Appendix C

Commitments Table



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ToR and Work Plan Commitments Table

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Ridge Landfill Expansion Environmental Assessment (EA) – ToR and Work Plan Commitments Table

#	Commitment	How was Commitment Addressed	Reference Section in EA		
	Ministry of the Environment, Conservation and Parks				
Gene	ral Commitments				
1	The acronyms and definitions section will be revised in the EA to include definitions from the Codes of Practice for Preparing and Reviewing ToRs and EAs in Ontario, as well as applicable legislation (e.g., alternative methods, circular economy, individual EA, stakeholders, etc.).	The acronyms and definitions have been reviewed and updated and are detailed a the beginning of the EA Report and throughout EA documentation.	Section "Acronyms, Abbreviations, Definitions" (EA Report), Appendices		
2	As outlined in the Code of Practice, Waste Connections will reconfirm the data used to develop the rationale for the undertaking that is outlined in the ToR. The rationale for the project and opportunity will be revisited during the EA.	The rationale for the undertaking and the data used to develop the rationale are described in Sections 1.4 and 1.5 (EA Report) with supporting documentation provided in Appendix F.	Sections 1.4, Appendix F		
3	The EA will consider the cumulative environmental effects of the Project, and existing and planned future undertakings.	Section 6.14 (EA Report) provides a discussion on potential cumulative environmental effects of the Project, and existing and planned future undertakings.	Section 6.14 (EA Report)		
4	The final detailed description of existing conditions will be provided in the EA based on technical work that will be completed.	A summary of the existing conditions based on technical work completed for the EA is provided in Section 3.2 (EA Report). Detailed descriptions of the existing conditions are provided in the technical impact assessments in Appendices D1 to D12.	Section 3.2 (EA Report), Appendices D1 to D12		
5	The work plans for EA technical disciplines will be confirmed during the EA.	As detailed in Section 6.0 (Appendix B), the work plans for the EA technical disciplines were confirmed and approved in consultation with the applicable agencies.	Section 6.0 (Appendix B)		
6	Waste Connections has provided preliminary study areas as part of the ToR. These will be confirmed or modified as part of the EA based on the impact assessment work and feedback during consultation. The EA will provide rationale for the final extent of the study areas.	A rationale for the final extent of the study areas is provided in Section 3.1 (EA Report).	Section 3.1 (EA Report), Appendix B		
	Waste Connections will determine the study areas in consultation with government agencies, Indigenous communities and the public prior to the evaluation of alternative methods and impact assessment work to ensure that all direct and indirect environmental effects can be identified.	Details on consultation with interested government agencies, Indigenous Communities and Organizations, and interested members of the public is documented in Appendix B.			
7	Waste Connections commits to characterizing post-closure conditions as part of the description of the "do nothing" scenario in the EA.	The post-closure conditions are characterized as part of the description of the "do nothing" scenario in Section 6.0 and Attachment 7 (EA Report).	Section 6.0, Attachment 7 (EA Report)		
8	A specific list of other approvals required for the Project will be provided in the EA.	A specific list of other approvals required for the Project is provided in Section 10.0 (EA Report).	Section 10.0 (EA Report)		
9	Waste Connections will revisit the purpose and opportunity outlined in the Terms of Reference. Waste Connections will reconfirm the data and methods used to develop the rationale for the undertaking that considers the available disposal volume at existing landfill sites, anticipated capacity from proposed landfill facilities, and waste export to the United States. Waste Connections will prepare a comprehensive market analysis to quantify the industrial, commercial and institutional waste that the Ridge Landfill can reasonably expect to receive over the 20-year planning period to support the identified opportunity.	The purpose and rationale for the proposed undertaking has been reviewed and is detailed in Sections 1.4 and 1.5 (EA Report). The data used to develop the rational for the opportunity was revisited during the EA and it was confirmed that there continues to be a need for disposal capacity in southern and central Ontario over the 20-year planning period, see Appendix F. Appendix F also contains commentary on current market conditions that may impact future needs.	Sections 1.4 and 1.5 (EA Report), Appendix F, Appendix B8		



