordance with the approved ToR. Notwithstanding this, circumstances may arise during preparation of the MWDS EA that could prevent the proposed framework from being carried out exactly as outlined in the approved ToR. As a result, flexibility has been provided in the ToR to allow Mayer Waste Management to adjust certain aspects of the proposed framework or accommodate new circumstances during preparation of the MWDS EA without the need to prepare and submit a new ToR to the Minister for approval. Table 10.1 lists the aspects/circumstances Mayer Waste Management is seeking flexibility.

Table 10.1 Flexible Aspects/Circumstances of the Terms of Reference

Aspect/Circumstance	Process for Confirming/Finalizing
Purpose of the Undertaking An initial purpose of the undertaking (purpose statement) is provided in the ToR (Section 3.1): To increase the approved capacity of the Domestic Landfill at the MWDS by 650,000 m³ so Mayer Waste Management can realize the economic opportunity by providing long-term disposal capacity for local customers.	The purpose statement will be reviewed and finalized as part of preparing the MWDS EA once a specific undertaking is selected from the Alternative Methods that are to be considered.
Description of and rationale for the undertaking. A preliminary description of the proposed undertaking is provided in the ToR (Section 4): — An expansion of the existing Domestic Landfill at the MWDS to increase its approved capacity by 650,000 m³ to receive additional non-hazardous solid residual waste	A detailed description of and the rationale for the proposed undertaking will be finalized as part of preparing the MWDS EA once a specific undertaking is selected from the Alternative Methods that are to be considered.
Description of and Rationale for the Alternative Methods A preliminary description of each of the Alternative Methods and their rationale is provided in the ToR (Section 5.1 and Section 5.2).	The preliminary descriptions of each of the Alternative Methods will be expanded upon as part of preparing the MWDS EA to provides a detailed description of each for assessment and comparative evaluation. Similarly, the rationale for each of the Alternative Methods will be expanded upon as part of preparing the MWDS EA The finalization of the Alternative Methods and their rationale will occur after presenting additional details and consulting on them with the Indigenous communities, review agencies, and the public.
Preliminary Study Area A Preliminary Study Area for the MWDS EA that extends 1500 m or 1.5 km from the Site boundaries has been identified in the ToR (Section 6.1).	The Preliminary Study Area will be finalized during preparation of the MWDS EA when the Alternative Methods have been confirmed and the potential environmental effects are better known. The EA process will allow for the acquisition of more detailed information beyond the preliminary information currently provided in Section 6 of the ToR, which will assist in confirming or refining the Preliminary Study Area.
Preliminary Description of the Environment A brief description of the environment within the preliminary study area addressing all components of the EA Act definition of the environment (i.e., natural, built, social, economic, and cultural) has been provided in the ToR (Section 6.2).	A more detailed description of the environment will be provided during preparation of the MWDS EA reflecting the final study area using available existing information sources and investigative studies. The detailed description will be finalized after presenting and consulting on them with Indigenous communities, review agencies, and the public.

Aspect/Circumstance	Process for Confirming/Finalizing
Investigative Studies/ Work Plans A description of the investigative studies and proposed work plans has been provided in the ToR (Section 6.2.6.2 and Appendix D).	The proposed work plans will be finalized as part of the MWDS EA after presenting and consulting on them with consulting on them with Indigenous communities, review agencies, and the public.
Potential Effects A preliminary list of the types of potential environmental effects that will be assessed during preparation of the MWDS EA has been included in the ToR (Section 6.2.6.3).	The specific potential environmental effects will be determined and finalized during the preparation of the MWDS EA, specifically after the review of secondary sources, completion of investigative studies and evaluation of alternative methods
Evaluation Criteria A preliminary list of evaluation criteria and indicators that will be finalized and utilized during preparation of the MWDS EA has been provided in the ToR (Appendix C and D).	The preliminary evaluation criteria and indicators will be finalized prior to application during preparation of MWDS EA after presenting and consulting on them with consulting on them with Indigenous communities, review agencies, and the public.
Consultation A preliminary list of consultation activities proposed to be carried out during the preparation of the MWDS EA are provided in the ToR (Section 9.2): Notifications Meetings and presentations Public Open Houses Project-specific Website	As part of the MWDS EA, the consultation events will include those listed as part of the ToR but may include additional events as required.
Other Approvals Required A preliminary list of additional approvals that may be needed to implement the proposed undertaking are identified in the ToR (Section 11)	The actual approvals required for the preferred undertaking will be identified during preparation of the MWDS EA and will be finalized and presented in the Final EA Report.

11. Other Approvals Required

In addition to requiring *EA Act* approval, other additional approvals may be required to be obtained under a number of Provincial and/or Federal statutes to implement the proposed undertaking. The types of approvals that potentially apply may include, but are not limited to:

- Ontario Environmental Protection Act (EPA), 1990 MECP
- Ontario Water Resources Act (OWRA), 1990 MECP
- Canadian Impact Assessment Act (IAA), 2019 Canadian Impact Assessment Agency.

The actual approvals required for the preferred undertaking will be identified during preparation of the MWDS EA.

