

Appendix A – Halton Municipalities Detailed Comments on Potential Conditions

Overview

This Appendix provides the Halton Municipalities' detailed technical comments on the potential conditions. The Table of Contents below sets out the organization of this Appendix, using the order provided in the Agency's proposed conditions.

For each category of potential conditions, we begin with an overview of our concerns, setting out common issues with the proposed conditions. We examine specific draft conditions of concern in the accompanying table.

These comments reflect input received from experts retained by the Halton Municipalities. With one exception, all experts involved in this review appeared before the environmental assessment panel. The exception is Dr. Andrew Gray who provided input on air quality, instead of Dr. Franco DiGiovanni.

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Halton Municipalities' Comments on Potential Conditions – General Conditions

Overview

The Agency has proposed draft General Conditions relating to all consultation, follow-up and adaptive management, annual reporting, change of proponent and change to the designated project. Other than a Panel recommendation related to annual reporting, these proposed conditions were not taken from the Panel recommendations.

The Halton Municipalities' main concerns with these proposed conditions are:

- the proposed conditions do not provide adequate clarity and specificity with respect to what “standard setting bodies” apply with respect to the Proponent’s requirement to meet conditions that are based on methods and models that are recognized by standard setting bodies;
- any change of the Designated Project should be reported to the Agency, not simply changes that affect the Designated Project description or that may result in adverse environmental effects;
- the Agency has not identified how the proposed conditions related to follow-up programs are federally enforceable where they relate to s.5(2) effects. Absent federal enforceability, these proposed conditions cannot be included as a condition in a future decision statement; and
- the Halton Municipalities, particularly Halton Region and the Town of Milton, fit the definitions of “affected party” and “relevant authority.” Therefore the proposed conditions should be amended to expressly reference these parties throughout and restrict the Proponent from having the power to decide whether or not Halton Region and the Town are included on the corresponding lists in General Conditions with respect to consultation, follow-up programs, information sharing, notification of change of proponent and notification of change to the Project.

Potential Conditions: 2 – General Conditions

Potential Condition	Comments
<p>2.1 The Proponent shall ensure that its actions in meeting the conditions set out in this document during all phases of the Designated Project are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge including community and Indigenous knowledge, available at the time the Proponent takes action, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals, have applied the best available economically and technically feasible technologies to achieve continuous improvement and meet all engineering requirements for safe railway and facility operation.</p>	<p>This proposed condition does not provide the requisite level of detail required for the Proponent to comply. Specifically, the standard setting bodies should be defined further to include references to specific standard setting bodies that apply.</p>
<p>2.7 The Proponent shall, where a follow-up program is a requirement of a condition set out in this document, determine, as part of the development of each follow-up program and in consultation with the party or parties being consulted during the development, the following information:</p>	<p>The major problem with this proposed condition is that CEAA 2012 makes no provision for the enforcement of conditions related to s. 5(2) effects, including follow-up programs.</p>
<p>2.9 The Proponent shall provide the follow-up programs referred to in conditions 4.5, 4.10, 4.20, 5.9, 5.10, 5.13, 6.3, 6.10, 7.12, 8.4, 8.11, 8.14, 8.22, 8.26, 8.29, 8.33, 9.1 and 9.3 to the Agency and to the party or parties being consulted during the development of each follow-up program prior to the implementation of each follow-up program. The Proponent shall also provide any update made pursuant to condition 2.8 to the Agency and to the party or parties being consulted during the development of each follow-up</p>	<p>The major problem with this proposed condition is that there is no enforcement available for s.5(2) effects. On this list, the following items relate to s.5(2) effects:</p> <ul style="list-style-type: none"> 4.5 lighting 4.10 noise 5.9 stormwater 5.10 surface water 5.13 groundwater 6.3 wetlands 6.10 reclamation of site post-construction 8.11 Western Chorus Frog 8.14 grassland habitat 8.22 Snapping and Painted Turtles 8.26 Monarch Butterfly 8.29 Eastern Milksnake 8.33 habitat connectivity

Potential Conditions: 2 – General Conditions

Potential Condition	Comments
<p>program within 30 days of the follow-up program being updated.</p>	<p>9.1 country foods 9.3 sleep disturbance</p> <p>Halton Region and Town of Milton should be explicitly named as a party to be consulted with for the development of each follow-up program.</p> <p>The follow-up programs and updates to follow-up programs should be made available to the public, including by posting on the Agency registry.</p>
<p>2.10.1 implement the follow-up program according to the information determined pursuant to condition 2.7;</p>	<p>Enforcement of follow-up programs is a major problem given that there is no enforcement available for s.5(2) effects.</p>
<p>2.12.8 any change to the Designated Project for which the Proponent determined that condition 2.18 did not apply.</p>	<p>This proposed measure allows for the Proponent to unilaterally make a finding of whether the change results in a “change to the Designated Project description including in this document <u>or that may result in adverse environmental effects</u>” under Proposed Condition 2.18. Previous Decision Statements in EAs do not have this condition.</p> <p>Accordingly, Proposed Condition 2.12.8 should read (additions are bolded and underlined):</p> <p>A <u>summary of each</u> change to the Designated Project for which the Proponent determined that condition 2.18 did not apply <u>that has been reported to the Agency under condition 2.18.</u></p> <p>As shown below, Condition 2.18 should be modified to report all changes to the Designated Project to the Agency.</p>
<p>2.14 The Proponent shall publish on the Internet, or any medium which is publicly available, the annual reports and the executive summaries referred to in conditions 2.12 and 2.13, the air pollutant emissions reduction plans referred to in conditions 4.16 and 4.17, the final offsetting plan(s) referred to in condition 7.6, the wildlife management and connectivity plan referred to in condition 8.34, the cultural heritage property maintenance and re-use plan referred to in condition 11.5, the</p>	<p>Similar to past Decision Statements for an EA, the document should be kept on publicly available sites for at least 25 years following the end of operations or until decommissioning of the Designated Project, whichever comes first. These documents should also be included on the registry.</p> <p>Halton Region and Town of Milton should be included on list of potentially affected parties.</p>

Potential Conditions: 2 – General Conditions

Potential Condition	Comments
<p>archaeological resources protection plan referred to in condition 11.8, the accident and malfunction response plan referred to in condition 14.3, the reports related to accidents and malfunctions referred to in conditions 14.5.3 and 14.5.4, the accident and malfunction communication plan referred to in condition 14.5, the schedules referred to in conditions 15.1 and 15.2, and any update or revision to the above documents, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for 15 years following their publication. The Proponent shall notify the Agency, potentially affected parties, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation of the availability of these documents within 48 hours of their publication.</p>	
<p>2.15 When the development of any plan is a requirement of a condition set out in this document, the Proponent shall submit the plan to the Agency prior to construction, unless otherwise required through the condition.</p>	<p>The plans should be submitted and approved by the Agency prior to construction, unless otherwise required through the condition.</p>
<p>2.16 The Proponent shall notify the Agency, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation in writing no later than 30 days after the day on which there is any transfer of ownership, care, control or management of the Designated Project in whole or in part.</p>	<p>Halton Region and the Town of Milton should be included on this list.</p>
<p>2.17 The Proponent shall consult with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat</p>	<p>Halton Region and Town of Milton should be included on the list of potentially affected parties.</p>

Potential Conditions: 2 – General Conditions

Potential Condition	Comments
<p>Nation, potentially affected parties, Conservation Halton and relevant authorities prior to notifying the Agency, pursuant to condition 2.18, of any potential change to the Designated Project.</p>	
<p>2.18 The Proponent shall notify the Agency in writing of any potential change to the Designated Project that would result in a change to the Designated Project description included in this document or that may result in adverse environmental effects. In notifying the Agency, the Proponent shall provide a description of the change(s) to the Designated Project, the predicted adverse environmental effects and the proposed mitigation measures and follow-up requirements to be implemented by the Proponent to ensure that the change(s) do not result in adverse environmental effects greater than those predicted in the Joint Review Panel Report. The Proponent shall also describe the results of the consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation, potentially affected parties, Conservation Halton and relevant authorities.</p>	<p>Any change to the Project should be reported to the Agency, not only where it results in a change to the Designated Project description or if it may result in adverse environmental effects. This allows for the Proponent to unilaterally make this finding.</p> <p>Instead, the proposed condition should be re-written as follows (additions are bolded and underlined):</p> <p>2.18 The Proponent shall notify the Agency in writing of any potential change to the Project that would result in a change to the Designated Project description included in this document or that may result in adverse environmental effects. <u>This notice shall be required for changes proposed by the Proponent and changes that happened through accidents or malfunctions or other unplanned events. Where the Proponent determines that the change does not change the Designated Project description or have an adverse environmental effect, it shall provide its rationale for this determination to the Agency. For other changes, the Proponent's notice to the</u> Agency, the Proponent shall provide a description of the change(s) to the Designated Project, the <u>actual or</u> predicted adverse environmental effects, and the proposed mitigation measures, and <u>the</u> follow-up requirements to be implemented by the Proponent to ensure that the change(s) do not result in adverse environmental effects greater than those predicted in the Joint Review Panel Report. The Proponent shall also describe the results of the consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation, potentially affected parties, Conservation Halton and relevant <u>authorities including Halton Region and Town of Milton.</u></p>

Halton Municipalities’ Comments on Potential Conditions – Community Liaison Communication Process

Overview

The Panel recommended that if the Project is approved, CN should establish a Community Liaison Group prior to construction. The purpose of this Group would be to provide ongoing information about the Project, Project activities and the monitoring of Project effects on the community; to identify and discuss issues of concern to the community, and to work towards mutually satisfactory resolution of problems and complaints. The Agency has included these recommendations from the Panel as part of its proposed conditions.

