

9. Consultation and Engagement

This section of the EA Study Report provides a summary of the consultation and engagement program undertaken as part of the EA. This includes a description of how the consultation and engagement program influenced or resulted in changes to the proposed project. The detailed information related to the consultation and engagement program is included in **Supporting Document 4 – Record of Consultation and Engagement**.

9.1 Overview of the Consultation and Engagement Process for the EA

In accordance with the MOECC's Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario (January 2014), Code of Practice: Consultation in Ontario's Environmental Assessment Process (January 2014) and as required by Section 5.1 of the OEAA, a consultation and engagement program involving agencies, Indigenous groups, and the public was carried out during the EA process.

The approved ToR included a consultation program to be undertaken for the EA (**Appendix A**). The EA consultation program was developed based on the following principles:

- transparency, accountability and accessibility;
- identification of stakeholder and Indigenous community concerns early in the process and addressing these concerns in the EA;
- multiple points of consultation and engagement throughout the EA using a variety of techniques (in-person, digital, print); and
- documentation of issues, concerns and responses in the EA.

The consultation program outlined the components and activities to be undertaken during the EA. A commitment was also made to continue to engage Indigenous communities and organizations with a potential interest in the project. The following subsections describe how each of these activities was implemented during the course of the EA.

By following the consultation program and consulting with interested people, GFL was able to provide opportunities for input before decisions were finalized and respond by making changes as appropriate. The input and comments received through the EA consultation process will be incorporated into the EA Study Report.

9.2 Participants in the EA Process

A broad group of participants were consulted and engaged in the EA process. This included:

- governmental departments, ministries and agencies with an interest in the project, typically referred to as the GRT;

- local municipalities, including the host Township of North Stormont;
- Indigenous communities in the vicinity of the EOWHF or with an interest in the project; and
- general public including residents, landowners, businesses and other stakeholders with an interest in the outcome of the EA.

A participants list for the EA was prepared based on the consultation and engagement process completed during the ToR. The participants list was updated throughout the EA process, including both the addition and removal of participants as required and when requested. A copy of the complete participants list is included in **Appendix A of Supporting Document 4**.

A list of the GRT members including federal, provincial and municipal agencies consulted during the EA process is provided below:

Government Review Team (GRT)

- Ministry of Indigenous Relations and Reconciliation (formerly Ministry of Aboriginal Affairs)²⁸
- Ministry of Northern Development and Mines
- Ministry of Agriculture, Food and Rural Affairs
- Ministry of Tourism, Culture and Sport
- Ministries of Citizenship and Immigration, Tourism, Culture and Sport
- Ministry of Education
- Ministry of Community Safety and Correctional Services
- Ontario Provincial Police
- Indigenous and Northern Affairs Canada
- Transport Canada²⁸
- Environment and Climate Change Canada
- Ministry of Economic Development and Growth
- Ministry of Energy
- Ministry of Long-Term Care
- Ontario Growth Secretariat
- Ministry of Municipal Affairs and Housing
- Ministry of Natural Resources and Forestry
- Ministry of Transportation
- Canadian Environmental Assessment Agency²⁸
- Ministry of Environment and Climate Change (MOECC)
- Civil Aviation Service Standard²⁸

²⁸ Agency removed from the contact list as requested during the EA Process.

Municipal Agencies

- Corporation of the Nation Municipality
- Eastern Ontario Health Unit
- North Stormont Fire Services
- South Nation Conservation Authority
- United Counties of Prescott-Russell
- United Counties of Stormont, Dundas and Glengarry
- Township of North Stormont
- Raisin Region Conservation Authority
- Russell Township
- Upper Canada District School Board
- Village of Casselman
- Catholic District School Board of Eastern Ontario

Local residents within the vicinity of the EOWHF and neighbouring property owners were contacted as part of the Notice of Commencement of the project. Additional members of the public were added to the participants list during the course of the EA upon request. Members of the Community Liaison Committee were also included on the participants list.

During the preparation of the ToR, the following Indigenous communities and organizations were identified as having a potential interest in the project. These Indigenous communities and organizations were contacted during the development of the ToR and throughout the EA process.

Indigenous Communities and Organizations

- Mohawk Council of Akwesasne
- Huron Wendat Nation Council
- Mohawks of the Bay of Quinte – Tyendinaga Mohawk Council
- Algonquins of Ontario Consultation Office
- Métis Nation of Ontario Council
- Métis Nation of Ontario Ottawa Region Métis Council

9.3 Consultation and Engagement Activities

The following section provides a description of all consultation and engagement activities undertaken with the government and municipal agencies, Indigenous communities and organizations, and the public.

9.3.1 Notice of Commencement

The GRT, Indigenous communities and members of the public, including neighbouring property owners, were notified of the EA by a Notice of Commencement. All participants were sent a copy by mail of the Notice in both English and French languages. A personalized letter and a copy of the Notice were sent by registered mail to each Indigenous community and organization in both English and French (**Appendix D of Supporting Document 4**). All Notices were sent to participants on June 5, 2017.

The EA Notice of Commencement was published in English and French in the Cornwall Standard Freeholder newspaper on June 7, 2017 and in Le Reflet-The News newspaper on June 8, 2017.

Both the English and French versions of the EA Notice of Commencement were posted on the project website (www.leic.com/about/projects) on June 7, 2017.

Copies of the Notice of Commencement and newspaper notices are included in **Appendix B of Supporting Document 4**.

Comments were received from the Huron-Wendat Nation following the Notice of Commencement. A summary of the comments is provided below and a detailed copy of the correspondence is included in **Appendix D of Supporting Document 4**. Comments were also received from the Ministry of Northern Development and Mines. A summary of the comments is provided in **Table 9-1** and a detailed copy of the correspondence is included in **Appendix E of Supporting Document 4**.

Table 9-1. Comments Received Following the Notice of Commencement

Date	Comment Summary	Response / How Comment was Addressed in the EA
<i>Huron-Wendat Nation</i>		
June 8, 2017 Email	<p>Any further correspondence should be addressed to Grand Chief Konrad Sioui.</p> <p>We would like to know if any archaeological assessments have been done on this project or if any are anticipated in the future?</p>	<p>The participants list for the project was updated to reflect this request.</p> <p>A Stage 1 Archaeological Assessment of the entire 189 hectare landfill site property was completed as part of the original EA, approved in 1999. The Stage 1 assessment determined that there is no archaeological potential within the boundaries of the existing facility, including the proposed expansion areas. Subsequently the Provincial interest in archaeology for the property was signed off on in a letter dated November 2, 1999. No further archaeological assessment is planned for this project as a result.</p>
June 12, 2017 Email	<p>Thanks for clarifying the situation on archaeology.</p> <p>The Huron-Wendat Nation would like to stay informed if any update on archaeology occurred.</p>	Comment acknowledged.
<i>Ministry of Northern Development and Mines</i>		
July 11, 2017 Email and Letter	<p>MINING LANDS: No concerns with respect to mining lands in the area.</p> <p>ABANDONED MINES REHABILITATION PROGRAM: No concerns from the Abandoned Mines Rehabilitation Program. There are some sites in close proximity to the project area. This site is under the jurisdiction of the Ministry of Natural Resources and Forestry's (MNRF)</p> <p>Aggregate Resources Act (ARA). The Ministry of Northern Development and Mines recommends contacting the MNRF for further information of these sites.</p>	Comments acknowledged.

Table 9-1. Comments Received Following the Notice of Commencement

Date	Comment Summary	Response / How Comment was Addressed in the EA
	<p>RESIDENT GEOLOGIST PROGRAM: The Resident Geologist Program (RGP) of the Ontario Geologist Survey has completed the following:</p> <ol style="list-style-type: none"> 1. According to the Ministry’s Mineral Deposit Inventory (MDI) for mineral occurrences: There are no known mineral occurrences within 1 kilometre of the site. 2. The Ministry’s Assessment File Report Inventory (AFRI) database to determine whether past mineral exploration activity has been reported for the proposed area: there are no assessment files for this area; 3. The GIS-based “Metallic Mineral Potential Estimation Tool” to get an estimation of the mineral potential of the proposed project area: medium - low metallic mineral potential is estimated for the area (maximum value of 47.5). 4. The Groundwater Study 5, Karst of Southern Ontario and Manitoulin Island for identified karst hazard: no known karst in this area. 5. Reviewed the Terms of Reference for the EA to assess the potential environmental considerations identified. 	

9.3.2 Public Open Houses

The EA consultation program outlined in the approved ToR identified that one open house (Public Open House #2) would be held during the EA. It was intended that the open house be held following the comparative evaluation of the alternative methods and identification of the Preferred Alternative. Given the period of time that had elapsed between submission of the final ToR (July 2015) and the approval of the ToR (May 2017), GFL considered it appropriate to host an additional open house. The purpose of this additional event was to update the community on the project, present information on the existing environmental conditions, and provide additional details on the development of the two alternative methods being assessed in the EA. The second EA open house (Public Open House #3) would then present the results of the assessment. Details of the two open houses are provided in the following sections.

9.3.2.1 Public Open House #2

Public Open House #2 took place on Wednesday June 21, 2017 at the EOWHF Administrative Office, 17125 Lafleche Road, Moose Creek, Ontario from 16:00 to 20:00. The open house was organized to allow attendees to circulate around the room, review the information on the poster boards and ask questions of GFL staff and consultants.

Based on the completed sign-in sheet the open house was attended by 17 people in addition to GFL and consulting staff.

Notification of the open house was provided in advance to agencies, Indigenous communities and organizations and the public as part of the Notice of Commencement as described in **Section 9.3.1**.

The purpose of the open house was to provide attendees with an update on the project, the EA process, and information on the existing conditions within the on-site and off-site study areas, the proposed landfill expansion alternative methods, and the consultation process that will be followed during the development of the EA. The open house was organized in an information session format with poster boards displayed around the periphery of the room. GFL staff and consultants were available to discuss the information panels, receive comments and answer questions. As members of the public arrived, they were asked to sign-in and were then given a comment form which included questions regarding the information presented. The members of the public were given the option of filling out the forms on-site or providing their comments via mail, email or fax to the project team.

All presentation material at the open house was available in both French and English. Bilingual staff members were also present at the open house. Presentation materials were posted to the project website following the open house.

Completed comment forms were requested by July 7, 2017. One comment form was received at the open house and two additional comment forms were received prior to July 7, 2017. The comments received are included in **Table 9-2**. Verbal comments received at the open house were addressed by staff as they were received.