#	Commitment	How was Commitment Addressed	Reference Section in EA
		Communication with the MECP on revisiting the purpose and opportunity is included as a memo in Appendix B8.	
10	Waste Connections will develop a tracking table of commitments made during the Terms of Reference that will be carried forward into the environmental assessment. The table will outline the commitments made during the Terms of Reference and in what section they are addressed in the environmental assessment.		Section 8.5 (EA Report), Appendices B and C
	The main body of the environmental assessment report will include a summary of issues and concerns raised during consultation which will be described in greater detail in the Record of Consultation.	Section 8.5 (EA Report) includes a summary of issues and concerns raised during consultation which are described in greater detail in Appendix B.	
11	The MECP provides guidance by way of the "D-4 Land Use On or Near Landfills and Dumps" land use guidelines. The guidelines are not limited to, water contamination by leachate, odour, litter, dust, noise, surface runoff and landfill-generated gases. These will be considered as part of the technical studies completed as part of the EA.		Section 3.1 (EA Report), Appendices D1 to D12
Agricu	ltural		
12	Waste Connections will continue to accommodate farming on the on-site lands not being used for waste management until they are needed for landfilling.		Sections 6.7 and 7.4 (EA Report), Sections 5.1 and 6.1 (Appendix D1)
Archa	eology & Cultural Heritage		
13	Waste Connections will keep Walpole Island First Nation and Aamjiwnaang First Nation updated as to the anticipated timing of the Stage 2 Archaeological Assessment and will coordinate a meeting with the archaeologist if requested by WIFN.	As documented in Appendix B7, Walpole Island First Nation and Aamjiwnaang First Nation were updated on the anticipated timing of the Stage 2 Archaeological Assessment. Members of the Walpole Island First Nation oversaw the archaeological fieldwork, which commended on April 24, 2019, see Section 5.0 (Appendix B)	Appendix B7, Section 5.0 (Appendix B)
14	The EA will determine the potential effects of the Project on the cultural environment within the study areas. Potential effects can be short-term or long-term, direct or indirect and positive or negative. The EA will also identify ways to reduce or mitigate potential negative effects on these environments and will consider our changing climate.	Recommendations to mitigate potential effects to cultural heritage or archaeological features are documented in Sections 6.8 and 6.9 (EA Report). Details on ways to reduce or mitigate potential negative effects on these environments are described in the Atmospheric Impact Assessment (Appendix D3A) and the Climate Change Impact Assessment (Appendix D3B).	Sections 6.8 and 6.9 (EA Report), Appendix D3A, Appendix D3B
Atmos	spheric & Climate Change		
15	The EA will include studies related to odour and greenhouse gas emissions when considering the preferred site development alternative.	Details on studies related to odour and GHG emissions when considering the preferred site development alternative are documented in Appendix D3A and Appendix D3B.	Appendix D3A, Appendix D3B
16	For each alternative method, quantitative/qualitative indicators of air quality, odour, dust and GHGs will be used to evaluate the relative differences between alternative methods. Air Quality will be included as a criteria group as a component of the natural environment.	The initial evaluation criteria is documented in the Atmospheric Scope of Work and the Climate Change Work Plan (Appendix A2). As committed to in the ToR, the refinement of the evaluation criteria was completed in consultation with agency stakeholders, Indigenous Communities and Organizations, and members of the public. The evaluation criteria table is included as Attachment 1 (EA Report). Consultation activities are documented in Appendix B.	Atmospheric Scope of Work and Climate Change Work Plan (Appendix A2), Attachment 1 (EA Report), Appendix B
17	The estimation of GHGs from the preferred alternative method will be done using established emission factors (e.g., US EPA, Canadian NIR).	The estimation of GHGs from the preferred alternative method was done using established emission factors as detailed in Section 2.1 (Appendix D3B). The criteria	Section 2.1 (Appendix D3B), Attachment 1 (EA Report)



#	Commitment	How was Commitment Addressed	Reference Section in EA
		and indicators used in the impact assessment, including the use of established emission factors (e.g., US EPA, Canadian NIR), are detailed in Attachment 1 (EA Report).	
18	GHGs from on-site vehicles and the haul route will be quantitatively assessed for the preferred alternative method. The preferred alternative method will have various stages of development over the lifetime of the site. GHG emissions will be estimated for the operational scenarios defined under the air quality analysis. These scenarios typically consider milestones in the development of the site and assess air emissions associated with those milestones. The average of these milestone scenarios will be provided as an estimate of the annual GHG emissions from the site. Additionally, post-closure GHGs will be estimated.	D3B).	Sections 2.2 and 2.3 (Appendix D3B)
19	Waste Connections will identify and propose mitigation for the effects of the undertaking on climate change. Waste Connections will consider the climate change impacts of potential woodlot removal in the EA.	Section 6.4 (EA Report) provides an overview of the proposed mitigation for the effects of the undertaking on climate change, including climate change impacts of potential woodlot removal.	Section 6.4 (EA Report)
20	Waste Connections will include an assessment on how the preferred project may contribute to greenhouse gas emissions. Waste Connections will develop a detailed work plan outlining how greenhouse gas emissions will be considered in the environmental assessment for site development activities including woodlot removal, on-site vehicles, the waste haul route as defined in the Terms of Reference, and landfill gas management for the preferred undertaking in consultation with Ministry of the Environment and Climate Change staff. Waste Connections will also consider greenhouse gas emissions as an evaluation criterion for alternative methods. The assessment of landfill gas utilization alternatives will reflect the objective of reducing greenhouse gases from the waste sector as stated in the Climate Change Action Plan.	An assessment on how the preferred project may contribute to GHG emissions is included in Section 6.4 (EA Report) and Appendix D3B. The Climate Change Work Plan is included in Appendix A2.	Section 6.4 (EA Report), Appendix D3B, Climate Change Work Plan (Appendix A2)
21	The EA will also consider how changing climate has the potential to impact the Project and how adaptive measures can be incorporated into the site design. This will be explored, specifically as it relates to the potential for extreme weather events to impact waste management infrastructure through power outages, physical damage, and stormwater management systems and reduced access to the site. Waste Connections will assess the potential effects of climate change on infrastructure components for the preferred undertaking and related potential risks to the environment resulting from these effects. The environmental assessment will include a consideration of climate change adaptation measures to reduce and manage such potential effects during the operation, construction, closure and post-closure phases of the undertaking. Waste Connections will use climate change assessment guidance documents that include, but are not limited to those issued by the Ministry of the Environment and Climate Change in the environmental assessment. The EA will include studies related to odour and greenhouse gas emissions when considering the preferred site development alternative.	how adaptive measures can be incorporated into the site design is detailed in Sections 5.9 and 6.13 (EA Report). Further detail is included in Appendix D3B and Appendix D6.	Sections 5.9 and 6.13 (EA Report), Appendix D3B, Appendix D6
22	Waste Connections will identify and propose mitigation for the effects of the undertaking on climate change, and the effects of climate change on the undertaking, as part of the EA. Discussion of this topic in the EA will consider the MECP's guidance document, <i>Consideration of Climate Change in Environmental Assessment in Ontario</i> .	Section 6.4 (EA Report) describes the potential net environmental effects of climate change on the proposed expansion and the effects of the proposed expansion on climate change as well as the proposed mitigation measures. Further detail is included in Appendix D3B. The Design and Operations Report is included in Appendix D6.	
Bird H	azard and Aviation Safety		
23	Since the Ridge Landfill was present before the zoning designation was enacted, it was granted exemption from federal airport zoning regulations. Under the exemption, operators of the landfill must	As outlined in Section 7.4 (EA Report), Waste Connections is committed to continuing the bird/wildlife management program at the Ridge.	Section 7.4 (EA Report), Section 6.0 (Appendix B), Appendix B8.