The Halton Municipalities’ main concerns with these proposed conditions are that:

- the proposed conditions setting out the community liaison communication process are not well defined or specific. We recommend that this process be approved by the Agency prior to construction;
- to provide increased transparency and communication throughout the process, we recommend amending the proposed conditions to include the recommendations of the Panel to have an independent facilitator to run meetings, as well as administrative support to take minutes and circulate information to all committee members (Panel Report, Appendix. J, pp. 37-38); and
- the Agency has not identified how these conditions are federally enforceable where they do not relate to s.5(1) effects,¹ and absent federal enforceability, these proposed conditions cannot be included as a condition in a future decision statement.

Overall, the Halton Municipalities are concerned that enforceability limits on many, if not most, aspects of this proposed condition will mean that it fails to result in mitigation that avoids any significant adverse environmental effects of this Project.

Potential Condition	Comments
<p>3.1 The Proponent shall identify, prior to construction, parties that may be potentially affected by the Designated Project, which shall include parties representative of local and municipal governments, nearby residents, community organizations and business organizations identified by the Proponent in appendix D of the environmental impact statement (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57) and the Mississaugas of the Credit First Nation, the Six Nations of the Grand</p>	<p>The Agency should amend this proposed condition as follows (additions are bolded and underlined):</p> <p>3.1 The Proponent shall <u>identify</u>, prior to construction, (a) <u>identify</u> parties that may be potentially affected...</p> <p><u>(b) appoint an independent facilitator to support its community liaison process, and take all required action to maintain this independent facilitator in place, including providing administrative support for the duration of the Project. Among other things, the facilitator shall attend all liaison meetings. Among other things, administrative support shall take minutes of all liaison meetings and circulate information to liaison committee members.</u></p>

¹ Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to any effects that are not s.5(1) effects. While some aspects of this liaison process relate to s.5(1) effects, many do not and would be clearly related to s.5(2) effects.

Potential Conditions: 3 – Community Liaison Communication Process

Potential Condition	Comments
<p>River and the Huron-Wendat Nation. The Proponent shall provide the list of potentially affected parties, including their contact information, to the Agency prior to construction. The Proponent shall maintain this list up-to-date during all phases of the Designated Project and shall provide any updated list to the Agency as part of the annual report referred to in condition 2.12, or upon request of the Agency.</p>	
<p>3.2 The Proponent shall develop, prior to construction and in consultation with potentially affected parties, a community liaison communication process. The Proponent shall implement the community liaison communication process throughout all phases of the Designated Project. The Proponent shall include, as part of the community liaison communication process, a method for potentially affected parties to provide feedback to the Proponent about any adverse environmental effect caused by any component of the Designated Project and a method for the Proponent to share information about the Designated Project with potentially affected parties, to document and respond to feedback received and to demonstrate how feedback has been addressed, including through the implementation of modified or additional mitigation measures and/or modified or additional follow-up program requirements. In doing so, the Proponent shall:</p>	<p>The Agency should amend this proposed condition as follows (additions are bolded and underlined):</p> <p>3.2 The Proponent shall develop <u>consistent with condition 3.1</u> prior to construction and in consultation with potentially affected parties,</p>

Halton Municipalities' Comments on Potential Conditions – Light

Overview

The Panel concluded that during operations, the Project will function day and night and be lit by 30-meter high mast light fixtures on the pad area and 15-meter high light fixtures along roadways. The proposed light fixtures and lights are taller and more powerful than other types of lighting in the area. Reviewing these points, the Panel concluded that the Project was likely to cause significant adverse environmental effects from nighttime lighting unless the mitigation identified by the Panel was implemented.

Turning to the proposed conditions, the majority of the proposed conditions provide plans for the future. However, these plans cannot serve as mitigation measures. These plans defer the identification of mitigation measures to after the CEAA 2012 decisions, and do not contain adequate levels of specificity to know the desired outcome will be achieved. These plans cannot be relied upon by the Minister as mitigation measures.

Additionally, the wording of the proposed conditions is too vague where it allows the Proponent to unilaterally decide against implementing a proposed mitigation measure where it is “not technically or economically feasible,” and/or “does not meet all engineering requirements for safe railway and facility operation” (4.4.2).

The following mitigation measures identified by the Panel as necessary were not clearly addressed in the proposed conditions:

- CEAA Recommendation 5.7 — CN should implement the mitigation it has committed to undertake for light: ensure terminal lighting design will be as efficient as possible, while providing enough light for on-site safety; reduce lighting in areas not being used for construction activities; and supplement mitigation through lighting design, strategic shading elements (berms, barriers and vegetation). (Panel Report, Appendix J, p. 4)
- CEAA Recommendation 5.8 — Additional mitigation to reduce obtrusive lighting: The Panel considers that additional mitigation measures beyond CN’s commitments are necessary to avoid a significant adverse environmental effect. Therefore, the Panel recommends that CN implement the following additional mitigation measures: retain an environmental consultant with relevant lighting experience to direct lighting decisions during the detailed design stage; and within operational safety limits, require truck drivers to dim headlights when inside the facility, and monitor compliance. (Panel Report, Appendix J, p. 4)
- CEAA Recommendation 5.10 — Follow-up program for light: As part of the follow-up program, CN should consult with both the Town of Milton and with the residents living in the four houses where light trespass guidelines could be exceeded, when considering projects that have been or will be carried out, to ensure that appropriate mitigation is installed and that cumulative light effects do not exceed the International Commission on Illumination E2 rural guideline. (Panel Report, Appendix J, p. 5)

The further problem with all of the proposed conditions is that effects from nighttime lighting are s.5(2) effects. As such, the Agency has no authority under CEAA to enforce any of them. Nor has the Panel or Agency identified any other federal authority with the authority, expertise, or resources to enforce

Potential Conditions: 4 - Light

these conditions.¹ Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects from nighttime lighting only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects from nighttime lighting are likely.

Potential Condition	Comments
<p>4.1 The Proponent shall measure, prior to construction, baseline light trespass and glare at the eight sites identified by the Proponent in table 4.5 of the document entitled Technical Data Report Light (Appendix E.8) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).</p>	<p>The proposed condition should be amended to ensure that this baseline study is filed with the Agency and the Town of Milton.</p>
<p>4.2 The Proponent shall manage, during all phases of the Designated Project, lighting within the Designated Project Development Area such that light trespass and glare from the Designated Project meet or surpass:</p>	<p>The proposed condition should be amended to ensure that the Proponent must (a) carry out regular monitoring and reporting on its compliance with this condition, and (b) share the results of its monitoring with Agency and the Town of Milton to ensure compliance with the applicable guidelines.</p>
<p>4.3 The Proponent shall develop, prior to construction, mitigation measures to control the direction, timing and intensity of lighting within the Designated Project Development Area to mitigate adverse environmental effects of the Designated Project (including on migratory birds), while meeting engineering requirements for safe railway and facility operation. The Proponent shall implement these measures throughout all phases of the Designated Project. The Proponent shall submit these measures to the Agency prior to implementing them. As part of these measures, the Proponent shall:</p>	<p>The proposed condition should include the requirement that the Proponent file with the Town of Milton all mitigation measures submitted to the Agency.</p>

¹ We note by contrast that the Town of Milton has, as evidenced by lighting standards in its official plan, the authority to deal with this topic within its planning and enforcement expertise.

Potential Conditions: 4 - Light

Potential Condition	Comments
<p>4.4 The Proponent shall evaluate, prior to construction, the technical and economic feasibility of installing amber-coloured outdoor light fixtures with wavelengths longer than 500 nanometers and a peak around 590 nanometres within the Designated Project Development Area. The Proponent shall also evaluate, in consultation with relevant authorities, whether the use of amber lighting can reduce sky glow and glare from the Designated Project, is not harmful to wildlife and can meet all engineering requirements for safe railway and facility operation. In doing so, the Proponent shall:</p>	<p>This proposed condition provides a plan, but is not a mitigation measure. It is also too vague by allowing the Proponent to decide what “technical and economic feasibility” means.</p> <p>There is no indication that any mitigation will occur or thus whether this condition will reduce light emissions.</p>
<p>4.4.2 install amber outdoor light fixtures within the Designated Project Development Area, unless the evaluation demonstrates that installing amber lighting is not technically or economically feasible or does not reduce sky glow and glare, is harmful to wildlife and/or does not meet all engineering requirements for safe railway and facility operation.</p>	<p>As above, this proposed measure is too vague. There is no indication that any mitigation will occur or thus whether this condition will reduce light emissions.</p>
<p>4.5.1 monitor light trespass and glare attributable to the Designated Project and compare monitoring results against the applicable guidelines referred to in condition 4.2.1 or 4.2.2; and</p>	<p>This proposed measure should be amended to require that the Proponent share the results of the monitoring program with the Town of Milton and other relevant authorities.</p>
<p>4.5.2 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 4.5.1 demonstrate that modified or additional mitigation measures are required to ensure that light trespass and glare attributable to the Designated Project meet or surpass the applicable guidelines referred to in condition 4.2.1 or 4.2.2. The Proponent shall submit these</p>	<p>The proposed measure should be rewritten to set out the remedy for non-compliance with the applicable standards.</p>

Potential Conditions: 4 - Light

Potential Condition	Comments
measures to the Agency prior to implementing them.	