Table 9-2. Summary of Comments Received from Public Open House #2 Comment Forms

1. My interest in the project is: (please check all that apply)	
3 residential property	3 air quality (dust, noise, odour [x2])
0 business	1 ecology
0 member of interest group	2 groundwater, surface water
0 agency representative	1 land use / visual
0 other: _____	0 transportation
2. Please provide any general comments about the information presented at this Public Open House.	
While I applaud the EOWHF's purpose & end goals, I have serious reservations about the quality of the air that I breathe when mother nature dumps volumes of noxious fumes at my doorstep, when wind directions are optimum. I understand that steps are being taken to lay down new membrane to seal off the escaping gases. When is this going to happen?	
Okay, but the visit (tour + info with slides) with Gabriel Lefebvre was A+. Don't let him go. He is an asset for the company.	
Excellent	
3. After reviewing the information presented at this Public Open House, do you have any additional comments, concerns or recommendations regarding the current operations at the EOWHF and/or the proposed project that have not been addressed today? (Yes/No)	
(No response provided)	
(Yes). Take care of the odor problem.	
(Yes). Are there no new ways to proceed since 1999? [translated]	

Table 9-2. Summary of Comments Received from Public Open House #2 Comment Forms

<p>4. Do you have any specific comments or questions about the EA Process or consultation activities? (Yes/No) (No) (No response provided. EA Process circled with question mark) (Yes). Has an evaluation report been submitted? [translated]</p>
<p>5. Do you have any specific comments, concerns or recommendations regarding the Alternatives as presented? (Yes/No) (No) (Yes). Plan to receive less to maintain the site longer in operation (less from Toronto + far-away places) (Yes). We are getting closer to the 417. Is the odour going to be magnified for us south of the 417? Why not build a basin to hold the surface water? Why not surround the site with trees to reduce odours and noise? [translated]</p>
<p>6. Do you have any specific comments, concerns or recommendations regarding the Evaluation Criteria to be used in the assessment of the Alternatives as presented? (Yes/No) (No) (No response provided) (No response provided)</p>
<p>7. Do you have any specific comments, concerns or recommendations regarding the Existing Conditions as presented? (Yes/No) (No). Provided steps are taken to correct/eliminate/reduce? the strong odours/fumes that are generated by this facility. (Yes). Put pressure on Government to sort glass, plastic, wood and domestic residues. Countries much smaller than Canada have put in place measures. Use the electricity produced (Ont. Hydro). The idea of a dome growing vegetables would be supported by the communities. On the full portions of the site, why not plant vegetation to feed on the waste?</p>

As outlined in the consultation program included in the approved ToR (**Appendix A**), a Public Open House #2 Summary Report was prepared following the event. The Summary Report included a description of all aspects of the open house, a summary of results as well as comments received and responses, as appropriate. A copy of the Public Open House #2 Summary Report is included as **Appendix C of Supporting Document 4**. The Summary Report was posted to the project website.

9.3.2.2 Public Open House #3

Public Open House #3 took place on Wednesday November 22, 2017 at the EOWHF Administrative Office, 17125 Lafleche Road, Moose Creek, Ontario from 16:00 to 20:00. The Open House was organized to allow attendees to circulate around the room, review the information on the poster boards and ask questions of GFL staff and consultants. Based on the completed sign-in sheet the open house was attended by 20 people in addition to GFL and consulting staff.

Agencies and members of the public, including neighbouring property owners, were notified of Public Open House # 3 via a Notice of Public Open House (the Notice). Both English and French versions of the Notice were sent via regular mail to agencies, the public and neighbouring property owners on November 6, 2017. One Notice, in both

English and French, was sent via email on November 8, 2017 because a regular mailing address was unavailable.

The Notice was published in both English and French in two local newspapers: the Cornwall Standard-Freeholder on November 8, 2017 and Le Reflet-The News on November 9, 2017.

A copy of the Notice, in both English and French, was uploaded to the project website on November 8, 2017.

Indigenous communities and organizations were notified of Public Open House #3 via the Notice. Letters providing a brief overview of the project and an invitation to Public Open House #3 were addressed to the Indigenous communities and groups and were sent along with English and French versions of the Notice via registered mail on November 6, 2017. Letters were sent in either English and/or French depending on the requirements of the recipient.

Public Open House #3 was held to provide attendees with an update on the project, present the conceptual designs for the alternative methods, present the results of the effects assessment of the alternative methods and the comparative evaluation, and identify the Preferred Alternative. The open house was organized in an information session format with poster boards displayed around the periphery of the room. GFL staff and consultants, including bilingual staff members, were available to discuss the information panels, receive comments and answer questions. As members of the public arrived, they were asked to sign-in and were then given a comment form which included questions regarding the information presented. The members of the public were given the option of filling out the forms on-site or providing their comments via mail, email or fax to the project team.

Presentation material at the open house was available in English. Bilingual staff members were present at the open house. A French version of the presentation material was available following the event. Presentation materials were posted to the project website after the open house.

Completed comment forms were requested by December 6, 2017. Two comment forms were received at the open house and one additional comment form was received prior to December 6, 2017. The comments received are included in **Table 9-3**. Verbal comments received at the open house were addressed by staff as they were received. These comments were focused on current landfill odours associated with the fugitive release of LFG, and truck traffic at the intersection of Highway 138 and Lafleche Road. In response to these comments, GFL provided information to attendees on the work underway at the site to expand and enhance the LFG collection system, along with the schedule for this work to be completed, as part of an overall plan to minimize future off-site odours. With respect to truck traffic, the results of the traffic study completed as part of the EA were discussed along with the recent study completed by the MTO. Both studies have identified no operational concerns associated with the Highway 138 and Lafleche Road intersection.

Table 9-3. Summary of Comments Received from Public Open House #3 Comment Forms

<p>1. My interest in the project is: (please check all that apply)</p> <table border="0"> <tr> <td>1</td> <td>residential property</td> <td>3</td> <td>air quality (dust, noise, odour)</td> </tr> <tr> <td>1</td> <td>business</td> <td>1</td> <td>ecology</td> </tr> <tr> <td>1</td> <td>member of interest group</td> <td>1</td> <td>groundwater, surface water</td> </tr> <tr> <td>0</td> <td>agency representative</td> <td>1</td> <td>land use / visual</td> </tr> <tr> <td>1</td> <td>other: Resident of Ontario</td> <td>1</td> <td>transportation</td> </tr> </table>		1	residential property	3	air quality (dust, noise, odour)	1	business	1	ecology	1	member of interest group	1	groundwater, surface water	0	agency representative	1	land use / visual	1	other: Resident of Ontario	1	transportation
1	residential property	3	air quality (dust, noise, odour)																		
1	business	1	ecology																		
1	member of interest group	1	groundwater, surface water																		
0	agency representative	1	land use / visual																		
1	other: Resident of Ontario	1	transportation																		
<p>2. Please provide any general comments about the information presented at this Public Open House.</p> <p>Well informed from the staff. Better idea of what is going on.</p> <p>At the municipality we are getting lots of complaints about odours. It has been increasing. Unlimited electricity (FIT) should be implemented.</p> <p>Factual and up to date. Though Europe has been incinerating garbage for 30 years most of Canada is still back in the Stone Age. Landfills are creatures of the past. Like mercury buried in the St. Lawrence River, this garbage will still be there hundreds of years from now. With most local municipalities running out of landfill space and new sites costing millions to set up local politicians only see the present. 1 properly built incinerator could fix both Ontario and Quebec's disposal problems for decades. With Maxvilles water project ...</p>																					
<p>3. After reviewing the information presented at this Public Open House, do you have any specific comments or questions about the conceptual design of the Alternative Methods for the project? (Yes/No)</p> <p>(No)</p> <p>(No response provided)</p> <p>(No response provided regarding Yes/No). A massive area slated to be filled within 10 years.</p>																					
<p>4. Do you have any specific comments, questions, or recommendations about the Assessment of Alternative Methods? (Yes/No)</p> <p>(No)</p> <p>(No response provided)</p> <p>(No response provided regarding Yes/No). Lots of government red tape.</p>																					
<p>5. Do you have any specific comments, questions, or recommendations about the results of the comparative evaluation of Alternative Methods? (Yes/No)</p> <p>(No)</p> <p>(No response provided)</p> <p>(No response provided regarding Yes/No). Has to be a better way. Probably the best we can expect the way society treats what would be renewable resources.</p>																					
<p>6. Do you have any specific comments, questions, or concerns about the Preferred Alternative identified? (Yes/No)</p> <p>(No)</p> <p>(No response provided)</p> <p>(No response provided regarding Yes/No). Scaled back at a time where the federal liberals have promised 10s of billions in infrastructure projects we continue to realize east Ontario is the rectum of the province. Incineration won't happen because federal and provincial governments have no vision.</p> <p>PS: Picked up 81 bags of garbage on just under 3 mile section of County Road 20 this year. Don't need dumps. The whole province is a massive one.</p>																					

As outlined in the consultation program included in the approved ToR (**Appendix A**), a Public Open House #3 Summary Report was prepared following the event. The Summary Report included a description of all aspects of the open house, a summary of results as well as comments received and responses, as appropriate. A copy of the Public Open House #3 Summary Report is included **Appendix C of Supporting Document 4**. The Summary Report was posted to the project website.

9.3.3 Review of Draft Existing Conditions Reports

The approved ToR included a preliminary description of the existing environmental conditions within the area surrounding the EOWHF landfill, with the commitment that the description would be expanded upon in the EA. Draft existing conditions reports were prepared to address the environmental components listed below.

Environmental Aspect	Environmental Component
Natural Environment	Atmospheric Environment – Air, Odour, Noise
	Geology and Hydrogeology
	Surface Water Environment
	Ecological Environment
Socio-Economic Environment	Economic
	Social
Cultural Environment	Cultural Environment
Built Environment	Transportation
	Current and Planned Future Land Use
	Aggregate Extraction and Agricultural
	Design and Operations

These draft reports were made available to the GRT, Indigenous communities and the public for review and comment. All draft existing conditions reports were posted to the project website on August 2, 2017. Any comments were requested to be provided to GFL by September 1, 2017.

GRT members and agencies were notified of the draft existing conditions reports by email. A link to the project website was provided in order to access all of the draft reports. In some cases, electronic copies of specific draft reports were included in the email where the specific interest in the project or mandate of the agency was known.

Indigenous communities and organizations were notified of the draft existing conditions report review by letter. The letters were addressed directly to the Indigenous communities and groups and provided in either English and/or French depending on the requirements of the recipient. An electronic copy of the draft existing conditions reports was included on a USB drive along with the letters. The letters also included a link to the project website. The letter and USB drive were sent to each recipient by courier on August 2, 2017. A follow-up email was sent to each Indigenous community and organization on August 29, 2017 requesting any comments be provided.