#	Commitment	How was Commitment Addressed	Reference Section in EA
	control any bird hazards to aircraft that result from the operation of the landfill, including any expansion of activities. This exemption would need to be extended as part of the EA to accommodate the proposed expansion. Waste Connections will need to commit to continuing the bird/wildlife management program at the Ridge in the EA. This will be clarified in the EA.	Consultation with Transport Canada is documented in Section 6.0 (Appendix B) and Appendix B8.	1
24	The potential risks to aviation and the bird management plan will be revisited as part of this current EA and will form part of the final recommendations of the aviation and bird hazard assessments presented in the EA.	The potential risks to aviation and the bird management plan are addressed in Sections 6.0 and 7.0 (Appendix D4). The recommendations of the aviation and bird hazard assessments are presented in Section 6.12 (EA Report).	Sections 6.0 and 7.0 (Appendix D4), Section 6.12 (EA Report)
Biolog	gical		
25	Waste Connections will consider the form and function of natural features during the EA.	Section 6.1 (EA Report) document the consideration of the form and function of natural features. Further information is provided in the technical disciple appendices, specifically Appendix D5 and Appendix D10.	Section 6.1 (EA Report), Appendix D5, Appendix D10
26	The potential need for a wetland evaluation will be considered during the EA.	As documented in Section 4.2.1 of the Biology Work Plan (Appendix A2) the need for wetland evaluation will be completed during the EA. The wetland evaluation has been detailed in Section 6.1 (EA Report) and Section 5.1.3 (Appendix D5).	Biology Work Plan Section 4.2.1 (Appendix A2), Section 6.1 (EA Report), Section 5.1.3 (Appendix D5)
27	Waste Connections will appropriately consider hedgerows in the evaluation of alternatives and the impact assessment to be completed during the EA.	Sections 3.2.5 and 4.1 (EA Report) address how natural features (including hedgerows) are assessed as part of the EA.	Sections 3.2.5 and 4.1 (EA Report)
28	Waste Connections will continue to use best practices and MNRF guidelines and requirements for conducting field work.	As noted in Sections 4.2 and 4.3 of the Biology Work Plan (Appendix A2), our field methods are consistent with industry best practices and agency approved methodology.	Biology Work Plan Sections 4.2 and 4.3 (Appendix A2), Section 6.0 (Appendix B), Appendix B8
		Consultation with the MNRF is documented in Section 6.0 (Appendix B) and Appendix B8.	
29	Waste Connections will continue to engage the Municipality of Chatham-Kent and the Ministry of Natural Resources and Forestry to ensure that potential effects to woodlots and/or other natural features are mitigated, as appropriate.	Section 6.1 (EA Report) outlines the proposed mitigation measures to ensure that potential effects to woodlots and/or other natural features are mitigated, as appropriate.	Section 6.1 (EA Report), Section 6.0 (Appendix B), Appendix B8
		Consultation with the MNRF and the Municipality of Chatham-Kent is documented in Section 6.0 (Appendix B) and Appendix B8.	
30	Natural environment surveys will be undertaken in accordance with MNRF requirements and industry best practices. Details as to protocols followed, agencies having authority, etc., will be provided in the EA.	Sections 6.0 and 7.0 (Appendix D5) address how baseline conditions will be documented. The field methods are consistent with industry best practices and agency approved methodology.	Sections 6.0 and 7.0 (Appendix D5), Section 6.0 (Appendix B), Appendix B8
		Consultation with the MNRF is documented in Section 6.0 (Appendix B) and Appendix B8.	
31	The project will be reviewed for potential Fisheries Act implications and next steps.	Sections 5.2 and 7.4 (Appendix D5) detail the aquatic assessment undertaken as part of the proposed expansion.	Sections 5.2 and 7.4 (Appendix D5), Table D5-12 (Appendix D5), Section 6.1 (EA Report)
		As part of the Potential Biological Effects and Mitigation Plan it is recommended that the <i>Fisheries Act</i> Self-Assessment process be completed to determine next steps in relation to the <i>Fisheries Act</i> , see Section 6.1 (EA Report) and Table D5-12 (Appendix D5).	