Halton Municipalities' Comments on Potential Conditions – Noise

Overview

The Panel concluded that during operations, the Project will operate 24-hours per day resulting in notable noise effects throughout points of reception in the residential neighborhoods adjacent to the Project. The Panel concluded that these effects would be significant unless the mitigation identified as necessary by the Panel was implemented. The noise expert retained by the Halton Municipalities also concluded that CN's predictions for operational noise from the facility under-assessed the attributes of this noise.

Turning to the proposed conditions, the majority lack detail and clarity. Conditions that do not specifically detail what the Proponent is required to do make it impossible to evaluate the effectiveness of the proposed condition or the mitigation it describes. It is thus not clear whether or how the proposed conditions will avoid the significant adverse environmental effect identified by the Panel.

In addition, several mitigation measures that the Panel required to avoid a significant effect from Project noise emissions are not reflected in the proposed conditions, including requirements that the Proponent be required to:

- avoid annoyance from back up alarms, including consideration of installing broadband backup alarms on CN equipment, such as reach stackers; (Panel Report, Appendix J, p. 6)
- ensure compliance with its anti-engine braking policy by installing signage around the terminal and using site monitors to identify offenders (Panel Report, Appendix J, p. 6); and
- locate idling trains to locations with fewer receptors, or where receptors are the greatest distance from the railway line to avoid potential low frequency noise effects (Panel Report, Appendix J, p. 6).

For several other examples of necessary mitigation, the proposed conditions include aspects of the necessary mitigation, but do not contain sufficient detail to ensure that the mitigation will be effective, namely:

- design and rigorously apply a no-idling policy so that, where feasible, construction equipment would be turned off when not in use (Panel Report, Appendix J, p. 7) – the proposed conditions deal with no-idling policy to mitigate effects on air quality, not noise, and provide no specific targets or measures to ensure compliance;
- require all contractors to minimize tailgate slams. CN should monitor and enforce this requirement with appropriate consequences (Panel Report, Appendix J, p. 6) – the proposed conditions deal with aspects of this mitigation under proposed measure 4.6.5, but this measure lacks sufficient detail to ensure contractor compliance or thus effective mitigation; and
- enforce speed limits for truck traffic within the terminal area to reduce the need for and intensity of engine-braking noise (Panel Report, Appendix J, p. 6) – the proposed conditions deal with speed limits to mitigate effects on air quality, not noise mitigation – the proposed conditions provide no limits or measures to ensure compliance.

It is also important to note that noise emissions arise in relation to s.5(2) effects. As such, the Agency has no authority under CEAA to enforce any of them. Nor has the Panel or Agency identified any other federal authority with the authority, expertise, or resources to enforce these conditions. Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

Potential Conditions: 4 - Noise

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects due to noise only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects due to noise are likely.

Potential Condition	Comments
<p>4.6 The Proponent shall manage noise throughout all phases of the Designated Project so that the Designated Project causes the acoustic environment to change by less than one to five decibels, as set out in the U.S. Federal Transit Administration’s Transit Noise and Vibration Impact Assessment Manual, and the level of highly annoyed to change by no more than 6.5% from baseline, as set out in Health Canada’s Guidance for Evaluating Human Health Impacts in Environmental Assessment: NOISE, at any receptor location identified by the Proponent on figure 3 of the document entitled Technical Data Report Noise Effects Assessment (Appendix E.10) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57). In doing so, the Proponent shall:</p>	<p>This proposed condition requires additional detail. In particular, this proposed condition should specifically refer to Health Canada’s criterion for avoidance of sleep disturbance.</p>
<p>4.6.1 construct, prior to operation, and maintain, throughout operation, vegetated noise berms with a minimum height of 5 metres within the Designated Project Development Area. The Proponent shall determine the locations of the berms prior to construction and shall provide that information to the Agency prior to construction;</p>	<p>This proposed measure lacks detail and certainty. As applicable standards may require berm heights greater than 5m in some areas, this proposed measure needs to be amended to ensure that there is a formal approval mechanism to ensure that correct heights are incorporated into the final design of the facility.</p>
<p>4.6.2 install a temporary sound barrier around the concrete batch plant for the duration of any paving activity conducted during construction;</p>	<p>This proposed measure does not have sufficient detail or certainty. It fails to specify either the height of the barrier or the extent of the expected reduction in sound levels. Accordingly, there is no way to determine the effectiveness of the barrier in reducing noise impacts.</p> <p>For example, a 2.4 m high (8ft) sound barrier constructed of plywood sheets (i.e., typical construction hoarding) would meet the wording of the proposed measure, but would not likely</p>

Potential Conditions: 4 - Noise

Potential Condition	Comments
	<p>result in significant reductions in noise levels, as noise sources associated with temporary batching plants are taller than the example wall. Also, second floor bedroom windows may “look over” the wall, again eliminating an acoustical benefit.</p>
<p>4.6.3 install a temporary sound barrier around the construction site for the Lower Base Line grade separation;</p>	<p>This proposed measure does not have sufficient detail or certainty.</p> <p>Same reasoning as 4.6.2 above.</p>
<p>4.6.4 use and maintain noise-dampening technologies on construction vehicles and equipment in good working order;</p>	<p>This proposed measure lacks clarity and certainty.</p> <p>More specificity is required than “noise dampening technologies”. This proposed measure should be amended to specifically refer to the measures identified as necessary by the Panel, including but not limited to:</p> <ul style="list-style-type: none"> • mufflers (Panel Report, Appendix J, p. 6) • broad-band back-up beepers (Panel Report, Appendix J, p. 6) • no-idling policies (Panel Report, Appendix J, p. 7) • vehicle maintenance (Panel Report, Appendix J, p. 6) <p>This proposed measure also fails to demand how that aspect of this proposed measure that applies to third parties will be enforced by and against the Proponent.</p>
<p>4.6.5 require all employees and contractors associated with the Designated Project to abide by best practices for noise reduction during all activities occurring within and outside the Designated Project Development Area, including when travelling to and from the Area and during loading and unloading activities. The Proponent shall provide these best practices to the Agency prior to implementing them; and</p>	<p>This proposed measure lacks clarity and certainty.</p> <p>More specificity is required on best practices and how this proposed measure is enforceable. This proposed measure should be amended to specifically refer to the best practices identified as necessary by the Panel, including but not limited to:</p> <ul style="list-style-type: none"> • requirements for broad-band back-up beepers (Panel Report, Appendix J, p. 6) • no-idling policies (Panel Report, Appendix J, p. 6) • vehicle maintenance (Panel Report, Appendix J, p. 6) • avoidance of tailgate slams (Panel Report, Appendix J p. 6) • avoidance of excessive impulsive noise during reach stacker loading and unloading operations; (Panel Report, Appendix J, p. 5) • enforcement of speed limits for truck traffic within the terminal area (Panel Report, Appendix J, p. 5) • enforcement of compliance with its anti-engine braking policy by installing signage around the terminal and

Potential Conditions: 4 - Noise

Potential Condition	Comments
	<p>using site monitors to identify offenders (Panel Report, Appendix J, p. 6)</p> <ul style="list-style-type: none"> • location of idling trains to areas with fewer receptors, or where receptors are the greatest distance from the railway line to avoid potential low frequency noise effects (Panel Report, Appendix J, p. 6)
<p>4.6.6 enclose generators used during construction and manage their overall sound power levels in a manner that reduces noise.</p>	<p>This proposed measure lacks clarity. More specificity is required. With the present wording, there is no way to determine the effectiveness of the barrier in reducing noise impacts. This proposed measure should be amended to include specific limits on overall sound power for the generators (i.e., 107 dBA, per the Panel recommendation).</p> <p>There are many types of all-weather enclosures available for generators which would meet the wording of the current proposed measure, but which would provide minimal acoustical reductions.</p>
<p>4.7 The Proponent shall develop, prior to construction and in consultation with potentially affected parties, a communication protocol to share information related to noise attributable to construction of the Designated Project. The Proponent shall implement the protocol during construction. The Proponent shall provide the protocol to the Agency prior to construction. The protocol shall include procedures, including timing and methods, for sharing information on the following:</p>	<p>This proposed condition lacks certainty and detail.</p> <p>In particular, this proposed condition requires amendment to specify who is included in the term, “affected parties,” and should explicitly include Halton Region and the Town of Milton on that list.</p> <p>Further, to be effective, the proposed condition must set out not merely what needs to be communicated during Project construction regarding noise impacts, but also what recourse the affected parties and complainants have where the Proponent breaches the protocol and/or applicable noise standards.</p>
<p>4.8 The Proponent shall conduct construction activities during daytime, unless not technically feasible. If the Proponent must conduct any construction activity that produces noise during nighttime, the Proponent shall notify the local community prior to undertaking the activity according to the communication protocol implemented pursuant to condition 4.7.</p>	<p>This proposed condition is too vague. The reference to what is “technically feasible” lacks certainty and detail.</p> <p>It is not at all clear how any construction is not “technically feasible” during the daytime. Therefore, a definition of what construction activities are not ‘technically feasible’ to be performed during daytime is required.</p> <p>Consistent with the communication protocol in Condition 4.7, this proposed condition should be amended to clearly state who the Proponent is required to notify in advance of any nighttime construction work.</p>