A copy of the notification emails and letters are included in **Supporting Document 4**.

Comments on the draft existing conditions reports were received from:

- Ministry of Natural Resources and Forestry;
- Ministry of Northern Mines and Development;
- Ministry of Tourism, Culture and Sport; and
- South Nation Conservation Authority.

A summary of the comments received and responses provided are included in **Table 9-4**. A copy of the detailed comments received and responses provided are included in **Appendix G of Supporting Document 4**. Comments were also received from the Huron-Wendat Nation and are included in **Appendix D of Supporting Document 4**.

Table 9-4. Summary of Comments Received on Draft Existing Conditions Reports

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
Huron-Wendat Nation			
August 2, 2017 Email	Cultural Heritage / Archaeology	After receiving the various reports and their analysis, we will let you know if we have any comments. Are archaeological reports available for this project? We understand that a Cultural Heritage Existing Conditions Report has been produced, but what about archaeology?	<p>Comment acknowledged.</p> <p>A Stage 1 Archaeological Assessment of the entire 189 hectare landfill site property was completed as part of the original EA for the landfill in 1999. A copy of the Stage 1 Archaeological Assessment report was provided.</p> <p>The Stage 1 assessment determined that there is no archaeological potential within the boundaries of the existing facility including the proposed expansion areas. Provincial interest in archaeology for the property was signed off on in a letter dated November 2, 1999.</p> <p>As part of this current EA process the Ministry of Tourism, Culture and Sport (MTCS) concluded in letters dated February 25, 2015 and July 31, 2015 (copies provided) that the project was within the footprint of the existing property and they had no further concerns regarding archaeology. Consequently, no further archaeological assessments are planned for this project as a result.</p> <p>A description of the results of the Stage 1 Archaeological Assessment will be included in the EA.</p>

Table 9-4. Summary of Comments Received on Draft Existing Conditions Reports

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
Ministry of Northern Development and Mines			
August 25, 2017 Email	Land Use, Geology and Hydrogeology	<p>The Ministry of Northern Development and Mines (MNDM) submitted comments on July 11, 2017 to the Notice of Commencement.</p> <p>The MNDM Mines and Minerals Division has reviewed the technical information available for the study area with respect to the geology and mineral resource potential, mining lands, and abandoned mine hazards. No further comments to provide at this time</p>	Comments acknowledged.
Ministry of Natural Resources and Forestry			
September 1, 2017 Email	Natural Environment	<i>General</i>	
		1. It should be noted that we did not review section 3.4.4 (Surface Water Quality) as this does not pertain to our Ministry's Mandate.	Noted. This section is provided for information purposes and a more detailed description of surface water quality is included in a separate report, the Surface Water Quality Existing Conditions Report. The Surface Water Quality Existing Conditions Report has been circulated to the Ministry of the Environment and Climate Change (MOECC) and the South Nation Conservation Authority.
		2. On page 1, the Study Area Property Description (section 1.2) includes the proposed Stage 3B and Stage 4 expansion areas, but these areas were not identified on Figures 1 or 2. It is assumed that they are located within the existing landfill property, but this should be clarified.	<p>Both of the proposed alternatives are located within the existing property boundary, which is defined as the on-site study area. To clarify, the sentence in the Existing Conditions Report will be revised to read as follows:</p> <p>"The "on-site" study area covers the existing landfill property and "off-site" is the 1 km beyond the property boundaries.</p>
		<i>Survey Timing</i>	
3. Breeding Bird Surveys: the first survey (April 25th) was conducted a bit early, especially with this year's late and wet/cool spring. There is potential that some species may have been missed.	There were three survey dates for breeding birds as noted in Section 2.2.2 of the Existing Conditions Report. The April 25th survey was incidental observations but grackle, robin and woodcock were exhibiting breeding behaviour at that time. The other two surveys were conducted on May 21 and June 2 during the peak breeding period.		

Table 9-4. Summary of Comments Received on Draft Existing Conditions Reports

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		4. Amphibian Surveys: the first survey (April 25th) was conducted too late for Chorus Frogs. Even though some were identified on site, there is a potential that some individuals or specific habitats may have been missed.	The survey windows in the Ottawa area are later than in other parts of eastern Ontario. The timing for conducting amphibian surveys this year was later this year due to colder conditions. Chorus frogs were recorded during other surveys in the Ottawa area that same week.
		<i>Fisheries</i>	
		5. Fish Community (Section 3.4.2), it is stated that the fish species present in Moose Creek represent a warm water fishery, but this should be revised as the species described are representative of a cool and warm water fishery	Noted. The report text will be updated to indicate that the species described are representative of both a cool and warm water fishery.
		<i>Natural Heritage and Species at Risk</i>	
		6. The following Species At Risk (SAR) and Significant Wildlife Habitat(s) which were confirmed on site will need to be addressed in the next stage of the EA: a. Barn Swallow (seen foraging and potentially nesting on-site); b. Bank Swallow (seen foraging and potentially nesting on-site); and c. Deer Wintering Yard (Confirmed Significant Wildlife Habitat).	These species and habitats will be addressed using the Significant Wildlife Habitat (SWH) technical guide and <i>Endangered Species Act</i> (ESA)/SAR habitat guidelines as part of the effects assessment stage of the EA. Direct and indirect effects will be addressed at that time including identifying the need for further permitting or mitigation measures including timing windows, if necessary.
		7. The following additional Natural Heritage Features or Species/Habitats (which are or could potentially be considered as Significant) should also be addressed in the next stage of the EA: a. Significant Woodlands; b. Raptor Wintering Area (Confirmed on-site); c. Canada Warbler; d. Wood Thrush; e. Eastern Wood-Pewee; f. Snapping Turtle; and g. Nightjars (Common Nighthawk and Whip-Poor-Will) given that no species specific surveys were conducted and these species could potentially be using adjacent properties in very close proximity to the site.	The SWH criteria in the SWH technical guide will be reviewed as part of the effects assessment stage of the EA. This will include a review of the candidate status and confirmation of each feature. If present, an impact assessment will be completed and recommendations will be made regarding mitigation measures, timing windows and any need for alteration to the project. A response to the SAR inquiry submitted to the MNR (March 9, 2017) did not list whip-poor-will as a possible species; consequently, no surveys were planned. No whip-poor-will were heard during the evening frog surveys. Except for the swamp, the surrounding areas are sod farms and do not provide suitable habitat for the whip-poor-will. There is no nesting habitat on site for the common nighthawk. No common nighthawks were heard during the

Table 9-4. Summary of Comments Received on Draft Existing Conditions Reports

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
			evening frog surveys. The surrounding areas are sod farms and do not provide suitable habitat or foraging.
		8. Given that SAR have been confirmed on the site, the proponent will need to meet obligations under the Endangered Species Act (ESA), 1997. We recommend submitting an Information Gathering Form (IGF) to initiate the ESA review process. The IGF requires information that is similar to that which will be provided in the subsequent EA report (i.e., potential effects assessment)	The found SAR species and the habitat use/behaviour/life stages will be reviewed against the proposed development as part of the effects assessment stage of the EA. As it is early in the EA process, discussions with MNRF will continue, and the results of the net effects assessment of the alternative methods will be provided to the MNRF. At that time, if an IGF is determined to be required, the necessary documentation will be provided in compliance with the ESA.
		9. Regarding Chimney Swifts, it should be confirmed that the chimneys on-site are indeed “active” during the summer months and not only referred to as being industrial. Please confirm.	The types of chimneys, their current use, and that they are being used for emissions in the summer months/active nesting season will be confirmed with the site owner/manager. The Existing Conditions Report will be updated to include this information.
		10. Please provide a detailed description or coordinates for the off-site Barn Swallow nesting location and the off-site Bobolink observation location.	The barn swallows were observed nesting on a high concrete box culvert on Route 700 crossing of Moose Creek; coordinates 45.31575, -75.01992. The bobolink was heard/seen in the field west of Highway 417; coordinates approximately 45.31904, -75.02070.
		11. On page 37, it is stated that MNRF did not provide details on a restricted species at risk identified. Please contact us directly (see coordinates below) for the identification of the species, which will also need to be addressed as part of the EA. Given the very high risk and sensitivity associated with this species, the name is not provided or allowed to be mentioned in print or in any non-verbal communications related to this EA.	The MNRF has been contacted directly by phone to obtain the name of the species. This information will not be mentioned or described in the existing conditions report, only the fact that the species was not found in the on-site or off-site study areas.

Table 9-4. Summary of Comments Received on Draft Existing Conditions Reports

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
October 17, 2017 Email	Natural Environment	<i>Breeding Bird Surveys</i>	
		It is noted that the first of 3 survey dates of April 25th consisted of recording incidental observations.	Correct
		<i>Whip-poor-will</i>	
		It should be noted that the MNRF response letter clearly states: "Please note that information regarding species at risk is based on documented occurrences only and does not include an interpretation of potential habitat within or in proximity to the site in question. Although this data represents the MNRF's best current available information, it is important to note that a lack of information for a site does not mean that additional features and values are not present. i.e.: Species at Risk (SAR) or their habitat could still be present at the location or in the immediate area."	Comment acknowledged
		Given that no species specific surveys were conducted and that this species could potentially be using adjacent properties in very close proximity to the site, a survey may be required to further inform our review of the next stage (net effects assessment) of this Landfill Expansion EA, unless the proponent chooses to assume species presence and address it accordingly. Your response to our comments mentioned that no Whip-Poor-Wills were heard during the evening of the frog surveys, but upon reviewing the timing and/or environmental conditions encountered during these evenings, it would be unlikely that birds would be expected to be heard (i.e., either too early in the season (April 25); or overcast, windy (19 kph), and 11 days from a full moon (May 21)).	Whip-Poor-Will surveys are typically conducted over three (3) nights in May and June during a full moon cycle; however, as there was no suitable nesting habitat for Whip-Poor-Will on the property itself, targeted surveys were not conducted. For the Ecological Environment net effects assessment, it will be assumed that Whip-Poor-Will are present in the off-site study area and may find habitat in the wetland/woodland community to the southwest. Whip-Poor-Will habitat is very specific in terms of nesting sites and hunting/feeding habitat criteria. Potential changes to Whip-Poor-Will habitat as a result of the proposed expansion and resulting net effects to Whip-Poor-Will will be explored in the Ecological Environment net effects assessment.