#	Commitment	How was Commitment Addressed	Reference Section in EA
32	The significance of natural features will be determined based on MNRF and planning protocols, including the Provincial Policy Statement (PPS) and Significant Wildlife Ecoregion Schedules. This will be documented in the EA.	Sections 4.0 and 6.0 (Appendix D5) address how baseline conditions will be documented, and significance assessed, based on industry best practices and agency approved methodology and guidance documents.	Sections 4.0 and 6.0 (Appendix D5)
33	 Waste Connections will consider the following criteria as part of the evaluation of alternative methods and the impact assessment of the preferred alternative method: Potential loss of habitat of Endangered or Threatened species Potential loss of medicinal or other culturally sensitive species of importance to First Nations groups 	Section 4.0 and Attachment 1 (EA Report) outlines the criteria considered as part of the evaluation of alternative methods and the impact assessment of the preferred alternative method. As committed to in the ToR, the refinement of the evaluation criteria was completed in consultation with agency stakeholders, Indigenous Communities and Organizations, and members of the public. Consultation activities are documented in Appendix B.	Section 4.0 and Attachment 1 (EA Report), Appendix B
34	Although the Municipality's Official Plan notes that agriculture remains the primary pressure on forest cover, retention of mature woodlots will be carefully considered during the EA process.	Sections 5.1 and 7.1 (Appendix D5) detail the assessment of the woodlots (i.e., northeast, southeast and southwest) identified within the Study Area. Appendix D5-J includes a memo regarding tree replacement and berm naturalization, including the use of native species and/or beneficial plantings.	Section 5.1 and 7.1 (Appendix D5), Appendix D5-J
Desig	n & Operations		
35	Waste Connections commits to developing a site plan during the EA that demonstrates that the Ridge Landfill property is adequate for the proposed expansion.	As documented in the Preliminary Design Drawings Package in Appendix D6, a site plan was developed that demonstrates that the Ridge Landfill property is adequate for the proposed expansion.	· ·
36	 The leachate contaminating life span for groundwater will be assessed for the alternative methods and the preferred alternative method as follows: The waste loading (tonnes of waste per footprint area) for each alternative method will be determined Three leachate generation rates will be assumed per alternative method based on a natural cover, low permeability clay cover and a low permeability geosynthetic cover Leachate characteristics used in the contaminating life span estimates will be taken from Table 1, Section 10 of O.Reg. 232/98 The contaminating life span for each alternative method will be estimated adapting the method used by "Barrier Systems for Waste Disposal Facilities, 2nd Edition", by R. Kerry Rowe, Robert M Quigley, Richard W.I. Brachman & John R. Booker. 	groundwater assessment for the alternative methods and the preferred alternative method. The complete Hydrogeological Impact Assessment is included in Appendix D7.	
37	The landfill gas contaminating life span will be determined by modelling landfill gas generation rates for the site development alternative methods. The landfill gas generation model will indicate how long landfill gas will occur (contaminating life span). An assessment of the natural subsurface landfill gas migration potential, which is limited by low permeability soil, a shallow water table and surface water features, will also be included in the landfill gas contaminating life span assessment.	The landfill gas contaminating life span was determined by modelling landfill gas generation rates for the site development alternative methods as described in Section 4.2 (EA Report). The complete Atmospheric Impact Assessment is included in Appendix D3.	Section 4.2 (EA Report), Appendix D3
38	Potential impacts to nearby receptors such as private drinking water wells will be assessed in the EA using a predictive impact assessment using contaminant transport computer modelling to predict expected concentrations in groundwater in the bedrock aquifer immediately below the landfill. Predicted concentrations will be compared to both the Ontario Drinking Water Standards and the allowable concentrations determined by the <i>Reasonable Use Guidelines</i> .		Section 6.2 (EA Report), Section 6.0 (Appendix D7)



#	Commitment	How was Commitment Addressed	Reference Section in EA
39	Technical cross-sections and a discussion on the relationships between geology, waste, leachate collection and surface water features will be included as part of the EA.	Technical cross-sections and a discussion on the relationships between geology, waste, leachate collection and surface water features have been included as part of the technical discipline work completed for the EA.	Hydrogeology (Appendix D7), Section 3.3.1 and 6.1 (Appendix D10)
40	The design and operations facility characteristics of the preferred alternative method will be determined. Characteristics could include: modifying site contours, site preparation work such as clearing vegetation; moving existing features such as drains or existing landfill facilities; constructing of new landfill cells; modifying leachate, stormwater, and landfill gas management systems; and ongoing operation of the landfill. Closure and post-closure characteristics will also be developed. Facility design will also consider potential extreme weather effects on landfill infrastructure components and the goals to reduce phosphorus loading to Lake Erie as set forth in the Canada-Ontario Lake Erie Action Plan.	documented in Section 5.0 of the EA and in Appendix D6 - Design and Operations Report. Consideration was given to potential extreme weather effects on landfill infrastructure components and this is documented in Appendix D6 - Design and Operations Report and Appendix D3B - Climate Change Assessment. The goals to	
41	Native species and/or beneficial plantings will be considered as part of landscape planning for the EA with input from Aamjiwnaang First Nation.	Appendix D5-J includes a memo regarding tree replacement and berm naturalization, including the use of native species and/or beneficial plantings. As outlined in Section 7.4, (EA Report), Waste Connections is committed to continue to consult with Indigenous Communities and Organizations.	Appendix D5-J, Section 7.4, (EA Report)
Hydro	geological		
42	Waste Connections commits to further development of the hydrogeology EA work plan with the MOECC's Southwest Region Hydrogeologist. As part of these discussions, Waste Connections commits to discussing groundwater sampling parameters and locations.	Communication with the MECP's Hydrogeologist and MECP's Project Officer is documented in Section 6.1 (Appendix B) and Appendix B8. Groundwater sampling parameters are discussed in Section 4.4 and sampling locations are discussed in Section 4.1 of the Hydrogeology Work Plan (Appendix	Section 7.1.2 (EA Document), Section 6.1 (Appendix B), Appendix B8 Section 4.4 and 4.1 of Hydrogeology Work
		A2) and in Sections 7.1.2 (EA Document).	Plan (Appendix A2),
43	Waste Connections commits to incorporating a section in the EA that describes potential effects to nearby receptors (i.e., private drinking water wells). This section will include discussion on the private drinking water well supplies in the area and will also demonstrate that compliance with the Reasonable Use Guideline is sufficient to show that off-site receptors are not at risk." The methodology to assess potential effects to nearby receptors is to use the results of the predictive contaminant transport and fate modelling that will be completed as part of the Reasonable Use assessment. The travel time to the drinking water aquifer from the surface through the clay aquitard is many hundreds of years and will protect private drinking water wells. Private water well users in the vicinity of the site will be identified via a survey.	The assessment of potential impacts to nearby receptors such as water supply wells is described in Section 6.2 (EA Report) and Section 6.0 (Appendix D7).	Section 6.2 (EA Report), Section 6.0 (Appendix D7)
Socio-	Economic		
44	The socio-economic impact assessment will assess potential effects within a regional study area that includes communities in the Municipality of Chatham-Kent.	As stated in Sections 3.1, 6.5 and 6.6 (EA Report), the Socio-Economic Impact Assessment considered the potential effects within a regional context that included neigbouring communities in the Municipality of Chatham-Kent and the Municipality of Chatham-Kent as a whole.	Sections 3.1, 6.5 and 6.6 (EA Report)