Potential Conditions: 4 - Noise

Potential Condition	Comments
	<p>Further, this proposed condition should be amended to require compliance with all standards applicable to nighttime noise levels.</p> <p>The proposed condition should also require noise monitoring of all over-night noise levels in relation to applicable standards.</p>
<p>4.9 The Proponent shall develop, prior to construction and in consultation with potentially affected parties, a protocol for receiving complaints related to exposure to noise attributable to the Designated Project. The Proponent shall implement the protocol during all phases of the Designated Project. The Proponent shall provide the protocol to the Agency prior to construction. As part of the implementation of the protocol, the Proponent shall:</p>	<p>This proposed condition lacks sufficient detail.</p> <p>The proposed condition should be amended to require that the protocol identify applicable standards and demand compliance with applicable standards.</p> <p>The proposed condition should also be amended to require that the Proponent share the protocol that is provided to the Agency with all potentially affected parties.</p>
<p>4.9.1 respond to any noise complaint attributed to any component of the Designated Project within 48 hours of the complaint being received and shall implement any corrective action, if required to reduce exposure to noise, in a timely manner;</p>	<p>This proposed measure is not effective to mitigate noise emissions. It also lacks certainty and detail.</p> <p>The proposed measure should demand immediate acknowledgement and corrective action. "Response" to noise complaints within 48 hours is unacceptable. This would potentially leave residents exposed to excessive or unbearable noise levels for two days.</p> <p>The proposed measure should be amended to require that a complaint require an immediate visit to the complainant and review of current activities to identify the source of the noise. It should also require noise measurements at the location of the complaint to determine levels (i.e., in addition to the measurement program outlined in Condition 4.10, which only covers specified windows of time, and which may not capture the current activities causing the issue).</p>
<p>4.9.2 consider the results of the monitoring conducted pursuant to condition 4.10 when determining if any corrective action is required to reduce exposure to noise; and</p>	<p>This proposed measure lacks detail and certainty.</p> <p>This condition should be amended to provide a specific threshold for requiring additional mitigation (deviations from baseline result in a calculated change in %Highly Annoyed of 6.5% or more, per Health Canada guidelines).</p>
<p>4.9.3 provide, on a quarterly basis, a report of all complaints received and any corrective action taken during the reporting quarter to the Agency,</p>	<p>This proposed measure lacks detail. The proposed measure should be amended to require that all reports of noise</p>

Potential Conditions: 4 - Noise

Potential Condition	Comments
the Town of Milton and potentially affected parties.	complaints include any relevant noise measurements and assessments of compliance with applicable standards.
4.10.1 monitor day-night average sound levels continuously during the first four weeks of each of the three phases of construction, at locations to be determined as part of the development of the follow-up program;	This proposed measure lacks certainty. Monitoring for only four weeks is an arbitrary deadline. This proposed measure should be amended to include that monitoring should continue for the full extent of all construction phases.
4.10.2 monitor day-night average sound levels continuously during the first four weeks of operation and during four additional weeks when the Designated Project operates at its full operational capacity, at locations to be determined as part of the development of the follow-up program;	<p>This proposed measure lacks certainty. Monitoring for only four weeks is an arbitrary deadline. This proposed measure should be amended to include that monitoring should continue for the full extent of all construction phases.</p> <p>Details on this monitoring should not be tied to the follow-up program. The Proponent has not yet established the baseline conditions or the Project effects. The appropriate locations to carry out this assessment should be determined independently of other noise issues to ensure that night-time noise is properly measured and assessed.</p>
4.10.4 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in conditions 4.10.1 or 4.10.2 demonstrate that modified or additional mitigation measures are required to maintain changes to the acoustic environment attributable to the Designated Project within the thresholds for change referred to in condition 4.6, including in the area north of Britannia Road. The Proponent shall submit these measures to the Agency prior to implementing them.	This proposed measure should be amended to resemble other measures that curtail Project operations.

Halton Municipalities' Comments on Potential Conditions – Air Quality

Overview

The Panel concluded that, even with mitigation, the Project is likely to cause significant adverse environmental effects on local air quality “resulting in a high magnitude effect”. This conclusion includes new exceedances of PM2.5 and diesel particulate matter – zero-threshold pollutants. In other words, there is no safe level of PM2.5 and diesel particulate matter. The Halton Municipalities’ expert stated at the Panel hearing that, based on CN predictions of Project emissions, the Project will cause adverse effects including effects that are 17 times the Canadian *de minimis* respiratory cancer risk level, and 170 times the Ontario *de minimis* respiratory cancer risk level even with mitigation. Other potential adverse health effects include an increase of approximately 2 heart attack deaths per 100,000 affected residents per year and some 3.2 new asthma cases per 1000 local child residents between 10-14 years of age.

We note that these conclusions arise from accepting CN predictions and do not reflect the concerns of experts retained by the Halton Municipalities. In particular, Halton experts have observed that the CN predictions do not combine all Project-related emissions (e.g., all locomotives, off-site container trucks), are not worst-case as would be required by Ontario modeling standards, and are not conservative for several important inputs affecting the magnitude and geographic extent of predicted emissions.

Within this context for air emissions, we begin by noting that the proposed conditions are silent on mitigating the health effects of Project air emissions.

The Agency has failed to indicate whether the proposed conditions change the high magnitude of air emissions effects. For example, a number of proposed conditions are plans. A plan cannot serve as a mitigation measure where there is no information to determine what, if any, impact the plan will have on mitigating emissions from the Project. Similarly, the majority of the proposed conditions include mitigation measures that have not been measured for effectiveness or monitoring. Dispersion modelling is required to quantify the potential impact and thus effectiveness of the mitigation measures. Lastly, proposed conditions that provide a follow-up program must contain sufficient detail on measuring actual emissions and carrying out dispersion modelling to determine the effectiveness of the mitigation measures.

The further problem with all of the proposed conditions is that effects on air quality are s.5(2) effects. As such, the Agency has no authority under CEAA to enforce any of them. Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.¹

Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

Overall, the Panel concluded that the Project is likely to cause significant adverse environmental effects on air quality that cannot be avoided through mitigation. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to alter this conclusion.

¹ We note, by contrast, that the Province of Ontario has exercised jurisdiction, retained expertise, and applied enforcement resources to hundreds of air pollutants. Similarly, as is evident in Halton Region within the Town of Oakville, there is also legal jurisdiction for municipalities to do the same for specific contaminants not fully addressed by the Province.

Potential Condition	Comments
<p>4.11 The Proponent shall implement, during all phases of the Designated Project, measures to mitigate fugitive dust emissions attributable to the Designated Project, including:</p>	<p>This proposed condition lacks clarity, certainty and detail.</p> <p>Dispersion modelling is required to quantify the potential impact and monitor the effectiveness of the mitigation measure. Without proper accounting of emission levels, control efficiencies, and dispersion modelling, it is impossible to determine the effectiveness of the proposed measures on PM2.5. CN provided predicted results (e.g., 5% reduction in 2031), but not sufficient detail to assess the effectiveness of specific measures.</p> <p>In particular, the Proponent should provide an analysis of emission factors to determine the appropriateness of factors used to determine emissions from this source category, focusing on AP-42 (Compilation of Air Pollutants Emissions Factors) emissions factors that are rated D or E (marginal reliability or worse). The Proponent should conduct source tests on equipment actually used at the Project site. For example, AP-42 (Ch. 13.2.3) recommends breaking down the construction process into component operations.</p> <p>These comments apply generally to all proposed conditions within Proposed Condition 4.11.</p>
<p>4.11.2 avoiding the handling of non-enclosed granular materials during sustained high wind conditions, unless not technically feasible;</p>	<p>This proposed measure is too vague. The phrase, ‘Avoiding...unless not technically feasible” provides no measurable result or enforceable standard. The proposed measure should prohibit the handling of non-enclosed granular materials during sustained high wind conditions.</p>
<p>4.11.4 building and managing temporary and permanent roads and parking lots located within the Designated Project Development Area in a manner that reduces fugitive dust emissions from dirt surfaces, including through paving and the removal of loose materials on road surfaces; and</p>	<p>This proposed measure is too vague. The phrase, “in a manner that reduces,” provides no measurable result or enforceable standard.</p>
<p>4.11.5 establishing speed limits on temporary and permanent roads located within the Designated Project Development Area and</p>	<p>This proposed mitigation measure is too vague. If lower speeds produce less dust, then the proposed measure must set the limit, not leave it to the Proponent to decide on the limit and assess compliance by others. The present proposed measure provides no measurable result or</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
requiring that all persons abide by these speed limits.	enforceable standard. Equally, there is no information to advise how effective this will be at reducing overall emissions.
4.12 The Proponent shall install the temporary portable concrete plant, which shall include a bag house, and shall operate the plant in a manner that mitigates fugitive dust emissions attributable to the operation of the concrete plant. In doing so, the Proponent shall:	<p>This proposed condition lacks clarity, certainty and detail. The phrase, “in a manner that mitigates,” contains no measurable result or enforceable standard.</p> <p>Dispersion modelling is required to quantify the potential impact and monitor the effectiveness of the mitigation measure. Without proper accounting of emission levels, control efficiencies, and dispersion modelling, it is impossible to determine the levels of reduced emission impacts due to mitigation measures applicable to the temporary portable concrete plant.</p> <p>These comments apply generally to all proposed measures within Proposed Condition 4.12.</p>
4.12.1 store dry material only within designated material storage areas and control dust emissions when transferring and handling dry material;	Further specificity on how CN must control dust emissions is required.
4.12.2 enclose material transfer points, conveyors and mixing equipment; and	This proposed measure lacks specificity. The Agency should specify what enclosures the Proponent should use and how the enclosures should be employed.
4.12.3 minimize drop height during truck loading and unloading activities.	<p>This proposed measure lacks specificity. Minimizing drop height without specific parameters is not achievable for CN. A specific maximum drop height is required.</p> <p>Further, source testing should be required to determine the level of PM emissions from truck loading and unloading activities on Project site.</p>
4.13 The Proponent shall implement measures to mitigate air emissions attributable to the Designated Project, including by:	<p>This proposed condition is too vague. It does not contain measurable results or enforceable standards.</p> <p>The potential conditions should include proper accounting of emission levels, control efficiencies, and dispersion modeling to be able to assess the effectiveness of the mitigation measures.</p>
4.13.1 implementing a no-idling policy for mobile equipment and	This proposed measure is too vague. A policy is not mandatory or thus enforceable. Also, more specificity is