Table 9-4. Summary of Comments Received on Draft Existing Conditions Reports

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		<p><i>Species at Risk</i></p> <p>As previously stated, given that some Species at Risk are confirmed on site, the proponent will need to meet obligations under the Ontario Endangered Species Act (ESA), and as part of the next stage of this Landfill Expansion EA. The ESA permitting process is proponent driven, and as such, the decision as to when to submit an Information Gathering Form (IGF) to MNR rests with the proponent. That being said, the results of the net effects assessment of the alternative methods may potentially not be reviewed by MNR, as they pertain to ESA species, unless accompanied by a completed IGF.</p>	<p>The Ecological Environment effects assessment will assess whether or not the Preferred Alternative will result in a negative impact to Whip-Poor-Will habitat or other SAR habitat. The General Habitat Descriptions (GHD) and guidelines for Category 3 habitat protection will be used in the assessment.</p> <p>If a project activity is proposed within the habitat or habitat protection zone of a threatened or endangered species, an <i>Endangered Species Act</i> (ESA) permit will be required for the project. The first stage in obtaining an ESA permit is to submit an Information Gathering Form (IGF), which provides the details on the surveys and habitats.</p> <p>If proposed project activities are located outside of the habitat or habitat protection zone of a threatened or endangered species, an IGF form would not be required.</p>
		<p><i>Chimney Swifts</i></p> <p>Re: Chimney Swifts, it should be confirmed that the chimneys on-site are indeed "active" during the summer months, and not only referred to as being industrial. Please confirm.</p>	<p>The EOWHF has an existing LFG flare, a siloxane gas flare and four (4) LFG combustion engines with exhaust stacks. Each of these are for the purpose of managing LFG and operates at temperatures exceeding 500 degrees Celsius. The LFG combustion engines and flares essentially operate continuously. As such there are no chimneys that are useable for chimney swift nesting during the summer breeding period.</p>
Ministry of Culture, Tourism and Sport (MTCS)			
August 31, 2017 Email	Cultural Environment	<p>The Cultural Heritage Existing Conditions Report identified two cultural heritage resources within or adjacent to the Study Area, including one cultural heritage landscape and one built heritage resource. The conservation recommendations for the identified built heritage resource and cultural heritage landscape features outlined in Section 6.1 of the Report should be considered and implemented as part of this EA project, specifically: Construction activities and staging</p>	Comments acknowledged.

Table 9-4. Summary of Comments Received on Draft Existing Conditions Reports

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		should be suitably planned and undertaken to avoid impacts to identified cultural heritage resources. Once a Preferred Alternative or detailed designs of the proposed work are available, this report will be updated with a confirmation of impacts of the undertaking on cultural heritage resources identified within and/or adjacent to the study area and will recommend appropriate mitigation measures. Mitigation measures may include, but are not limited to, completing a heritage impact assessment or documentation report, or employing suitable measures such as landscaping, buffering or other forms of mitigation, where appropriate. In this regard, provincial guidelines should be consulted for advice and further heritage assessment work should be undertaken as necessary. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential heritage resources.	
South Nation Conservation Authority			
August 31, 2017 Email	Natural Environment	South Nation can provide a technical review of the Hydrogeological and Natural Environment studies if you wish, following our fee schedule.	Comment acknowledged.

9.3.4 Project Website

A project specific website (www.leic.com/about/projects) was launched during the ToR and maintained during the EA process. The website was established to provide clear and accurate information to stakeholders and also to provide opportunities for feedback. The website includes up-to-date information about the EA activities and includes access to notices, open house materials and study reports. The website was available in both English and French languages.

9.3.5 Telephone Number and Contact

A Project telephone number (613-538-2776 ext. 226) and GFL staff contact person was established to receive comments and questions from the public. This service allowed interested parties to submit enquiries for information, submit comments and request a call-back. Since the commencement of the EA, no specific comments were received by telephone.

9.3.6 Other Activities

9.3.6.1 EOWHF Site Tour

As a follow up to a request made by attendees at Public Open House #3, GFL conducted a tour of the EOWHF on November 30, 2017 for a group of 12 people from Moose Creek, Nation and Casselman. The group wanted to see the site, discuss the landfill expansion project and obtain additional information on work being completed related to odour control.

The tour included the landfill working areas, LFG utilization facility, composting facility, and LTF, and included open discussions with on-going questions and answers. Participants expressed concerns about current odour releases from the EOWHF. GFL discussed the current odour sources, reasons for odour releases related to LFG, the on-going work being completed at the site to enhance the LFG collection system, future plans, and the proposed implementation schedule.

The group was appreciative of the tour and stated they learned a lot and now have a better understanding of the various activities and processes at the EOWHF and the projects that GFL is undertaking, such as the landfill, composting, LFG co-generation plant, gas well installation, waste diversion (electronics, metals), and the new pollinator garden.

9.3.6.2 Community Liaison Committee

The EOWHF has a well established Community Liaison Committee, which meets quarterly to review and provide feedback on the operations of the EOWHF. During the regularly scheduled meeting on June 30, 2017, GFL staff provided an update on the proposed landfill expansion project and the EA process. General discussion followed amongst the Community Liaison Committee members.

9.3.6.3 General Inquiries

During the course of the EA, EOWHF neighbours and members of the community contacted GFL staff regarding the status of the project and to make general inquiries. No specific comments or concerns about the project were identified.

9.3.6.4 Record of Consultation and Engagement

A Record of Consultation and Engagement has been prepared as part of EA and is included as **Supporting Document 4**. The Record of Consultation and Engagement includes more detailed information for each of the consultation and engagement activities undertaken during the EA and discussed above. This includes information about and received at the open houses, notices, and copies of comments, questions, issues and concerns from agencies, Indigenous communities and members of the public and how those questions, issues and concerns were addressed.

9.3.7 Review of Draft Environmental Assessment Study Report

The Draft EA Study Report was made available to the GRT, the public, agencies and Indigenous communities for review and comment. Notice of the availability of the Draft

EA Study Report and review period was provided by newspaper notice, mail, email and on the project website.

Copies of the Draft EA Study Report were provided in hard copy (as requested), electronic format and were available for download on the project website on January 31, 2018. The Notice of Draft EA Study Report review was published in two newspapers on January 31 and February 1, 2018. A printed copy of the report was also available for public viewing at the location identified in the Notice. Any comments were requested to be provided to GFL by March 5, 2018.

GRT members and agencies were notified of the Draft EA Study Report review by mail or courier including a copy of the Notice and/or letter. The letters and Notices were distributed on January 29, 2018. A link to the project website was provided in order to access the Draft EA Study Report. In some cases, electronic copies of the Draft EA Study Report were included in the mail package.

Indigenous communities and organizations were notified of the Draft EA Study Report review period by letter and Notice. The letters were addressed directly to the Indigenous communities and groups and provided in either English and/or French depending on the requirements of the recipient. An electronic copy of the Draft EA Study Report and supporting documents was included on a USB drive along with the letters and Notice. The letters also included a link to the project website. The letter and USB drive were sent to each recipient by courier on January 29, 2018.

A copy of the Notice and letters are included in **Supporting Document 4**.

Comments on the Draft EA Study Report were received from:

- Ministry of Natural Resources and Forestry (MNRF);
- Ministry of Environment and Climate Change (MOECC);
- Ministry of Northern Development and Mines (MNDM);
- The Nation Municipality;
- South Nation Conservation; and
- One member of the public.

Responses to the comments were prepared by the project team. Follow up comments were received from the MNRF and additional responses were provided. A summary of the comments received and responses provided are included in **Table 9-5**. A copy of the detailed comments received and responses provided are included in **Appendix G of Supporting Document 4**. Revisions were made to the EA Study Report, as appropriate, based on the comments received on the draft report. Changes made to the EA Study Report are identified as part of the responses.

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
Ministry of Natural Resources and Forestry (MNRF)			
March 2, 2018	Natural Environment	<i>General</i>	<p data-bbox="1287 414 1923 597">Comment noted.</p> <p data-bbox="1287 597 1923 641"><i>Significant Woodland</i></p> <p data-bbox="1287 641 1923 1177">The MNRF commented that Significant Woodland is present immediately adjacent to the site, and that potential impacts to this feature were not discussed in the Draft EA Study Report and supporting documents and should be addressed.</p> <p data-bbox="1287 1177 1923 1422">The effects of the project on the Ecological Environment were assessed for the on-site study area (i.e., the 189 ha site area) and the off-site study area (i.e., the area within 1 km of the property boundary of the site). The area defined by the Township of North Stormont as a Significant Woodland is located to the southwest of the site. Within the off-site study area, this Significant Woodland is located within the Moose Creek wetland. The assessment of the effects of the project on the off-site study area, including the Moose Creek wetland, is provided in Section 6.2.1.4 of the Draft EA Study Report, and Section 3 of the Ecological Environment Draft Effects Assessment Report (Supporting Document 3-7).</p> <p data-bbox="1287 1177 1923 1422">In order to address this comment, the text in the Draft EA Study Report and Supporting Document 3-7 will be modified to indicate the presence of the Significant Woodland within the Moose Creek wetland in the off-site study area. The conclusions of the effects assessment on the Moose Creek wetland in the off-site study area will not change, and will also apply to the Significant Woodland. This change will be included in the Final EA</p>
		<p data-bbox="674 414 1287 597">We no longer have any concerns regarding the adjacent deer yard, raptor wintering habitat, Chimney Swift, Eastern Whip-poor-will, Barn Swallow, or Bank Swallow. We do not anticipate any negative impacts to these features and species as a result of the proposed expansion.</p>	
		<p data-bbox="674 597 1287 1422">We had commented previously that Significant Woodland is present immediately adjacent to the site. Potential impacts to this feature were not discussed in the above-noted reports and should be addressed.</p>	

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
			Study Report and supporting documentation which will be circulated in the Spring of this year for review.
April 9, 2018	Natural Environment	Thank you for the additional clarification and information on the proposed revisions. We no longer have any concerns with the EA report.	Comment noted.
Ministry of Environment and Climate Change (MOECC) Environmental Assessment and Permissions Branch			
March 21, 2018	General	On my first read through of the main document, I really didn't have anything worth noting- I think I saw a couple really minor typos or punctuation missing- but it really isn't worth mentioning. If I do find anything worth mentioning, I will put it in a memo.	Comment noted.
March 28, 2018	Noise	I have reviewed the draft noise effects assessment report and have no further comments on the document.	Comment noted.
April 9, 2018	Landfill Design & Operations	1. According to the Alternative Method 1, Stage 4 of the landfill will extend to the west of the existing landfill and include the area for the existing compost curing pad and storage pile. Please indicate and show in figure the new location for the compost curing pad when Stage 4 of the landfill is developed, to ensure all operations at the site is accommodated and there is adequate space in the buffer area.	The approximate new location for the compost curing pad will be shown on Figure 2 (Overall Plan) of the Conceptual Design Report (SD 2) and Figure 1-1 (Alternative Method 1) in the Effect Assessment Reports (SD 3). The proposed location is immediately north of its existing location, closer to the leachate holding pond.
		2. The northeast corner of the future Stage 4 is currently treed swamp area. As the landfill design proposes natural containment that relies on the in situ silty clay deposit to form a hydraulic containment layer, it is important that for preparation of the landfill base in the treed swamp area, after the trees are cleared, the stumps and roots shall be adequately removed and the base layer be reworked to achieve the low hydraulic conductivity as required by Reg 232/98.	The portion of the treed swamp to be removed is almost entirely glossy buckthorn, a shrub which is considered an invasive species in Ontario. This tree species typically has a shallow, large lateral root system with root depth of less than 1 metre. Following removal of the treed swamp area, the landfill base will be adequately prepared and cleared from the stumps and roots in place as it has been done for any vegetation encountered in the previous landfill stages. This will be described in the Design and Operations Report prepared in support of the Environmental Compliance Approval amendment application.