#	Commitment	How was Commitment Addressed	Reference Section in EA
45	Property owners who will be receiving compensation will be notified in writing and advised of the level of compensation to be received. Property owners who qualify for property value protection will also be notified.	, ,	Appendix D9
46	Waste Connections will employ an information collection process that includes an in-person survey of residents and businesses within 1 km of the site and along the haul route related to their use and enjoyment of property. More specific details on the data collection methodology will be documented in the EA.	An overview of the socio-economic surveys and follow-up discussions is included in Section 4.0 (Appendix D9).	Section 4.0 (Appendix D9)
Surfac	e Water		
47	Waste Connections commits to developing the EA Surface Water work plan with the MECP's Southwest Region Surface Water Specialist. This will include a discussion of surface water sampling locations. This work plan would include a stormwater analysis for each alternative method assessing changes to surface water flows and potential impacts to surface water features.	the MECP on the Surface Water Work Plan is documented in Section 6.1 (Appendix	Section 2.3 (Appendix D10), Section 6.1 (Appendix B), Appendix B8
48	Impact assessment criteria for surface water will include water chemistry, fish and benthics.	The initial impact assessment criteria for surface water is document in Section 3.0 of the Surface Water Work Plan (Appendix A2). The evaluation criteria table has been revised in consultation with the MECP and is included as Attachment 1 (EA Report)	Surface Water Work Plan (Appendix A2), Attachment 1 (EA Report)
49	Waste Connections' approach to surface water management is to mitigate surface water quantity/quality impacts to meeting pre-development conditions at the surface water release point to the Howard Drain. As such, each alternative method will be evaluated on its ability to release pre-development flows downstream, i.e., baseline conditions.		Sections 5.5 and 7.1 (EA Report), Section 5.3 (Appendix D10)
50	The conceptual design/locations for stormwater management will be incorporated into the site development and the impact assessment of the preferred alternative.	The surface water management plan for the proposed landfill expansion is presented in Section 5.5 (EA Report) and Section 6.0 (Appendix D6). Information on stormwater management is also included in Section 5.3 and Figure D10-15 (Appendix D10).	Section 5.5 (EA Report), Section 6.0 (Appendix D6), Section 5.3, Figure D10-15 (Appendix D10)
51	The surface water technical studies will include the assessment of on-site drains and requirements under the <i>Drainage Act</i> , as needed. Waste Connections will also consult with the Municipality of Chatham-Kent for <i>Drainage Act</i> requirements as they pertain to planning approvals.	· ·	Section 10.1 (EA Report), Appendix D10, Section 6.0 (Appendix B), Appendix B8
Transp	ortation		
52	The transportation impact assessment of the undertaking will consider anticipated traffic associated with any additional diversion occurring at the site confirmed through the EA process.	Traffic associated with additional diversion occurring at the site as a result of the Undertaking will be minimal as noted in Appendix D11 and the Review of Diversion Options Report (Appendix E).	Appendix E, Section 4.0 (Appendix D11)
53	Baseline collision data will be considered and analyzed as part of the overall safety assessment during the EA.	The analysis of baseline collision data for a recent 5-year period is documented in Section 3.4 (Appendix D11).	Section 3.4 (Appendix D11)
Visual			
54	The EA will determine the potential for negative impacts from the proposed expansion including potential impacts such as litter and visual impacts. To minimize these impacts, mitigation will be proposed which could include planting vegetation on berms.		Section 6.0 (EA Report), Appendices D1 to D12
55	Native species and/or beneficial plantings will be considered as part of landscape planning for the Mitigation Measures.	As described in Section 5.0 (Appendix D12) the use of native species and/or beneficial plantings are being considered as part of landscape planning.	Section 5.0 (Appendix D12)



#	Commitment	How was Commitment Addressed	Reference Section in EA
56	The results of previously used strategies to reduce off-site visual impact of the landfill will be considered as part of the EA.	Previously used strategies to reduce off-site visual impacts (i.e., berms) are discussed in Section 5.0 (Appendix D12).	Section 5.0 (Appendix D12)
Alter	native Methods & Impact Management		
57	The EA will determine the potential effects of the Project on the natural, cultural, socio-economic and transportation environments within the study areas. Potential effects can be short-term or long-term, direct or indirect and positive or negative. The EA will also identify ways to reduce or mitigate potential negative effects on these environments and will consider our changing climate.	Section 4.0 and Attachments 2, 3, and 4 (EA Report) outline the potential effects of the Project on the natural, cultural, socio-economic and transportation environments within the study areas as well as ways to reduce or mitigate potential negative effects on these environments, including potential impacts due to our changing climate.	Section 4.0, Attachments 2, 3, and 4 (EA Report)
58	Measures to reduce or mitigate potential effects will be identified and documented in the EA. Mitigation measures will be developed in consultation with Project stakeholders.	Measures to reduce or mitigate potential effects are identified in Section 6.0 (EA Report). As described in Appendix B, Waste Connections implemented an EA consultation program that provided interested stakeholders with various opportunities to learn about the Project, provide input, and express their comments or concerns.	Section 6.0 (EA Report), Appendix B
59	The proposed expansion will be developed in phases over time. As such, the EA will consider the potential for impacts during construction, operation and post-closure of the proposed landfill expansion		Section 6.0 (EA Report), Section 12.0 (Appendix D6)
60	Waste Connections is committed to minimizing the release of greenhouse gases from the Ridge Landfill with its landfill gas management system that collects landfill gas (approximately 50% methane) and flares it. Waste Connections is currently evaluating the potential for a biogas facility that would use landfill gas from the Ridge.	Section 4.0 (EA Report) include an assessment of landfill gas treatment or utilization alternatives for the proposed expansion.	Section 4.0 (EA Report)
61	Waste Connections will incorporate an assessment of landfill gas treatment or utilization alternatives for the expansion into the EA.	Section 4.2 (EA Report) include an assessment of landfill gas treatment or utilization alternatives for the proposed expansion.	Sections 4.2 (EA Report)
62	A review of the existing leachate management system, including the Blenheim Waste Water Treatment Lagoon and associated piping, will be undertaken to confirm sufficient capacity for leachate management from an expanded landfill. As part of this review, Waste Connections will assess other reasonable long term leachate treatment alternatives.	An overview of the existing leachate management system, including the Blenheim Waste Water Treatment Lagoon and associated piping is included in Section 3.2.6 (EA Report). Other leachate treatment alternatives were also assessed. The Design and Operations Report is included in Appendix D6.	Section 3.2.6 (EA Report), Appendix D6
63	Mitigation measures will be incorporated into an overall mitigation and monitoring plan which Waste Connections will be required to implement if the EA is approved. The mitigation and monitoring plan wil also include auditing of the mitigation measures to ensure they are working as planned. Contingency measures will be developed in the event that mitigation measures are not functioning properly.	i i i i i i i i i i i i i i i i i i i	Sections 6.0 and 7.0 (EA Report), Appendix D6
		A mitigation and monitoring plan, as well as contingency measures, will be implemented if the EA is approved	
64	The proposed expansion will stay within the maximum height allowed for the airport.	As noted in Section 4.0 (EA Report), no additional impact to the airport is expected for any of the proposed site development alternatives since the height of each alternative is within the regulated height limitation.	4.0 (EA Report)
65	For each alternative method, quantitative/qualitative indicators of air quality, odour, dust and GHGs will be used to evaluate the relative differences between alternative methods.		Attachment 1 (EA Report), Appendix D3, Appendix D3B