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
<p>vehicles within the Designated Project Development Area during all phases of the Designated Project and requiring that all persons abide by this policy, unless not feasible for health or safety reasons;</p>	<p>required for what is “not feasible for health or safety reasons”.</p> <p>A no-idling requirement could reduce PM, however, the extent of the air quality improvements must be determined through proper accounting of emission levels, control efficiencies, and dispersion modeling.</p> <p>The proposed measures should include a requirement for analysis of emission factors to determine appropriateness of emission factors used to determine emissions from this source category, focusing on AP-42 emissions factors that are rated D or E (below average or poor reliability). This can be done by using source tests on vehicles (including diesel trucks) actually used at the Project site.</p>
<p>4.13.2 during construction, applying the tendering process to require third-party contractors to use zero-emission mobile and stationary off-road equipment for any physical activity undertaken in relation to the Designated Project or, if zero-emission equipment is not available, use equipment that:</p>	<p>This proposed measure is too vague. It does not contain measurable results or enforceable standards. A clear definition of what is “not available” is required.</p> <p>Applying the tendering process during construction may reduce emissions, however, the extent of the air quality improvements must be determined through proper accounting of emission levels, control efficiencies, and dispersion modeling.</p>
<p>4.13.2.1 uses diesel engines operating on diesel or low-carbon diesel fuel that meet, at a minimum, Tier 4 emissions standards and is equipped with verified diesel particulate filters and for which both the engines and the filters are maintained in accordance with maintenance instructions provided by the manufacturer; or</p>	<p>Enforcement of this proposed measure is not technically feasible. The site will “use” many diesel engines that are not owned or thus maintained by the Proponent.</p>
<p>4.13.2.2 uses low-carbon fuel, which may include natural gas, propane or hydrogen, while meeting, at a minimum, Tier 4 emissions standards and being maintained in accordance with maintenance instructions provided by the manufacturer;</p>	<p>Enforcement of this proposed measure is not technically feasible. The site will “use” many diesel engines that are not owned or thus maintained by the Proponent.</p>
<p>4.13.3 during operation, using mobile and stationary off-road equipment that is zero-emission for any physical activity undertaken by the Proponent in relation to the</p>	<p>Enforcement of this proposed measure is not technically feasible. The site will “use” many diesel engines that are not owned or thus maintained by the Proponent. Further, the phrase, “is not available,” is too vague.</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
<p>Designated Project, including maintenance activities, or, if zero-emission equipment is not available, using equipment that meets the requirements referred to in condition 4.13.2.1 or 4.13.2.2;</p>	
<p>4.13.4 reducing distance travelled on-site by outgoing vehicles and minimizing container handling turnaround time during operation; and</p>	<p>Enforcement of this proposed measure is not technically feasible.</p>
<p>4.13.5 ensuring emission control technologies are not removed from equipment and vehicles operated by the Proponent for the Designated Project during any phase of the Designated Project, unless removal is necessary for repair and maintenance activities, after which the emission control technologies shall be reinstalled or replaced.</p>	<p>Enforcement of this proposed measure is not technically feasible.</p> <p>In addition, the proposed measures should include conducting an analysis to determine the expected duration of removal of control equipment/technologies for repair and maintenance and air quality impacts determined through the use of dispersion modeling.</p>
<p>4.14 The Proponent shall provide to the Agency, as part of the annual report referred to in condition 2.12, an update on the technical and economic feasibility of electrifying the Proponent-owned fleet of trucks that may serve the Designated Project. The Proponent shall provide that information annually until such time that the Proponent electrifies its truck fleet, or until the Proponent determines that electrifying the truck fleet is not technically or economically feasible. In providing that information, the Proponent shall:</p>	<p>This proposed condition provides a plan, but is not a mitigation measure. There is no indication what impact this plan will have on Project emissions.</p> <p>The Proponent should be required as a condition to electrify its fleet and the Agency should set a deadline by which it will be achieved.</p>
<p>4.15 The Proponent shall provide to the Agency, as part of the annual report referred to in condition 2.12, an update on the technical and economic feasibility of implementing idling reduction technologies on Proponent-owned locomotives that may serve the Designated Project. The Proponent shall provide that information annually until such time</p>	<p>This proposed condition provides a plan, but is not a mitigation measure. There is no indication what impact this plan will have on Project emissions.</p> <p>The Proponent should be required as a condition to implement idling reduction technologies of its locomotives and the Agency should set a deadline by which it will be achieved.</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
<p>that the Proponent implements these technologies, or until the Proponent determines that implementing these technologies is not technically or economically feasible. In providing that information, the Proponent shall provide a rationale as to why these technologies have, or have not, been implemented.</p>	
<p>4.16 The Proponent shall develop, prior to operation and in consultation with Environment and Climate Change Canada, an air pollutant emissions reduction plan to encourage continual improvements in the reduction of air pollutant emissions from trucks serving the Designated Project. As part of the development of the plan, the Proponent shall establish emissions thresholds for high-emitting trucks. The Proponent shall submit the plan to the Agency prior to operation and shall implement the plan throughout operation. As part of the implementation of the plan, the Proponent shall:</p>	<p>This proposed condition provides a plan, but is not a mitigation measure. There is no indication what impact this plan will have on Project emissions.</p> <p>The Proponent should be required as a condition to set emissions thresholds and be bound to meeting these thresholds.</p>
<p>4.16.1 implement incentive measures to encourage truck operators serving the Designated Project to lower truck emissions and implement clean technology, which may include low-carbon fuel, low-emission auxiliary power units or idling reduction technologies;</p>	<p>It is not clear whether enforceability of this proposed measure is technically feasible, what federal authority has the jurisdiction to enforce it, or what impact this measure will have on Project emissions.</p>
<p>4.16.2 install and maintain, during all phases of the Designated Project, signs at the exit of the terminal reminding truck operators serving the Designated Project to reduce idling outside of the Designated Project Development Area, unless not feasible for health or safety reasons;</p>	<p>This proposed measure – as part of a no-idling requirement - could reduce PM, however, the extent of the air quality improvements must be determined through proper accounting of emission levels, control efficiencies, and dispersion modeling.</p>
<p>4.16.3 evaluate, prior to operation, the technical and economic</p>	<p>This proposed measure is too vague. Through the word, “evaluate,” this proposed measure contains no clear</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
<p>feasibility of installing remote sensing equipment to continuously collect information about air pollutants emitted by trucks entering the Designated Project Development Area, including concentrations of nitrogen oxides (NOx), carbon dioxide (CO2) and particulate matters (PM) to identify high-emitting trucks according to the thresholds established during the development of the plan and to notify truck operators of any truck that meets or exceeds the thresholds.</p>	<p>standard. Nor is it clear what impact this measure will have on Project emissions.</p> <p>If the measures exist, the Proponent should be obligated as a condition to use them.</p>
<p>In doing so, the Proponent shall: 4.16.3.1 provide the results of the evaluation to the Agency and Environment and Climate Change Canada prior to operation; and</p>	<p>The residents of Milton and the Region will be the most impacted by the significant adverse effects on air quality. The Proponent should also be required to provide the results of the evaluation to the Halton Municipalities.</p>
<p>4.17 The Proponent shall develop, prior to operation and in consultation with Environment and Climate Change Canada and other relevant authorities, an air pollutant emissions reduction plan to encourage continual improvements in the reduction of air pollutant emissions from locomotives serving the Designated Project. As part of the development of the plan, the Proponent shall establish five-year targets for increasing over time the proportion of locomotives serving the Designated Project that meet, at a minimum Tier 4 emissions standards, and are maintained, in accordance with engine maintenance instructions provided by the manufacturer, to remain at least Tier 4 compliant, or of locomotives that are retrofitted with verified diesel oxidation catalysts and the latest available engine upgrades, until such time that the Designated Project is fully served by these locomotives. The Proponent shall submit the plan to the Agency</p>	<p>This proposed condition provides a plan, but is not a mitigation measure. There is no indication what impact this plan will have on Project emissions.</p> <p>The condition, not the Proponent, should set the targets.</p> <p>Other aspects of this proposed condition seem likely to require major enforcement resources. It is not clear which federal authorities have these enforcement resources.</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
<p>prior to operation and shall implement the plan throughout operation.</p>	
<p>4.19 During operation, the Proponent shall allow a maximum of 800 trucks to enter the Designated Project Development Area per 24-hour period to handle containerised goods.</p>	<p>It is not clear that there is federal jurisdiction for this proposed condition since the CTA lost authority over trucks in federal transportation deregulation decades ago. It is recommended that the proposed condition refer to containers not trucks as this will apply to railway and truck transportation.</p> <p>If within federal jurisdiction, this proposed condition requires additional measures to make its enforcement practical. In particular, the Proponent should be required to count the number of containers entering and leaving the Project site by rail or truck and record results hourly and daily.</p>
<p>4.20 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Health Canada, the Ontario Ministry of the Environment, Conservation and Parks, Halton Municipalities, the Town of Milton, the Mississaugas of the Credit First Nation and the Six Nations of the Grand River, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to air quality attributable to the Designated Project. The Proponent shall implement the follow-up program during construction and the first five years of operation. As part of the implementation of the follow-up program, the Proponent shall:</p>	<p>The follow-up program should include a source testing program component, to determine appropriate emission factors to use for various equipment and activities occurring at the Project site.</p> <p>This proposed condition should not have an end date. The verification of the effectiveness of mitigation measures should be an ongoing obligation as long as the Project is in operation.</p>
<p>4.20.2 monitor continuously, during construction, particulate matter (PM10), fine particulate matter (PM2.5), nitrogen dioxide (NO2) and meteorological conditions (including wind speed, wind direction, temperature and relative humidity) at locations upwind and downwind of the Designated Project</p>	<p>It is not clear that any federal authority has the jurisdiction, expertise or enforcement resources to enforce this proposed measure (note the contrast with Ontario and Ontario municipalities cited above).</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
Development Area, at or near the property line, based on prevailing winds;	
4.20.3 monitor, during the <u>first five years</u> of operation, or until the end of the first year during which the Designated Project operates at its full operational capacity, whichever comes later, particulate matter (PM10), fine particulate matter (PM2.5) and nitrogen dioxide (NO2) continuously, benzene and benzo(a)perene non-continuously over a 24-hour period (midnight to midnight) once every six days and meteorological conditions (including wind speed, wind direction, temperature and relative humidity) at the same monitoring locations referred to in condition 4.20.2;	As part of this proposed measure, 24-hour PM samples should be collected every day (not every 6 th day) during operation to capture all potential high dust exposures.
4.20.4.1 the Canadian Council of Ministers of the Environment's National Ambient Air Quality Objectives, the Canadian Ambient Air Quality Standards or, in the absence of federal criteria, to the Ontario Ambient Air Quality Criteria; or	<p>None of the cited standards protect public health. Therefore, compliance with these standards does not protect public health.</p> <p>To protect public health, this proposed measure should be rewritten to ensure that monitoring results are integrated with zones of emission and population data to assess the pyramid of health effects associated with these pollutants, particularly PM10 and PM2.5.</p>
4.20.4.2 if the current baseline information referred to in condition 4.20.1 already exceeds the air quality standards referred to in condition 4.20.4.1, to predicted air quality concentrations set out in table 5-1 of the Joint Review Panel Report (Canadian Impact Assessment Registry Reference Number 80100, Document Number 985) and, for 1-hour and annual NO2 concentrations, set out in tables 1 and 2 submitted by the Proponent in response to Information Request 4.29 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 632), or any update to predicted air quality	<p>This proposed measure does not protect public health. There is harm to public health even where there is compliance with these standards.</p> <p>To protect public health, this proposed measure should be rewritten to ensure that the full pyramid of effects on public health is assessed.</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
<p>concentrations made pursuant to condition 4.20.1;</p>	
<p>4.20.5 if the results of the monitoring referred to in condition 4.20.2 or 4.20.3 meet or are below the predicted air quality concentrations set out in table 5-1 of the Joint Review Panel Report (Canadian Impact Assessment Registry Reference Number 80100, Document Number 985) and, for 1-hour and annual NO₂ concentrations, set out in tables 1 and 2 submitted by the Proponent in response to Information Request 4.29 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 632), or any update to predicted air quality concentrations made pursuant to condition 4.20.1, the Proponent may determine a less frequent monitoring frequency, in consultation with the parties being consulted during the development of the follow-up program, at which to continue monitoring until the end of the 5th year following the start of operation, or until the end of the first year during which the Designated Project operates at its full operational capacity, whichever comes later; and</p>	<p>Monitoring frequency should not be reduced at any point in time. If monitoring frequency is reduced, it should only be done with the approval of all interested and/or affected parties.</p>
<p>4.20.6 if the comparison undertaken pursuant to condition 4.20.4.1 or 4.20.4.2 demonstrates any exceedance of the air quality standards referred to in condition 4.20.4.1 or the predicted air quality concentrations referred to in 4.20.4.2, determine, in consultation with the parties involved in the development of the follow-up program, the source of any such exceedance. If the Proponent determines that the Designated Project is the source of the exceedance, the Proponent shall</p>	<p>As above, this proposed measure does not protect public health.</p> <p>To protect public health, this proposed measure must be rewritten to address increased harm to public health and the sources causing such harm.</p> <p>Further, the re-written measure should be tied to other measures that curtail Project operations.</p>