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		<p>3. According to the landfill conceptual design, landfill gas is collected through vertical extraction wells that are to be installed once final contours are reached. Is there plan to collect landfill gas in early stage of landfilling? Please note as per Regulation 232/98 and Reg 347, gas collection is required in areas that are inactive for over 6 months.</p>	<p>Vertical landfill gas extraction wells will be installed once final contours are reached. This will be done as soon as two cells are filled to their maximum height, within the 6-month inactive period. The process and timing for installation of landfill gas wells will be described in the Design and Operations Report prepared in support of the Environmental Compliance Approval amendment application.</p>
		<p>4. In Section 10 of the EA report, please add a paragraph for contingency plans that will be included in the Design and Operations Plan, to address unexpected but potential issues such as haul road closure, groundwater contamination, leachate collection system failure, flooding, etc.</p>	<p>Approved contingency measures are currently in place at the EOWHF as part of the on-going operation. In Table 10-1, the commitment for mitigation related to landfill Design and Operations will be revised to include preparation of contingency plans as part of the ECA amendment application, following approval of the undertaking by the Minister of the Environment and Climate Change, and prior to construction. This will include establishing and maintaining contingency measures to address potential unexpected occurrences related to the leachate collection system, landfill liner, leachate treatment facility, stormwater management system or the lateral migration of landfill gas, if required, during the construction, operation, closure, and post-closure of the undertaking.</p>
<p>May 1, 2018</p>	<p>Surface Water</p>	<p>As outlined in Section 2.52 of the Draft EA, the existing leachate treatment plant has a treatment capacity of 304,000 m³/year. However, the current ECA No. 4299-9U8PV6 issued on March 16, 2015 allows the maximum treatment capacity of 200,000 m³/year. The estimated leachate volume generation from the Alternative 2 of the landfill expansion is 241,167 m³/year. The existing leachate treatment system has the capacity to handle the additional leachate generated from the landfill expansion. To allow the treatment of the additional leachate volume, there will be a need to submit an application for the amendment of the existing ECA. Prior to submitting the application, GFL need to complete a detailed receiving surface water</p>	<p>Please note that the EA identifies the preferred alternative as Alternative 1. This alternative is estimated to generate a peak leachate volume of approximately 267,000 m³/year. This scenario is predicted to occur at the mid-point of development of Stage 4, with the last four cells open, the initial four cells of Stage 4, Stage 3 and Stage 2 with an impermeable final cover incorporating a geomembrane, and Stage 1 with a permeable compacted soil final cover. Once final cover is placed on the remainder of the Stage 4 cells, leachate generation is expected to decrease to approximately 143,232 m³/year in the worst case scenario. GFL is aware that an amendment to ECA #3962-AQPJDP (Sewage Works), formerly ECA No. 4299-9U8PV6, will be required to increase the approved</p>

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		<p>impact assessment and submit the study and effluent limits proposal to the Eastern Region Technical Support Section for review and recommendation.</p>	<p>treatment capacity of the leachate treatment facility. In support of the ECA amendment application, a surface water impact assessment will be completed including a review of specific effluent discharge contaminants and limits. The requirement for this approval is identified in Section 11 of the EA Study Report.</p>
		<p>I have reviewed the options identified for the handling stormwater to service the proposed landfill expansion. I have no concerns with the proposal and there will be a need to submit detailed design specifications and engineering drawings with the application for amendment of the existing ECA.</p>	<p>GFL will be preparing an application to amend ECA #3962-AQPJDP (Sewage Works), formerly ECA No. 4299-9U8PV6, to allow the proposed changes to the sites stormwater management system. An updated Stormwater Management Plan (i.e., design brief) will be prepared in support of the amendment application. The requirement for this approval is identified in Section 11 of the EA Study Report.</p>
Ministry of Environment and Climate Change (MOECC) Eastern Region			
<p>March 29, 2018</p>	<p>Surface Water</p>	<p>In several locations, the report refers to the former approval for sewage works (No. 4299-9U8PV6. For clarity, the current approval is ECA No. 3962-AQPJDP.</p>	<p>The reference will be updated to identify ECA No. 3962-AQPJDP as the current approval for sewage works at the EOWHF.</p>
		<p>I have no objection to the proposed undertaking, provided the matters addressed below are addressed.</p>	<p>Comment noted.</p>
		<p>The ECA application for sewage works will be expected to demonstrate that more frequent discharge of treated effluent with comparable quality to the current conditions will not result in impacts to the Fraser Drain, specifically related to the 'pulses' of very high chloride associated with discharge events. Modifications to the surface water monitoring program will likely be required.</p>	<p>Comment noted. An application to amend the existing ECA (Sewage Works) will be submitted when the additional leachate treatment capacity is required. In support of the ECA amendment application a surface water impact assessment will be completed including a review of specific effluent discharge contaminants and limits. This will include a review of the existing surface water monitoring program.</p>
		<p>An updated agreement with the South Nation Conservation Authority may be required with respect to Clean Water Program.</p>	<p>Comment noted. An application to amend the existing ECA (Sewage Works) will be submitted when the additional leachate treatment capacity is required. In support of the ECA amendment application a surface water impact assessment will be completed including a review of specific effluent discharge contaminants and limits.</p>

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
			GFL has consulted with the South Nation Conservation Authority as part of this Environmental Assessment and will continue to consult with the Authority as appropriate.
	Hydrogeology	I agree with the consultant that the site is having less impact on the bedrock aquifer than predicted in the 1998 environmental assessment.	Comment noted.
		I have reviewed Supporting Document 3-4 Geology and Hydrogeology Draft Effects Assessment Report November 29, 2017 prepared by Tetra Tech which compares the impacts on groundwater of these two designs in keeping with the technical requirements of Ministry Guideline B-7 and Ont. Reg. 232/98. I agree with the conceptual site model and these results of predictive modeling for both alternate designs confirm that each design will have very little impact on the bedrock aquifer far into the future well beyond the sites contaminating lifespan and will continue to conform with Ministry Guideline B-7 and requirements set out in Ont. Reg. 232/98 for such sites. Extensive marine clay exists beneath this site.	Comment noted.
		I also agree with the consultant that the predicted impact of both alternatives on the bedrock aquifer are roughly the same.	Comment noted.
		The consultant modelled a leachate collection system failure scenario based on a 9 m high leachate mound and predicts it would take 400 to 600 years to pass through the silty clay into the underlying aquifers; this was the same scenario used in the 1998 EA. Therefore I have no problem with the preferred alternative.	Comment noted.
		Minimum onsite buffers as set out in Ontario Reg. 232/98 must be maintained in the future to ensure the placement and maintenance of perimeter groundwater monitoring wells. Similar monitoring plans and Contingency Plans should be carried over into the expansion area.	Comment noted. As outlined in Supporting Document SD 2 Conceptual Design Report, on-site buffers will be maintained in accordance with O. Reg. 232/98. The existing monitoring and contingency plans for the landfill will be reviewed and updated (if appropriate) as part of the Design and Operations Report for Stages 3B/4 to be prepared in support on an ECA amendment application

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
			following EA approval of the undertaking.
April 17, 2018	Air Quality	<p>1. Table 1 on page 9, Section 4.1 of the Supporting Document 1-1: Summary of the Air Quality Standards and Guidelines. Total suspended particulate matter (TSP) has an annual ambient air quality criteria (AAQC) of 60 µg/m³ in addition to the 24-hr AAQC of 120 µg/m³. MOECC also has an interim AAQC for particulate matter with aerodynamic diameter less than 10 µm (PM₁₀). Canadian Ambient Air Quality Standards (CAAQS) for fine particulate matter and ozone replaced the Canada-wide Standards in 2012, and the 24-hr CAAQS for PM_{2.5} is 28 µg/m³ for the year 2015, and 27 µg/m³ for the year 2020. The annual CAAQS for PM_{2.5} is 10 µg/m³ in 2015, and 8.8 µg/m³ in 2020. In addition, vinyl chloride has an annual AAQC of 0.2 µg/m³. These criteria/standards should also been included in the air quality assessment.</p>	These criteria/standards will be included in the air quality assessment.
		<p>2. Section 4.4 of the Supporting Document 1-1. Air quality monitoring data from Ottawa station was used as an indicator of the regional background air quality. In addition to the annual background concentration levels, 1-hr and/or 24-hr background concentration levels should be established to assess the cumulative effects of the project depending on the applicable criteria, standards or guidelines. Background air quality for TSP and PM₁₀ should also be established to assess the cumulative effects.</p>	The 1-hr and 24-hr back ground concentration levels are already included in the background concentration data. Information on TSP and PM ₁₀ will be added.
		<p>3. Section 4.7 and Section 5 of the Supporting Document 1-1. The existing air quality was assessed based on the dispersion modelling from the emission sources at the current landfill, and the dispersion modelling assessment was conducted based on the compliance purpose, i.e. ECA application. All mobile equipment is exempt from compliance requirements under O. Reg. 419/05 when best management practices are implemented. It should be noted that that is an environmental assessment, and all emissions</p>	The dispersion modelling of the existing conditions and both proposed alternative methods will be updated to include both fugitive and tailpipe emissions from mobile sources operated on site roads and as part of the on-going operations and potential construction activities.