#	Commitment	How was Commitment Addressed	Reference Section in EA
66	Waste Connections will consider greenhouse gas emissions as an evaluation criterion for alternative methods.	GHG emissions were considered as an evaluation criterion for alternative methods as documented in Attachment 1 (EA Report).	Attachment 1 (EA Report)
67	Air quality will be included as a criteria group as a component of the natural environment.	Air quality was included as a criteria group as a component of the natural environment as documented in Attachment 1 (EA Report).	Attachment 1 (EA Report)
68	Waste Connections commits to incorporating a section in the EA that describes how potential effects to nearby receptors (i.e., private drinking water wells) will be assessed. This section will include discussion on the private drinking water well supplies in the area and will also demonstrate that compliance with the <i>Reasonable Use Guideline</i> is sufficient to show that off-site receptors are not at risk.	Sections 6.2 and 6.3 (EA Report) provides an overview of the potential net environmental effects on hydrogeology and surface water features. The detailed impact assessments are included in Appendices D7 and D10.	Sections 6.2 and 6.3 (EA Report), Appendices D7 and D10
69	The impact assessment of the preferred site development alternative will include a thorough outline of the current monitoring and evaluation of historical monitoring data.	The Hydrogeological Impact Assessment (Appendix D7) of the preferred site development alternative includes thorough outline of the current monitoring and evaluation of historical monitoring data.	Appendix D7
70	Table 1 in Appendix B outlines the preliminary draft evaluation criteria for the comparison of alternative methods for landfill site development, leachate management, and landfill gas management. These criteria and indicators will be further developed in consultation with agency stakeholders, Indigenous communities, and members of the public during the environmental assessment process.	The refinement of the evaluation criteria was completed in consultation with agency stakeholders, Indigenous Communities and Organizations, and members of the public. The evaluation criteria table is included in Attachment 1 (EA Report). Consultation activities are documented in Appendix B.	Section 4.0 (EA Report), Appendix B
71	The proposed impact assessment criteria, outlined in Appendix B to predict the potential effects of the project and associated activities on the environment are preliminary, and will be further developed in consultation with government agencies, Indigenous communities and interested members of the public. The impact assessment criteria will also consider the potential effects of greenhouse gases from waste hauling activities and site activities from all phases of the project, including post-closure and proposed mitigation measures.	The refinement of the evaluation criteria was completed in consultation with agency stakeholders, Indigenous Communities and Organizations, and members of the public. The evaluation criteria table is included in Attachment 1 (EA Report). Consultation activities are documented in Appendix B.	Section 4.0 (EA Report), Appendix B
72	As part of developing the site development alternatives, a review of other experience at landfill mining operations related to odour will be undertaken.	As described in Section 4.1 (EA Report), landfill mining was considered as part of the assessment of site development alternatives. A Landfill Mining Assessment Report is included as Appendix F.	Section 4.1 (EA Report), Appendix F
Consu	Itation		
73	Waste Connections was and remains committed to engaging stakeholders to ensure that interested parties can provide their input on the Project. During the EA, Waste Connections will engage in a variety of stakeholder consultation activities, including: notification and distribution of Project information using the Project contact list, distribution of updates through mail and electronic correspondence, a community newsletter and the Project website; meetings with neighbours, elected officials, Indigenous communities and other stakeholders; an EA criteria workshop; open houses; and, updates to the Ridge Landfill Liaison Committee.	Details on consultation activities with government agencies, Indigenous Communities and Organizations, and the public are documented in Appendix B.	Appendix B
74	As a living document, the Project contact list will be continuously updated to include new participants as the Project unfolds.	As noted in Section 1.3 (Appendix B) the Project contact list was continuously updated to include new participants as the Project unfolded.	Section 1.3 (Appendix B)
75	Waste Connections is committed to considering all issues raised. Issues or concerns raised during the EA will be documented in a comprehensive table which will also document the response to the issue and how it was addressed in the EA. If issues are raised that cannot be addressed in the EA, this will be noted along with the rationale.	Comment and response tables of all issues raised over the course of the EA are included in Appendix B as the following attachments: • Attachment 1 - Public Stakeholder Comment and Response Table • Attachment 2 - Indigenous Communities and Organizations Comment and Response Table • Attachment 3 - Agency Comment and Response Table	Appendix B
76	Waste Connections will have ongoing consultation with the MECP's Project Officer during the EA to keep them aware of potential adjustments to the activities outlined in the ToR.	Consultation with the MECP's Project Officer took place throughout the EA and is documented in Section 6.1 (Appendix B) and Appendix B8.	Section 6.1 (Appendix B), Appendix B8