Potential Conditions: 4 – Air Quality

Potential Condition	Comments
develop and implement modified or additional mitigation measures to ensure that ambient concentrations of contaminants monitored pursuant to condition 4.20.2 or 4.20.3 remain within the levels referred to in condition 4.20.4.1 or 4.20.4.2. The Proponent shall submit these measures to the Agency prior to implementing them.	

Halton Municipalities' Comments on Potential Conditions – Water

Overview

Effects on surface and ground water are s.5(2) effects. The Panel concluded that CN had performed its water flow and system capacity analysis using methods other than those used by Conservation Halton and generally accepted in Southern Ontario, and further concluded that there is “considerable uncertainty” about the capacity of the Designated Project to store and convey the Regional Storm or larger flood event. This was held to be the case even if mitigation measures and infrastructure as proposed by CN are executed. CN’s proposed measures were held to be inadequate and of particular concern in light of the changing climate, and the magnitude of the effects on neighbouring lands and downstream systems including wetlands used by the Mississaugas of the Credit First Nation.

The major concerns with the proposed conditions are as follows:

- Not sufficiently clear and detailed to be executed. For instance, the proposed conditions direct the Proponent to “implement measures” to control erosion and sedimentation, but do not provide specifics on how this should be done.
- The proposed conditions direct the Proponent to develop follow-up plans if the existing mitigation does not appear effective, but provide no details on what triggers additional measures.

As well, the proposed conditions fail to incorporate all mitigation judged necessary by the Panel, including:

- use of natural channel design principles in the Proponent's design work, with numerous specifications provided by the Panel (Panel Report, Appendix J, p. 7-10);
- specific measures to mitigate thermal effects (Panel Report, Appendix J, p. 7-10);
- specific measures for the stormwater management strategy to collect and treat runoff (Panel Report, Appendix J, p. 7-10);
- restrictions on construction activities, and specific erosion and sediment control measures to reduce introduction of sediment to the water (Panel Report, Appendix J, p. 7-10);
- agricultural row crop management activities (Panel Report, Appendix J, p. 7-10);
- requirement for biannual geomorphic assessments with parameters specified (Panel Report, Appendix J, p. 7-10);
- specific requirements for an infrastructure protection plan (Panel Report, Appendix J, p. 36); and
- specific requirements for the Proponent's Emergency Response Plan (Panel Report, Appendix J, p. 36).

Based on these concerns, the proposed conditions fail to provide the mitigation required by the Panel to avoid a significant adverse environmental effects on water.

The further problem with **all** of the proposed conditions is that effects on water are s.5(2) effects. As such, the Agency has no authority under CEAA to enforce any of them. Neither the Panel nor any federal

Potential Conditions: 5 - Water

authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.¹

Absent federal authority to enforce each condition, the condition cannot form part of any CEEA decision statement.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on water only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on water are likely.

Potential Condition	Comments
<p>5.1 The Proponent shall design and implement the Designated Project, in consultation with Conservation Halton, the Town of Milton, Environment and Climate Change Canada, Fisheries and Oceans Canada, other relevant authorities, the Mississaugas of the Credit First Nation and the Six Nations of the Grand River, such that baseline maximum and minimum flows of waterbodies affected by the Designated Project located outside of the Designated Project Development Area are maintained during all phases of the Designated Project, and that sufficient capacity exists to safely accommodate and convey the range of climate conditions that could be reasonably expected during the Designated Project’s lifetime, including at least one Regional storm event.</p>	<p>The proposed condition is not sufficiently clear and detailed to be executed. In particular, it is not clear what “consultation” includes and how any differences in interpretation/expectations will be resolved.</p>
<p>5.2 The Proponent shall design, in consultation with Conservation Halton, the Town of Milton, Environment and Climate Change Canada, Fisheries and Oceans</p>	<p>As above, the proposed condition is not sufficiently clear and detailed to be executed.</p>

¹ We note, by contrast, that the Province of Ontario has exercised jurisdiction, retained expertise, and applied enforcement resources to address all aspects of water resources. Similarly, various provincial statutes provide legal jurisdiction for municipalities and regional bodies like Conservation Halton to do the same for specific effects on and from water not fully addressed by the Province.