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		sources including mobile (i.e., exhaust emissions and fugitive dust, etc.) and stationary sources from construction and operations should be included in the assessment. In addition, the existing air quality in the site-vicinity study area should be assessed based on the cumulative effects (modelling concentrations plus background air quality).	
		4. Section 6.2.1.1 of the Draft Environmental Assessment Study Report, and Supporting Document 3-1. Similar as the assessment of the existing air quality, the assessment of the effects of the project on air quality was also conducted based on the compliance assessment, and emissions from all mobile equipment were excluded from the air quality assessment, which might significantly impact the modelled air quality concentrations from the project. As mentioned in the comment #3, all emission sources including mobile and stationary sources from construction and operations should be included in the air quality assessment.	The emission inventory will be updated to include mobile and other noted sources. Also, the modelling results will be updated to include the contribution of ambient air quality concentrations of contaminants of concern (where available). The appropriate tables and plume concentration isopleth plots will also be updated to include the background ambient concentrations.
		In addition to the maximum off property concentrations, the cumulative air quality impacts (modelling concentrations plus background concentrations), should be assessed and compared to applicable criteria, standards or guidelines. The modelling off property results and cumulative effects (modelling results plus background concentrations), including results at sensitive receptors, should also be summarized in tables and illustrated as isopleths.	
		5. Section 2.1.3 and Table B-5 of the Supporting Document 3-1. The report indicates that the maximum LFG collection is expected to occur in 2026 with a total of approximately 6238 m ³ /hr, and it is assumed that the collection efficiency of the LFG collection system is approximately 75%. However, it seems landfill gas emission estimates shown in Table B-5 do not match the LFG scenario provided in the Section 2.1.3 of the	LFG generation rates will increase gradually until a maximum is reached in year 2026 (72,864,362 m ³ /yr, or 8,318 m ³ /h). No further landfilling will occur in Stage 4 from 2026 onwards, which will result in a gradual decrease in LFG generation. The 6,238 m ³ /hr volume is the collected volume not the volume generated. This will be clarified in the text.

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		Supporting Document 3-1, and Appendix C of the Supporting Document 2.	
		6. Supporting Document 1-2 and Supporting Document 3-2. For odour assessment, it seems only odour emissions from composting facility operations were included in the assessment, but the odour emissions from the landfill cap were not included.	Odour from on-site releases has been assessed on a substance by substance basis. There is currently no site-specific data available to calculate the “odour” emissions from most facility operations, with the exception of the composting facility, which has had a full odour assessment conducted in the past. The offsite concentrations of odorous emissions from the site have been modelled based on the compound specific emission rates of substances which have an MOECC “odour” based POI limit, including: H ₂ S, TRS, and 15 other miscellaneous landfill gas constituents. The Odour (OU) associated with total fugitive landfill gas emissions from the landfill surface and tipping face will be estimated and included in an updated modelling assessments for existing and proposed scenarios. The results will be documented in the updated ESDM report.
		7. Greenhouse gases (GHG) emissions assessment from the proposed project should be included in the report (i.e. emissions from composting, fugitive landfill gas, landfill gas combustion/flare, vehicles and on-site heavy equipment, etc.). In addition, consider Ontario’s greenhouse gases (GHG) target and Canada’s international obligations; potential mitigation measures should be discussed to reduce the GHG emissions from the project.	Emissions of CO ₂ and other GHG compounds will be calculated for all scenarios and will be presented in the updated reports along with the requisite information on emission controls to address the relevant federal and international reporting and reduction programs.
Ministry of Environment and Climate Change (MOECC) Cornwall Area			
April 3, 2018	Odour	The owner should develop and implement operating procedures that will ensure that installation of the LFGCS [landfill gas collection system] and final cover in closed cells is completed in a timely manner.	In 2017, there were some unplanned delays with the scheduled well drilling, due to contractual issues that were subsequently resolved for the long term. The contractual changes resulted in GFL assuming 100% control of the gas well and line connection projects. This will ensure that there is no delay in the future between cell closure and gas well installations occurring within 6 months of closure.

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		The amended ECA [environmental compliance approval] should include time constraints for completion of installation of LFGSC and final cover in completed cells.	Comment noted.
		Contractual ownership and responsibility for the LFG generated by the site and the LFGCS servicing the site must be resolved between GFL and Moose Creek Energy.	The contractual matters between GFL and Moose Creek Energy were resolved in Fall 2017.
		The owner should develop and implement routine monitoring procedures designed to ensure that uncontrolled sources of fugitive LFG emissions are identified and addressed.	The landfill gas and combustible monitoring program requirements for the EOWHF are set out in Schedule "E" of Amended ECA No. A420018. GFL proposes to review and update, if appropriate, the monitoring of fugitive LFG emissions in conjunction with preparation of the Design and Operations Report in support of an ECA amendment application, following EA approval of the proposed undertaking.
		The Ministry should include monitoring and maintenance requirements as conditions of the amended ECA which will ensure that monitoring of the landfill is conducted routinely for the purpose of identifying locations / sources of fugitive LFG emissions, and that maintenance is conducted in a timely manner to address any identified uncontrolled sources of LFG.	Comment noted.
		I have no objection to the proposed expansion provided the above recommendations are addressed.	Comment noted.
Ministry of Northern Development and Mines (MNDM)			
May 1, 2018	General	The Ministry of Northern Development and Mines (MNDM) Mines and Minerals Division reviewed the technical information available for the study area with respect to the geology and mineral resource potential, mining lands, and abandoned mine hazards. MNDM has no further comments other than those expressed in our July 11, 2017 response to the Notice of Commencement and again on August 25, 2017 for the EA.	Comment noted.

Table 9-5. Summary of Comments Received on the Draft EA Study Report

Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
<i>The Nation Municipality</i>			
February 7, 2018	Odour	<p>We have reviewed part of the documentation and we are particularly concerned with the statement found in the Draft Environmental Assessment Study Report which states on page ES-9 the potential net effects of Alternative Method 1 and Alternative Method 2 on odor[.]</p> <p>While The Nation Municipality is not opposed to the expansion of the landfill site, we feel that before this take place that the issue with the odor emanating for the site must be rectified. We, as a municipality, have received many complaints in regards to the smell. Once the problem is rectified then the municipality will be in a better position to support the expansion of the Eastern Ontario Waste Handling Facility Landfill site in Moose Creek.</p>	<p>In 2017, there were some unplanned delays with the scheduled landfill gas well installations. The delays were due to contractual issues that have since been resolved, and GFL has assumed 100% control of the landfill gas well and line connection projects. This control will ensure that there is no delay between landfill cell closure and the subsequent landfill gas well installations within 6 months of closure. In mid-October 2017, an additional 35 gas wells were installed, resulting in a total of 147 landfill gas wells on the site. The connection lines and an extended feeder system to the existing landfill gas plant were constructed in Nov 2017 and completed in January 2018. The new wells and connection system were commissioned and operational as of February 2018, which has resulted in a significant increase in the volume of landfill gas being extracted from the landfill. As of January 2018, upon completion of the new wells and lines, large amounts of intermediate and final cover were also applied to Stage 2 – Cells 5, 6, 7 & 8. The placement of additional cover material will continue into Spring 2018 in preparation for the installation of a geomembrane liner. The geomembrane liner project is planned to commence in May 2018, which will result in sealing the cells and allowing for the maximum amount of gas to be extracted from the landfill cells that are closed.</p>
<i>South Nation Conservation</i>			
April 4, 2018	Surface Water	<p>1. Discuss how the stormwater management ponds will be monitored for contaminants from the landfill.</p>	<p>It should be noted that Supporting Document SD 1-6 provides a description of the surface water quality existing conditions only, both on-site and within the off-site study areas for the EOWHF. GFL conducts monitoring of the stormwater management (SWM) ponds for a specified list of contaminants as per Condition 13(2) of ECA No. 3962-AQPJDP (formerly ECA No. 4299-9U8PV6). This is described in Section 4.2.2 of the report. The ECA requires up to four grab samples per year be taken during discharge between April 1st and October</p>

Table 9-5. Summary of Comments Received on the Draft EA Study Report

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			<p>31st with a minimum of a 30 day spacing between samples. As a result of the use of water for on-site dust control, discharge events from the stormwater ponds are infrequent as water is removed from the ponds. During the period from 2014-2016 only two samples were taken (i.e., discharge occurred during a total of 2 months in a 3 year period). One sample was collected in 2017 although there was no discharge. The SWM ponds will continue to be monitored for contaminants in accordance with the ECA.</p>
		<p>2. Discuss the contingency plan, should leachate be detected in the stormwater ponds.</p>	<p>ECA No. 3962-AQPJDP specifies the operating conditions for the stormwater management (SWM) ponds and the leachate treatment facility (LTF) at the GFL EOWHF. Condition 14(3) specifies concentrations of trigger parameters to be monitored for identifying any potential leachate impacts to stormwater. Samples are collected within 24 hours of a rainfall event resulting in a stormwater discharge. As a result of the use of water for on-site dust control, discharge events from the stormwater ponds are infrequent as water is removed from the ponds. During the period from 2014-2016 only two samples were taken (i.e., discharge occurred during a total of 2 months in a 3 year period). One sample was collected in 2017 although there was no discharge. No leachate triggers were exceeded during any of the sampling events.</p> <p>As required by Condition 14(6), in case a trigger has been met GFL has prepared a Stormwater Contingency and Remedial Action Plan for the SWM ponds. The Plan was submitted to, and approved by, the Ministry of the Environment and Climate Change (MOECC). In the event that leachate is detected in the SWM ponds, the outlet structure that controls the stormwater discharge from the site will be closed, which will prevent any impacted surface water from entering the Fraser Drain. The impacted water will then be stored in the SWM ponds until it is re-directed to the leachate treatment system, if necessary. Investigation on the source of contamination will be conducted until it is identified and</p>

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Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
			resolved. The contingency plan will be reviewed and updated, as appropriate, as part of the ECA amendment application following EA approval of the undertaking.
		3. Discuss how runoff will be separated from the leachate during normal landfill operations.	The proposed approach to managing stormwater and leachate, including keeping them separate during normal landfill operations will be consistent with the current practices. This approach is outlined in Supporting Document SD 2 Conceptual Design Report, Section 2.2. In summary, temporary containment berms are utilized within the landfill area to prevent leachate from the active cell coming into contact with clean surface water runoff from adjacent areas. These berms are placed at the limits of each cell. The berms are built with compacted clay soil. Any surface water runoff on the operating cells and in contact with waste is considered as leachate. The leachate is contained within the cells during operation, collected through the leachate collection system, and then transferred to the leachate treatment facility. Upon reaching the final elevation for the landfill, the cell is covered with a low permeability geomembrane which prevents stormwater from contacting the waste. Leachate will continue to be collected and treated, and stormwater runoff from the final cover will flow to the perimeter ditch of the cell and be conveyed to the SWM ponds. As noted, this process was outlined in the Conceptual Design Report prepared for the EA. The management of stormwater and leachate will be outlined in additional detail within the Design and Operations Report to be prepared in support of the ECA amendment application, following EA approval of the undertaking.
		4. Discuss how groundwater will be protected from infiltration of the storm water ponds.	The development and operation of the existing SWM system is approved under ECA No. 3962-AQPJDP. Enhancements to the SWM system, as part of the preferred alternative identified in the EA, will be described in greater detail as part of an updated SWM Plan in support of the required ECA amendment application, following EA approval of the undertaking.