#	Commitment	How was Commitment Addressed	Reference Section in EA
77	Waste Connections commits to ongoing consultation with the MECP's Air Quality Specialist to determine the appropriate scope of air, greenhouse gas, and odour assessment during the EA.		Sections 4.6 and 5.2 (Appendix D3), Section 6.1 (Appendix B), Appendix B8
78	Waste Connections will continue to liaise with the Lower Thames Valley Conservation Authority during the EA on matters related to stormwater and drainage and tree planting.	As detailed in Section 6.7 (Appendix B), Waste Connections has been in communication with the Lower Thames Valley Conservation Authority (LTVCA) to discuss woodlot compensation as part of the proposed Ridge Landfill expansion. Drainage related concerns were discussed with the Municipality of Chatham-Kent. Communication with the Municipality is documented in Section 6.5 (Appendix B).	Section 6.5 and 6.7 (Appendix B)
79	Waste Connections acknowledges that the Design and Operations Report will need to be reviewed by AFN as it is advanced.	AFN will be notified once the Preliminary Design & Operations Impact Assessment is ready for review.	N/A
80	The specific site development alternatives will be presented for consultation during the EA.	Specific site development alternatives were presented at the Evaluation Criteria Workshop and the Open Houses as documented in Sections 4.1 and 4.2 (Appendix B) as well as the draft Interim Alternative Methods Report. As noted in Section 3.0 (Appendix B), the draft report was made available for review.	Sections 4.1 and 4.2 (Appendix B), Alternative Methods Report
81	A summary of the technical work to be undertaken as part of the EA impact assessment is included in Appendix A. These work plans are preliminary and will be finalized based on input from interested government agencies, Indigenous communities, and the public. Waste Connections will consult with the Ministry of the Environment and Climate Change prior to the finalization of air quality, hydrogeology, and surface water quality work plans to ensure that the proposed studies will adequately characterize the existing environment as well as allow for the accurate prediction of impacts during the entire lifecycle of the proposed landfill.	Organizations, and the public on the work plans is documented in Sections 4.0 to	Sections 4.0 to 6.0 (Appendix B)
	Waste Connections will consult with the Ministry of Transportation on the preparation of a traffic impact study that considers the impacts of the existing waste haul route, as defined in the Terms of Reference, on the Highway 401/Highway 40 interchange. Waste Connections is committed to continued consultation with Ministry of Transportation over the course of the environmental assessment.	route considered traffic data obtained from the Ministry of Transportation as	Sections 2.0 (Appendix D11), Section 6.3(Appendix B)
82	Waste Connections has reached out to DFO and will continue to liaise with them during the EA.	During the design phase of the project, Waste Connections will liaise with DFO in accordance with the appropriate processes under the Fisheries Act.	Section 11.2 (Appendix D5)
83	Waste Connections commits to developing evaluation criteria based on feedback obtained during consultation.	Details on consultation with government agencies, Indigenous Communities and Organizations, and the public prior to the evaluation of alternative methods is documented in Sections 4.0 to 6.0 (Appendix B).	Sections 4.0 to 6.0 (Appendix B)
84	Waste Connections commits to revise/confirm the proposed impact assessment criteria based on feedback obtained from consultation activities.	Details on consultation with government agencies, Indigenous Communities and Organizations, and the public prior to the evaluation of alternative methods and impact assessment work is documented in Sections 4.0 to 6.0 (Appendix B).	Sections 4.0 to 6.0 (Appendix B)
85	The EA will reflect that the formal review period for the submission is 7 weeks.	To be completed once final EA is submitted.	To be completed once final EA is submitted.
86	The difference between the OP designation and zoning in the Zoning By-law will be clarified in the EA. This will include discussion of the potential need for an OPA and/or ZBA and will summarize consultation with municipal staff.		Section 6.5 (Appendix B)
87	Waste Connections will use the Walpole Island Consultation Protocol and is committed to ongoing consultation with Indigenous Communities.	Consultation with the Walpole Island First Nation is documented in Section 5.4 (Appendix B).	Section 5.4 (Appendix B)
88	Waste Connections commits to making follow up calls [to Indigenous Communities] after the distribution of letter notification.	Telephone conversations with Indigenous Communities and Organizations are documented in a Phone Call Log (Appendix B7).	Phone Call Log (Appendix B7)