Potential Conditions: 5 - Water

Potential Condition	Comments
<p>Canada and other relevant authorities, and implement a stormwater management system to collect and treat all stormwater runoff from the Designated Project prior to release to Indian Creek and Tributary A. In doing so, the Proponent shall:</p>	
<p>5.4 The Proponent shall implement measures to control erosion and sedimentation within the Designated Project Development Area to avoid the deposit of sediments in water bodies when conducting any activity, including dewatering, during any phase of the Designated Project, including through the installation of erosion and sedimentation control devices and vegetation planting. The Proponent shall provide these measures to the Agency prior to implementing them.</p>	<p>This proposed condition is not sufficiently clear and detailed to be executed. The proposed condition directs the Proponent to “implement measures” to control erosion and sedimentation, but does not provide specifics on the overall outcome or how this should be done.</p>
<p>5.6 The Proponent shall implement measures during construction to prevent wet concrete or cement-laden water, including high pH run-off occurring during concrete work, from entering any fish-bearing water.</p>	<p>This proposed condition is not sufficiently clear and detailed to be executed. The proposed condition directs the Proponent to “implement measures” to prevent specific run-off from entering the water, but fails to direct the Proponent how these actions may be measured to assess compliance with this objective.</p>
<p>5.7 The Proponent shall collect and treat all wastewaters and wash waters, taking into account the Council of Canadian Ministers of the Environment’s Canadian Water Quality Guidelines for the Protection of Aquatic Life, before discharging them in any fish-bearing water.</p>	<p>The proposed condition is not sufficiently clear and detailed to be executed. It is not clear what “taking into account” means or thus what specific outcome will occur.</p>
<p>5.8 The Proponent shall implement measures to mitigate the mobilization and transport of potential residual agricultural contaminants within the Designated Project Development Area towards the stormwater</p>	<p>This proposed condition is not sufficiently clear and detailed to be executed. The proposed condition contains no specific objective. Therefore, the direction to “mitigate” provides no clear outcome. As well, the proposed condition fails to direct the Proponent how these actions may be measured to assess compliance with this objective.</p>

Potential Conditions: 5 - Water

Potential Condition	Comments
<p>management system during all phases of the Designated Project, including measures to allow time for increased die-off of pathogenic organisms and volatilization of agricultural contaminants prior to soil disturbance and removal of nutrient compounds through plant harvesting.</p>	
<p>5.9 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Fisheries and Oceans Canada, the Town of Milton, Conservation Halton and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the stormwater management system. The Proponent shall implement the follow-up program following the end of construction. As part of the implementation of the follow-up program, the Proponent shall:</p>	<p>This proposed condition is not clear how “ineffective” existing mitigation needs to be in order to trigger additional measures.</p>
<p>5.9.2 develop and implement modified or additional mitigation measures if any review conducted pursuant to condition 5.9.1 demonstrates that modified or additional mitigation measures are required to maintain downstream hydrographs and floodlines unaltered, unless otherwise directed or advised by Environment and Climate Change Canada in consultation with Conservation Halton. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>As above, this proposed measure is not clear how “ineffective” existing mitigation needs to be in order to trigger additional measures.</p>
<p>5.10 The Proponent shall develop, in consultation with Environment and Climate Change Canada, Conservation Halton and other</p>	<p>This proposed condition is not clear how “ineffective” existing mitigation needs to be in order to trigger additional measures.</p>

Potential Conditions: 5 - Water

Potential Condition	Comments
<p>relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to surface water quality and quantity attributable to the Designated Project. The Proponent shall implement the follow-up program during construction and following the end of construction. As part of the implementation of the follow-up program, the Proponent shall:</p>	
<p>5.10.4 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 5.10.1 or 5.10.2 demonstrate that modified or additional mitigation measures are required to mitigate adverse changes to surface water quality and quantity attributable to the Designated Project, including so that water quality at locations where water flows towards the Designated Project Development Area is equivalent to water quality at locations where water flows away from the Designated Project Development Area. The Proponent shall submit these measures to the Agency prior to implementing them; and</p>	<p>As above, this proposed measure is not clear how “ineffective” existing mitigation needs to be in order to trigger additional measures.</p>

Halton Municipalities' Comments on Potential Conditions – Terrestrial Environment

Overview

The Panel noted that the terrestrial environment, including grassland and wetlands, provides important habitat for many species of wildlife, including species at risk. The Designated Project would result in the removal of 50.9 hectares of grassland and 3.7 hectares of wetland, and it is uncertain whether the lands proposed to compensate for these losses would function and sustain themselves over the life of the Project. It was therefore held that CN's originally proposed mitigation measures were insufficient to prevent SAEs. The Panel therefore imposed a requirement for significant additional mitigation measures and a follow-up program to prevent SAEs.

Environmental effects on the terrestrial environment are related to s.5(2) of CEEA. The Panel found that the Project is likely to cause a significant adverse environmental effect on the terrestrial environment unless all mitigation identified by the Panel was implemented.

The proposed conditions are not sufficiently clear and detailed to be executed. For instance, CN is directed to come up with additional or amended mitigation measures or follow-up plans if the existing mitigation does not appear effective, but is provided with no details on how "ineffective" existing mitigation needs to be in order to trigger additional measures.

The proposed conditions also fail to incorporate all mitigation judged necessary by the Panel, including:

- ensuring stable slope conditions are achieved and channel realignments monitored for 3 years after construction (Panel Report, Appendix J, p. 14); and
- designing the Project layout to avoid effects on local natural features (Panel Report, Appendix J, pp. 26-27).

Based on these concerns, the proposed conditions fail to provide the mitigation required by the Panel to avoid a significant adverse environmental effect on the terrestrial environment.

The further problem with **all** of the proposed conditions is that effects on the terrestrial environment are s.5(2) effects. As such, the Agency has no authority under CEEA to enforce any of them. Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.¹

Absent federal authority to enforce each condition, the condition cannot form part of any CEEA decision statement.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on the terrestrial environment only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis

¹ We note, by contrast, that the Province of Ontario has exercised jurisdiction, retained expertise, and applied enforcement resources to address all aspects of terrestrial natural heritage. Similarly, various provincial statutes provide legal jurisdiction for municipalities and regional bodies like Conservation Halton to do the same for specific effects on the terrestrial environment not fully addressed by the Province.

Potential Conditions: 5 – Terrestrial Environment

to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on the terrestrial environment are likely.

Potential Condition	Comments
<p>6.1 The Proponent shall design, prior to construction and in consultation with Conservation Halton, the Mississaugas of the Credit First Nation and the Six Nations of the Grand River, and maintain, throughout operation, 7.1 hectares of replacement online and offline wetlands within the Designated Project Development Area in a manner that supports the maintenance of ecological functions in the Bronte Creek watershed and that enhances wetland habitat for turtle and breeding opportunities for wetland-dependent birds. In doing so, the Proponent shall establish the constructed riparian wetlands with emergent and native riparian vegetation. The Proponent shall construct the replacement wetlands before removing the existing wetlands, unless not technically or economically feasible.</p>	<p>The proposed condition is not sufficiently clear and detailed to be executed. In particular, it is not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.</p> <p>Further, the proposed condition fails to ensure implementation that meets the mitigation objective of establishing replacement wetlands prior to removal of existing wetlands. The phrase “unless not technically or economically feasible” causes uncertainty as no guidelines for feasibility are provided.</p>
<p>6.1.1 If it is not technically or economically feasible to construct the replacement wetlands before removing the existing wetlands, the Proponent shall construct the replacement wetlands within three years of the start of construction.</p>	<p>As above (Proposed Condition 6.1), the phrase “unless not technically or economically feasible” causes uncertainty as no guidelines for feasibility are provided. Additionally, three years is too long a period for migratory birds to be without wetland habitat.</p>
<p>6.2 The Proponent shall design and maintain, throughout operation, drainage features around Designated Project components, including culverts beneath the mainline, to maintain baseline drainage and inflows and outflows to and from wetlands located within the Designated Project Development</p>	<p>The proposed condition is not sufficiently clear and detailed to be executed.</p>

Potential Conditions: 5 – Terrestrial Environment

Potential Condition	Comments
<p>Area. In doing so, the Proponent shall:</p>	
<p>6.2.1 conduct, prior to construction and in consultation with Conservation Halton, a feature-based water balance analysis for all wetlands with drainage areas that may be affected by the Designated Project to understand the hydrological impacts of site alteration (including water inflows and outflows) on all wetlands located within the Designated Project Development Area and ensure their long-term viability;</p>	<p>This proposed measure requires amendment as it is not clear what “consultation” includes or how any differences in interpretation/expectations are to be resolved.</p>
<p>6.2.2 consider the results of the feature-based water balance analysis conducted pursuant to condition 6.2.1 to inform the design and maintenance of the replacement wetlands referred to in condition 6.1;</p>	<p>Similarly, the mere requirement to “consider” the results of the water balance analysis is too vague to ensure any effective mitigation. This proposed measure should be amended to provide clear guidance.</p>
<p>6.2.3 consider the results of the feature-based water balance analysis conducted pursuant to condition 6.2.1 to inform the design and installation of the stormwater management system; and</p>	<p>Same as above (measure 6.2.2).</p>
<p>6.3 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Conservation Halton <u>and other relevant authorities</u>, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to the adverse changes to wetlands and wetland functions attributable to the Designated Project. The Proponent shall implement the follow-up program following the end of construction. As part of the implementation of the follow-up program, the Proponent shall:</p>	<p>This proposed condition is not sufficiently clear and detailed to be executed. In particular, it is not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.</p>

Potential Conditions: 5 – Terrestrial Environment

Potential Condition	Comments
<p>6.3.1 monitor, for at least five years following the end of construction, the areal extent, encroachment by invasive vegetation species and success of native vegetation planting for all retained and constructed wetlands located within the Designated Project Development Area;</p>	<p>This proposed measure should be amended to specify monitoring intervals over the five year period.</p>
<p>6.3.2 monitor, for at least five years following the end of construction, water level fluctuations in all retained and constructed wetlands located within the Designated Project Development Area and compare monitoring results against baseline fluctuations;</p>	<p>As above (measure 6.3.1).</p>
<p>6.3.3 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 6.3.1 or 6.3.2 demonstrate that modified or additional mitigation measures are required such that the total areal extent of wetlands within the Designated Project Development Area is maintained or increased over time and retained and constructed wetlands maintain their functions over time. The Proponent shall submit these measures to the Agency prior to implementing them; and</p>	<p>This proposed measure is not sufficiently clear and detailed to be executed. The proposed measure directs the Proponent to implement additional mitigation, and sets out the objective of maintaining the total areal extent of wetlands and wetland functions on-site, but fails to direct the Proponent how these objectives will be measured to assess compliance with this objective.</p>
<p>6.3.4 determine, in consultation with Environment and Climate Change Canada, Conservation Halton and other relevant authorities and based on the results of the monitoring referred to in conditions 6.3.1 and 6.3.2, if additional monitoring is required after the first five years following the end of construction.</p>	<p>As above (Proposed Condition 6.3), this measure is not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.</p>
<p>6.4 The Proponent shall establish and maintain, during all phases of the Designated Project, a buffer of undisturbed vegetation around all</p>	<p>This proposed condition is not sufficiently clear and detailed to be executed.</p>

Potential Conditions: 5 – Terrestrial Environment

Potential Condition	Comments
retained and constructed wetlands and along riparian areas located within the Designated Project Development Area. In doing so, the Proponent shall:	
6.4.1 determine the width of the buffer(s) prior to construction, in consultation with relevant authorities, and shall provide that information to the Agency prior to construction; and	This proposed measure is not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.