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			<p>The stormwater ponds are built within the native clay material (consistent with the landfill liner) which limits any potential infiltration. The thickness of the clay layer underneath the base of the stormwater ponds varies between 7 and 15 metres. The clay has an average vertical hydraulic conductivity of 4.4×10^{-10} m/s. The clay provides adequate protection of groundwater from any potential infiltration from the stormwater ponds. The stormwater management system collects non-impacted surface water runoff. As described in the response to Comment #2 above, this water is tested to ensure compliance and confirm that it has not come into contact with leachate.</p>
		<p>5. A separated, signed and stamped Grading Plan will be required.</p>	<p>The existing EOWHF stormwater management system has been developed and operates in accordance with ECA No. 3962-AQPJDP. Following approval of the EA, an updated Stormwater Management Plan will be prepared for the site in support of an ECA amendment application. In addition, a Design and Operations Report will be prepared for the landfill expansion in support of an amendment to ECA No. 420018. These approvals applications will include information related to site grading.</p>
	<p>Natural Environment</p>	<p>1. Section 1.3, third sentence, p. 2 – the sentence is confusing and the message is unclear.</p>	<p>Most of the property is actively used for landfill operations, or has been previously stripped of topsoil; as such, natural vegetation cover is isolated to areas that are not repeatedly disturbed. This sentence will be modified to clarify that natural vegetation on-site is limited to the roadside ditches, unused areas of the site, and edges of the site.</p>
		<p>2. Figure 1 – the legend has a marker for “Eastern Meadowlark Sighting”. As the report states no Meadowlark were observed, this label is incorrect. It also does not match with Figure 4-15 in the Draft EA Study Report which is the same figure.</p>	<p>The label on Figure 1 will be corrected to read “Eastern Meadowlark Survey”, as there were no sightings of Eastern Meadowlark during the surveys. The label was corrected for Figure 4-15 of the Draft EA Study Report.</p>
		<p>3. Section 2.2.2, Eastern Meadowlark and Bobolink Surveys, p.7 – the report states the MNRF bobolink</p>	<p>The MNRF protocol states that at least three sets of point counts be completed, and these should take place</p>

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		survey protocol was followed; however, only two field surveys were completed instead of the 3 required in the methodology. Further, the methodology states that surveys should take place in June or the first week of July. The report states the first survey was done prior to this timeframe, in May.	between the April 23rd and July 3rd in Hill Site Region 6E, with each survey separated by a week or more. Surveys were completed, although the field was fallow with sparse weeds and was not suitable habitat. After the second survey, as no crop was establishing in the field, a third survey was not completed. Agricultural fields with hay or forage crops can be used by meadowlark, and this field did not meet those types, as described by MNRF.
		4. Section 3.1, Community 9, second sentence, p.18 – the sentence is confusing and the message is unclear.	This sentence will be modified to clarify that the treed swamp areas were found in two pockets within Community 2 (buckthorn dominated community).
		5. Section 3.4.4.2, first bullet, p. 28 – more detail should be provided regarding the likelihood of equipment error causing the low dissolved oxygen readings.	As noted in the report, the information provided in this section is a summary of the findings from the 2014 annual monitoring report for the landfill, which was submitted to the MOECC for review. No additional information on the identified anomaly is available. This condition was not encountered in subsequent monitoring conducted in 2015 and 2016.
		6. Section 3.4.4.2, second bullet, third sub-bullet, p.29 – there is likely a mistake that un-ionized ammonia concentrations are being compared to iron concentrations.	This is a typographical error. The report will be corrected to read "[...] within the same range of un-ionized ammonia concentrations [...]".
		7. Section 3.4.4.2, ninth bullet, p.30 – more detail should be provided to verify equipment error.	As noted in the report, the information provided in this section is a summary of the findings from the 2014 annual monitoring report for the landfill, which was submitted to the MOECC for review. No additional information on the identified anomaly is available. This condition was not encountered in subsequent monitoring conducted in 2015 and 2016.
	Ecological Environment	Table 3 and Table 4, Aquatic Ecosystems, Predicted changes in water quality – discuss the potential effect of the new SWM ponds on the water temperature of the receiving watercourses. Further, discuss TSS removal targets for the SWM	The potential effect of the new SWM ponds on the water temperature of the receiving watercourse is minimal. As a result of the use of water for on-site dust control, discharge events from the stormwater ponds are infrequent as water is removed from the ponds. The

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Date	Topic Area	Comment Summary	Response / How Comment was Addressed in the EA
		ponds.	<p>ECA requires up to four grab samples per year be taken during discharge between April 1st and October 31st with a minimum of a 30 day spacing between samples. This monitoring condition for the 2014 through 2016 years led to a total of only two samples being taken (i.e., discharge occurred during a total of 2 months in a 3 year period). When discharge occurs from the SWM ponds on-site, it is typically during a prolonged wet weather period more commonly experienced in the spring/fall when temperatures are low. While discharge from a single storm event is possible, the intensity of the rainfall required to result in discharge would generally be such that: a) the entire watershed would be experiencing high flows, providing a greater buffer for any released water; and b) the stormwater has likely not been retained in the pond for a significant period of time before release, and there would be a lower temperature differential between the ponds and the receiving waters.</p> <p>With respect to the TSS removal by the ponds, the MOECC “Stormwater Management Planning and Design Manual” indicates that the protection level provided by a SWM system should provide a minimum of 70% (Normal) long-term sediment removal. While the revised stormwater system design including the two new SWM ponds will be developed in more detail during the ECA design and approval stage, the level of quality control for the site outlined in the EA targets 80% removal for TSS (Enhanced protection), exceeding the MOECC requirements.</p> <p>Text will be added to Section 2.1.3 of the Effects Assessment Report to more clearly outline the key design considerations and assumptions, and then will be carried forward into Tables 3 and 4, as appropriate, for the assessment of effects.</p>
		Discuss the potential for contamination of the SWM ponds by leachate?	The proposed approach to managing stormwater and leachate, including keeping them separate during normal landfill operations will be consistent with the current

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			<p>practices. This approach is outlined in Supporting Document SD 2 Conceptual Design Report, Section 2.2. In summary, temporary containment berms are utilized within the landfill area to prevent leachate from the active cell coming into contact with clean surface water runoff from adjacent areas. These berms are placed at the limits of each cell. The berms are built with compacted clay soil. Any surface water runoff in the operating cells and in contact with waste is considered as leachate. The leachate is contained within the cells during operation, collected through the leachate collection system, and then transferred to the leachate treatment facility. Upon reaching the final elevation for the landfill, the cell is covered with a low permeability geomembrane, which prevents stormwater from contacting the waste. Leachate will continue to be collected and treated, and stormwater runoff from the final cover will flow to the perimeter ditch of the cell and be conveyed to the SWM ponds.</p> <p>To-date, GFL has not encountered a situation at the EOWHF where leachate has come into contact with stormwater and contaminated the contents of a SWM pond; consequently, the net effects assessment identified that no additional effects on surface water quality are anticipated.</p>
		<p>Table 7, Aquatic Ecosystems – Temperature monitoring of the SWM pond outflows should be included in on-going monitoring. The SWM pond outflows should be monitored for leachate contaminants that have entered the ponds instead of the leachate treatment plant.</p>	<p>Temperature and leachate indicator contaminants are already an aspect of the current SWM pond and surface water monitoring program for the EOWHF, as required by the ECA. As noted in Table 7, on-going monitoring will be conducted as per the requirements of the ECA. This reference in the table will be revised to more clearly indicate the SWM ponds and surface water monitoring program for the site.</p>
		<p>Table 8, Terrestrial Ecosystems –Compliance monitoring is necessary to ensure adherence to timing windows listed under Commitment for Mitigation.</p>	<p>The table will be revised to include Compliance Monitoring for adherence to the timing windows to avoid vegetation clearing and clearing/grading of the treed swamp area.</p>

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		Table 8, Aquatic Ecosystems – see previous comments about SWM pond monitoring.	As noted in Table 8, on-going monitoring will be conducted as per the requirements of the ECA. This reference in the table will be revised to more clearly indicate the SWM ponds and surface water monitoring program for the site.
	General	The legend for Figure 4-15 does not match Figure 1 of the technical study (Supporting Document 1-7) concerning Eastern Meadowlark sightings.	The label on Figure 1 will be corrected to read "Eastern Meadowlark Survey", as there were no sightings of Eastern Meadowlark during the surveys. The label was corrected for Figure 4-15 of the Draft EA Study Report.
		The final report should identify which alternative will be implemented and a detail design should be provided demonstrating: (a) that post-development runoff will not exceed pre-development values for all storm events up to the 100 year, and (b) how 80% TSS removal will be achieved.	Section 7.2 of the Draft EA Study Report identifies Alternative Method 1 as the preferred alternative. Following approval of the EA, the detailed design of the preferred alternative will be prepared as part of the application to amend the Environmental Compliance Approval. This will include an updated Stormwater Management Plan for the site demonstrating post-development run-off will not exceed pre-development values up to the 100 year storm and achievement of 80% TSS removal.
		The report must summarize how ground water will be protected from infiltration of the stormwater management ponds, the contaminant monitoring strategy for the ponds, the timing window compliance monitoring strategy, and the contingency plan, should leachate be detected.	Each of these aspects has been addressed in the responses to the comments above. The updated Stormwater Management Plan for the EOWHF will provide the additional details requested in support of an ECA amendment application, following EA approval of the undertaking.
	Geology and Hydrogeology	<p><i>Geology</i></p> <p>It is difficult to assess the actual stratigraphy of the site since none of the borehole logs have been provided for review. Furthermore, the tables provided do not provide stratigraphic information for any of the onsite wells. They do provide information relevant to hydrogeological interpretation (well installation, screen locations etc.) but little for geological interpretation.</p>	The geological conditions at the EOWHF have been well established based on extensive investigations completed as part of the original EA for the EOWHF along with subsequent investigations as part of ongoing site development and monitoring. The Existing Conditions Report intended to provide an overall compilation of this information but not all of the detailed data and logs collected from the previous investigations. A summary table of the borehole geology will be incorporated in the