#	Commitment	How was Commitment Addressed	Reference Section in EA
89	Indigenous Communities will continue to be kept aware of EA consultation activities, and Waste Connections would be pleased to offer in-person meetings to further discuss questions or concerns throughout the EA process. Waste Connections plans to host a public open house to get input [on alternative site layouts] and would be happy to meet specifically with Walpole Island/Aamjiwnaang First Nation at this stage and at all other milestone stages during the environmental assessment process to get specific input.	Consultation with Indigenous Communities and Organizations is documented in Section 5.0 (Appendix B).	Section 5.0 (Appendix B)
90	Waste Connections commits to continuing to involve Aamjiwnaang First Nation in the Terms of Reference and environmental assessment and to keeping Aamjiwnaang First Nation informed of significant project updates.	Consultation with Aamjiwnaang First Nation is documented in Appendix B7.	Appendix B7
91	Waste Connections would be pleased to discuss with Aamjiwnaang First Nation the ecological survey work that remains to be undertaken for the environmental assessment and how Aamjiwnaang First Nation could participate during the environmental assessment.	Consultation with Aamjiwnaang First Nation is documented in Appendix B7.	Appendix B7
92	Waste Connections will keep Indigenous Communities apprised of field work scheduling as the EA progresses. Waste Connections will discuss participation in field studies with Aamjiwnaang First Nation and Walpole Island First Nation.	Consultation with Indigenous Communities and Organizations is documented in Section 5.0 (Appendix B). Communication with Aamjiwnaang First Nation and Walpole Island First Nation is included in Appendix B7.	Section 5.0 (Appendix B), Appendix B7
93	Property owners will be invited to public consultation events (workshops and open houses) to determine a preferred site development alternative which will then be subject to a socio-economic impact assessment.	An overview of notices sent to property owners is included in Section 3.1 (Appendix B).	Section 3.1 (Appendix B)
94	Waste Connections will use the Aamjiwnaang First Nation Consultation Protocol and is committed to ongoing consultation with Indigenous Communities.	Consultation with Aamjiwnaang First Nation is documented in Appendix B7.	Appendix B7
95	The main body of the EA report will include a summary of issues and concerns raised during consultation, which will be described in more detail in the Record of Consultation. The Record of Consultation for the environmental assessment will include a consultation log categorized by government agency, Indigenous community, and by interested group/individual that directs readers to parts/sections of the Record of Consultation where the original correspondence can be found.	A summary of issues and concerns raised during the consultation is included in Section 8.5 (EA Report). The complete consultation log is included in Appendices B1 to B8.	Section 8.5 (EA Report), Appendices B1 to B8
96	Waste Connections commits to continuing to consult with MTO on the Ridge Landfill Expansion EA and in particular on the planned traffic study for the Ridge Landfill.	Data was obtained from the MTO for the transportation analysis, which is referenced in Sections 2.3 and 3.4 (Appendix D11). Communication with the MTO is detailed in Section 6.3 (Appendix B).	Sections 2.3 and 3.4 (Appendix D11), Section 6.3 (Appendix B)
97	Waste Connections commits to contacting MNRF, Aylmer District regarding subsequent notices as part of the EA process for this project.	Consultation with the MNRF, Aylmer District is documented in Section 2.0 (Appendix D5) and Section 6.2 (Appendix B).	Section 2.0 (Appendix D5), Section 6.2 (Appendix B)
98	The Municipality of Chatham-Kent will be provided with the Ministry of Municipal Affair's January 26, 2018 letter for consideration when reviewing EA documentation for this project.	The Ministry of Municipal Affair's letter will be send to the Municipality of Chatham-Kent when reviewing EA documentation for this project.	Appendix B8
99	Waste Connections will continue to engage the Municipality of Chatham-Kent to ensure that the requirements of Official Plan and Zoning By-law amendments are satisfactorily met.	Consultation with municipal planning staff took place in August and September 2018 and March 2019 and is documented in Section 6.4 (Appendix B).	Section 6.4 (Appendix B)
100	Waste Connections will continue to engage the Municipality of Chatham-Kent and the Ministry of Natural Resources and Forestry to ensure that potential effects to woodlots and/or other natural features are mitigated, as appropriate. Waste Connections commits to contacting Ministry of Natural Resources and Forestry, Aylmer District, regarding subsequent notices as part of the environmental assessment process for this project.	Consultation with the Municipality of Chatham-Kent and the MNRF on the potential effects to woodlots and/or natural features is documented in Section 6.2 and 6.5 (Appendix B) and referenced in Appendix D5.	Section 6.2 and 6.4(Appendix B), Appendix D5



#	Commitment	How was Commitment Addressed	Reference Section in EA
Wast	e Diversion		
101	The Food and Organic Waste Policy Statement under the Resource Recovery and Circular Economy Act, 2016, directs both municipalities and the industrial, commercial and institutional sector to expand food and organic waste collection programs across the province and ensure that all collected food and organic waste is sent for recovery instead of disposal. Waste Connections will assess how this direction may impact the volume and composition of the disposal streams managed at the Ridge Landfill and the need for additional landfill capacity.	As stated in Section 9.0 (EA Report) Waste Connections is committed to considering opportunities to enhance waste diversion and assist the Province in meeting its diversion goals laid out in the Province's Made-in-Ontario Environment Plan and the Food and Organic Waste Policy Statement. Appendix E includes the Review of Diversion Options Report.	Section 9.0 (EA Report), Appendix E
102	Waste Connections commits to examining and considering the feasibility and viability of implementing an on-site diversion program as part of the preferred landfill expansion method.	The feasibility and viability of implementing an on-site diversion program at the Ridge Landfill is discussed in Section 9.0 (EA Report) and Appendix E.	Section 9.0 (EA Report), Appendix E
103	Waste Connections is committed to implementing further and enhanced waste diversion programs for the IC&I sector and to partner with the Municipality of Chatham-Kent to align with the objectives of the Strategy for a Waste-Free Ontario.	As detailed in Section 9.0 (EA Report) and Appendix E, Waste Connections remains committed to implementing further and enhanced waste diversion programs for the IC&I sector and to partner with the Municipality of Chatham-Kent to align with Provincial policies and guidelines.	Section 9.0 (EA Report), Appendix E
104	Specific system-wide alternative methods to enhance waste diversion will not be considered in detail as part of the EA; however, Waste Connections has committed to assisting the province in meeting its diversion goals, and opportunities for Waste Connections to enhance its existing waste diversion activities, either at source, at the Ridge or elsewhere in Waste Connections' integrated system will be examined further in the environmental assessment as an activity concurrent to the evaluation of alternative methods for landfill site expansion. Waste Connections will examine and evaluate the feasibility and viability of implementing an on-site diversion program as part of the preferred landfill expansion method. This will include the consideration and assessment of a reasonable number of ways in which to divert the types of waste materials received at site. The assessment of an on-site diversion program will be carried out in accordance with best management practices, in consideration of new and emerging technologies, and in recognition of the goals and expectations set forth in the Resource Recovery and Circular Economy Act, 2016 and the Strategy for a Waste-Free Ontario: Building the Circular Economy Act, 2016 directs proponents of new or expanded waste management systems for disposal to consider resource recovery opportunities for food and organic waste. Waste Connections will include an assessment on how additional resource recovery activities could help reduce the disposal of food and organic waste at the Ridge Landfill.	Ridge Landfill is discussed in Section 9.0 (EA Report) and Appendix E.	Section 9.0 (EA Report), Appendix E