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			revised version of the report to assist in understanding the stratigraphy of the site.
		[...] Basic MOE well records information were provided in Appendix C, any wells located within the property should be discussed and included in the interpretation of onsite geology[.] Fourteen, MOE Well Records appear within the property limits and have not been described during the overall discussion of geology nor hydrogeology. When comparing the Well ID 7044207 to the one cross-section provided in this location it is comparable to P1-3A, however this has not been discussed or provided as relevant information. Many of these wells are likely the monitoring wells onsite but has not been discussed.	The cross-sections will be reviewed with the MOE wells in mind. These wells, however can not be incorporated in the cross-sections since their elevations are not provided in the borehole logs. A summary table providing construction details of the 14 MOE wells will also be provided in the revised report.
		Provide additional cross-sections at the boundaries of the property <ul style="list-style-type: none"> ▪ Cross-sections should include screen locations, potentially potentiometric elevations, surface topography (landfill liners, landfills etc) and important features such as pond depths. ▪ The cross-sections should have easily referenced elevation grids or annotation. 	The two cross-sections will be updated in the revised report to show existing topography and key features along the cross-sections as well as monitoring well construction details and piezometric levels.
		Provide all borehole logs of onsite monitoring wells or onsite MOE well records.	A summary table of the borehole geology will be incorporated in the revised report. A summary table of the MOE wells, in addition to the GFL wells included in the MOE well search, will also be incorporated in the revised report.
		The report indicates Silty Clay having a range thickness range of 1.6 to 18.6 m but also describes it as extensive. No further description had been provided. 1.6 metres is not considered extensive, please provide further explanation if this is considered "Local" and why would this be considered "extensive".	The thickness range of silty clay will be updated in the report to more correctly interpret and reflect the borehole data for the site. The text in the report will also be updated to simply state that the silty clay unit is continuous.

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		<i>Hydrogeology</i>	
		<p>This report compiles hydrogeological data across multiple reports but does not use any interpretive judgement to describe the hydrogeological environment. Ranges and geometric means of hydraulic conductivities are discussed but the actual test results and interpretations have not been provided. The Hazen method (1911) has been used to identify hydraulic conductivities in a till which is generally not applicable since it is typically used for fine sands to gravel.</p>	<p>A conceptual understanding of the hydrogeological system based on the compiled data will be added to the revised report. The hydraulic conductivity values provided in historical reports will be assessed for appropriate analytical methods and if any data was derived using any unsuitable method in the historical reports (e.g., the Hazen method as mentioned above) will be removed.</p>
		<p>Without the referenced reports nor borehole logs it is very difficult for the SNC to provide effective comments with regards to the Hydrogeology except for the following issues.</p> <ul style="list-style-type: none"> - Potentiometric surfaces provided in Figures 7-10 all have concerning shapes (water mounds and depressions) and each require supporting text explaining features. For example, <ul style="list-style-type: none"> • Figure 7 (S1-1A, Mound), (P1-3A, Mound) • Figure 8 (96-3B) etc. <p>An example of the drastic mounding and depressions can be located on following Figure 6G.</p> <ul style="list-style-type: none"> ▪ All mounds and depressions (BULLS EYES) on all figures must be explained/ defended. <p>Changes in the interpretation will likely result in changes throughout the document, it would be advisable to update accordingly.</p>	<p>In 2017, all groundwater wells were re-surveyed to reduce uncertainties related to groundwater elevations. As such, the groundwater contour maps will be updated and included in the revised report accordingly. All mounds noticed on these maps will be discussed in the report.</p> <p>In addition to the re-surveying, additional wells were installed on site and landfilling activities were continued. As such, the groundwater flow direction as well as the horizontal and vertical hydraulic gradients have slightly changed mostly in the area of Stage 2 where mounding was observed.</p>
		<i>Groundwater Quality</i>	
		<p>This section references annual reports for detailed description of groundwater quality. The purpose of this report “to provide a detailed description and understanding of the site” however it tends to refer to other documents without being concise. It is uncertain that the reviewer will have all the referenced reports for review. Due to the lack of material for review, the SNC cannot comment on</p>	<p>Additional information on the groundwater quality including a summary of the results obtained from the on-site wells will be added to the report.</p>

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		whether any groundwater is being impacted in anyway.	
		<i>General</i>	
		The report is not signed nor stamped by any author and should have been completed or reviewed by an appropriate Designated Professional (P.Geo or P.Eng)	The final version of the report will be signed by a P.Eng.
		For such an important part of any landfill expansion this report seems to be quite brief.	The geological and hydrogeological conditions at the EOWHF have been well established based on extensive investigations completed as part of the original EA for the EOWHF along with subsequent investigations as part of on-going site development and monitoring. The Existing Conditions Report was not intended to reproduce all of the previous studies but provide an appropriate level of detail from that work for a sufficient understanding of the existing conditions. With the proposed changes to the report mentioned above, it is anticipated that the report will contain the additional detail requested by the reviewer.
		The Draft EA states the both alternative designs include the natural containment system with no liner. Based on the information provided for review and the fact that the Silty Clay becomes considerably less thick towards the alternative designs (North), additional information should be discussed in greater detail. This could include but is not limited to cross-sections, borehole logs, interpretation of groundwater levels and connection, detailed interpretation of the all the wells onsite and potentially additional hydraulic testing. This expanded report would hopefully verify the assumption of isolation in the expansion area is defensible and demonstrated.	It should be noted that the potential effects of each alternative on the geological/hydrogeological environment were assessed and documented in Supporting Document SD 3-4 to the EA. This includes an assessment of the proposed conceptual design for each alternative to meet the regulatory compliance standards for groundwater at the property boundary. Both of the alternatives meet the requirements of Ontario Regulation 232/98. The updated cross-sections (discussed above) will provide sufficient information concerning the existing conditions in the northern section of the site.
		Additionally, S2-2A, based on the cross-section, shows considerable sand and gravel. The South Nation Watershed is known to have hidden, unknown, esker complexes and generally when thick layers of silty clay are present with underlying high-quality groundwater	The S2-2A log was provided by a driller, and no geologist was on site during the drilling. The log identifies this unit as a compact gravel, sand and silt. Other borehole logs originating from drillers in the area also identify presence of similar unit; however, the unit was described as glacial

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		(bedrock contact), as stated in the Draft EA and the reviewed report, eskers can sometimes be present. Eskers have not been discussed within the report and should be discussed as this geological feature is considered an asset due to the high quality and relative high quantity of potable water.	till. Further research on overburden aquifer(s) such as sand and gravel aquifers/eskers in the area was carried out, and none could be located underneath or near the site. A map identifying overburden aquifer(s) present around the site will be added to the revised report.
Member of the Public			
February 5, 2018	General	On the pdf version of section 4 of the Draft EA report, on page 9 , second paragraph , it seems that they are describing the small vehicle drop off area as it existed in October 2016 . Currently there are 2 scales with the attendant between the scales. Also now the small vehicle drop off area is north and west of the scales (you no longer have to back up a ramp to the south of the scales). Also there are currently six containers for the small vehicle drop off (not four as in the current report) (of the six containers : 3 are for waste ; one is for metals ; one is for tires ; and the last is for wood / yard and leaf waste).	The description of the small vehicle drop off area does not include site changes that were made in 2017. This section of the EA will be updated to reflect the current conditions noted at the drop off area.
		On the pdf version of draft EA report , on page 41 , on map 4 - 13 , Eighth Road is incorrectly marked. What is marked now on the map as Eighth Road is actually the middle section of County Road 6 . Eighth Road is a township road that begins at the east end of County Road 6 (where County Road 6 makes a south turn) and continues east to Valley Street.	The label for Eighth Road on the figure will be removed.
		My guess HDR Corp. made a site visit in October 2016 and has not upgraded their data to conditions on January 31 , 2018.	The description of the small vehicle drop off area does not include site changes that were made in 2017. This section of the EA will be updated to reflect the current conditions noted at the drop off area.
February 14, 2018	General	I should point out that I have read only selected parts of the information that GFL has placed on its website concerning the Draft EA Report of the EOWHF. All comments I will make concern those parts only. I have only personally gone in the area of the scales and the public drop off area of your site, so I have to rely on the	Comment noted.

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		information contained on your website for the balance of information that I have viewed.	
		In Supporting Document 1-8, Socio-Economic Conditions, the consultants forgot to mention the total amount of harmonized sales tax (HST) collected on material placed in the landfill. I was once at your site and the bill showed that the rate for waste was about \$85 per tonne plus HST. At about 550,000 tonnes handled in 2016, the HST collected for the province of Ontario and the federal government amounts into the millions of dollars. Also, to put numbers in perspective, the budget of the Township of North Stormont is about \$7,000,000 annually (for the numbers given on page 16 of SD 1-8).	The amount of sales taxes collected and/or paid is not typically reported. The Township of North Stormont annual budget is in the order of \$5.5M. This will be noted in the final EA to provide further context for the information presented.
		Yesterday while out for a walk, there was smoke from a brush fire south of the village of Moose Creek. As long as the MOECC allows brush burning during land clearing operations, GHG are created and noxious fumes are generated.	Comment noted.
		I still have other sections of your reports to go through, so there may be additional comments in the future	Comment noted.

A teleconference was held on May 3rd, 2018 between SNC staff and the project team to review draft responses to comments received from SNC. Based on these discussions, revised responses and supporting documentation were prepared and provided to SNC prior to the completion of the EA Study Report.

The MOECC provided review comments covering a range of technical studies. A conference call was held on April 26th, 2018 between MOECC staff and the project team regarding comments received regarding the air quality and odour related studies. The purpose of the call was to clarify the comments and confirm the approach proposed by the project team to address specific comments.

9.4 Commitments for On-going Consultation and Engagement

The final EA Study Report has been formally submitted to the MOECC and circulated to agencies, Indigenous communities and the public for review and comment. The Notice of Submission for the final EA Study Report has been published in the Cornwall Standard-Freeholder and Le Reflet-The News newspapers in both English and French. A printed copy of the report has been made available for public viewing at the locations identified in the Notice.

GRT members and agencies, Indigenous communities and the public have been notified of the final EA Study Report review by mail or courier including a copy of the Notice and/or letter. The EA Study Report and supporting documents have also been made available from the project website www.leic.com/about/projects.