Halton Municipalities' Comments on Potential Conditions – Fish and Fish Habitat

Overview

Fish and fish habitat are s.5(1) effects. CN proposes to eliminate 1,075 m of Indian Creek, and replace it with 571m of constructed channel. While Fisheries and Oceans Canada would be involved in permitting for this work, the Panel reiterated that additional mitigation measures for Water were essential to avoid SAEs for downstream areas including fish habitat. In other words, even if CN's originally proposed mitigation measures were performed, in the absence of significant additional mitigation recommended by the Panel, SAEs were likely for fish and fish habitat.

The major concerns with the proposed conditions are as follows:

- Not sufficiently clear and detailed to be executed. For instance, proposed conditions direct the Proponent to “develop measures”, but in many cases, fail to provide what needs to be considered and included.
- The proposed conditions direct the Proponent to develop follow-up plans if the existing mitigation does not appear effective, but the proposed conditions provide no details on what triggers additional measures.
- “consultation” and “taking into account” – proposed conditions direct the Proponent to consult with parties like Conservation Halton and others, but fail to specify what authority consulted parties have to require any Proponent action.

The Panel specified detailed requirements for mitigation necessary to avoid a significant adverse environmental effect on fish and fish habitat. However, the proposed conditions do not include all specified mitigation. The following necessary mitigation measures are not reflected in the proposed conditions regarding fish and fish habitat:

- CN is to establish triggers in its Habitat Compensation Plan for implementing adaptive management measures. (Panel Report, Appendix J, p.15)
- Before the commencement of in-water activity, CN is to ensure that all equipment and materials are available and are on-site, including contingency equipment and materials. (Panel Report, Appendix J, p.15-16)
- CN is to design the Project so that it provides aquatic and riparian habitat that is functional over a range of flows with an increase in diversity of habitat types. (Panel Report, Appendix J, p.15)
- CN shall develop a detailed site-specific mitigation plan that meets all applicable requirements prior to initiating any watercourse or water body crossing activities not already approved as part of channel realignments. (Panel Report, Appendix J, p.15)
- CN shall not permit fording of watercourses or water bodies unless approved by the applicable regulatory authority. (Panel Report, Appendix J, p.15)
- CN shall re-establish vegetation on disturbed areas as soon as practicable, including following construction, in areas not subject to further construction activity/disturbance. (Panel Report, Appendix J, p.15)

Potential Conditions: 7 – Fish and Fish Habitat

- CN shall conduct stream diversions and culvert installation in isolation of stream flows, through, for example, using dam and pump, flume, and diversion. (Panel Report, Appendix J, p.15-16)
- CN shall isolate work areas during periods of in-water work to prevent direct effects on fish, including harm and mortality, and rescue potential release of sediments to downstream areas. (Panel Report, Appendix J, p.15-16)
- CN shall maintain downstream flow at all times when conducting in-water construction activities. (Panel Report, Appendix J, p.15-16)
- CN shall require contractors to notify CN 72 hours before construction of any watercourse or water body crossing or diversions to ensure any necessary fish salvage operations are conducted, including all culvert installations, channel diversions or in-water work. (Panel Report, Appendix J, p.16)
- CN shall work with Fisheries and Oceans Canada to develop contingency measures and relevant contingency plans to deal with unexpected situations or occurrences that may arise throughout construction and offsetting that could potentially affect fish and fish habitat in downstream watercourses that are outside of the Local Assessment Area. (Panel Report, Appendix J, p.17)

As well, for several proposed conditions, Panel requirements are more specific than the proposed conditions, which merely required CN to “implement measures”. These include:

- buffer sizes for wetland and riparian lands (Panel Report, Appendix J, p.15);
- technical guidance for the conduct of stream diversions and culvert installation (Panel Report, Appendix J, p.15-16);
- Tributary B assessment to be done in conjunction with Conservation Halton (Panel Report, Appendix J, p.18).

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on fish and fish habitat only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on fish and fish habitat are likely.

Potential Condition	Comments
7.1 The Proponent shall develop, prior to construction and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and relevant authorities, and implement, during all phases of the Designated Project, measures to protect fish and fish habitat when conducting any Designated Project activity in	This proposed condition is not sufficiently clear and detailed to be executed. In particular, it is not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.

Potential Conditions: 7 – Fish and Fish Habitat

Potential Condition	Comments
<p>or near water not already approved under the Fisheries Act, taking into account Fisheries and Oceans Canada’s Measures to protect fish and fish habitat.</p>	
<p>7.4.1 If the Proponent must conduct any in-water construction activity during the restricted activity timing windows, the Proponent shall develop and implement additional mitigation measures, in consultation with Fisheries and Oceans Canada and other relevant authorities, to protect fish during sensitive life stages, including migration and spawning. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>This proposed measure is not sufficiently clear and detailed to be executed. This measure directs the Proponent to “develop measures”, but provides no specifics on how this should be done.</p>
<p>7.7 The Proponent shall, for any fish habitat offsetting measure proposed in the approved offsetting plan(s) referred to in condition 7.5 that may cause adverse environmental effects not considered in the environmental assessment, develop and implement, following consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, Conservation Halton and relevant authorities, measures to mitigate those effects. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>This proposed condition is not sufficiently clear and detailed to be executed. In particular, it not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.</p>

Halton Municipalities' Comments on Potential Conditions – Migratory Birds

Overview

The Panel noted that the Project will result in the removal of 50.9 hectares of grassland habitat and 3.7 hectares of wetland habitat, all of which is used by migratory birds. These habitat losses would result in the displacement of over 400 pairs of breeding birds. Project operations and collisions with buildings would also be likely to cause additional sensory disturbances and mortality to migratory birds.

The major concerns with the proposed conditions are as follows:

- Not sufficiently clear and detailed to be executed. For instance, the proposed conditions direct the Proponent to develop additional or amended mitigation measures if the proposed mitigation is not effective, but provide insufficient detail on what triggers additional measures.
- Failure to address the purpose of the *Migratory Birds Convention Act* (MBCA) – the MBCA protects migratory birds and their nests. Vegetation clearing should therefore not occur when birds are nesting. However, the proposed conditions permit the Proponent to carry out vegetation clearing during the breeding season (which generally overlaps with when nesting takes place, depending on the species) where it is not “technically feasible” to do otherwise. The proposed conditions should prohibit the Proponent from vegetation clearing during the breeding season.
 - Failure to address all mitigation identified by the Panel as necessary to avoid a significant adverse environmental effect on migratory birds. The following necessary mitigation measures are not reflected in the proposed conditions regarding migratory birds:
 - To avoid harm to migratory birds, CN should not carry out nest sweeps except in exceptional circumstances and only after consultation with Environment and Climate Change Canada. (Panel Report, Appendix J, p. 24)
 - CN should limit the use of site flood lighting during bird migration periods. (Panel Report, Appendix J, p. 24)
 - CN should explore with Conservation Halton and other appropriate bodies the possibility of returning a portion of the land in the Local Assessment Area now under cover crop to grassland habitat, to offset at least a part of the habitat removed in the Project Development Area and reduce pressure on habitat in the Regional Assessment Area. This restored grassland habitat would also provide habitat for other terrestrial species and potentially improve habitat connectivity. It should be periodically maintained so as to ensure continued habitat availability for grassland birds and other species. While the Panel recognized that this would remove more land from agricultural use, the effect would not be permanent – the land returned to grassland could still be available for agricultural purposes in the future if required. (Panel Report, Appendix J, p. 24)
 - Retain natural habitat features such as wildlife trees; retain vegetation wherever practicable to provide nesting opportunities for cavity-dependent birds. (Panel Report, Appendix J, p. 26)

Additionally, Project effects on migratory bird habitat are related to s.5(2) of CEAA as they are not addressed in s.5(1). CEAA provides no means to enforce conditions related to s.5(2) effects. Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton

Potential Conditions: 8 – Migratory Birds

Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.¹

Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on migratory birds only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on migratory birds are likely.

Potential Condition	Comments
<p>8.1 The Proponent shall carry out the Designated Project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's Avoidance Guidelines to reduce risk to migratory birds. The Proponent's actions when carrying out the Designated Project shall be in compliance with the <i>Migratory Birds Convention Act, 1994</i>, the <i>Migratory Birds Regulations</i> and with the <i>Species at Risk Act</i>.</p>	<p>This proposed condition has a narrow scope: it avoids reference to migratory bird habitat. The Panel expressly assessed Project effects on migratory birds and their habitat when it reached its conclusions on the mitigation required to avoid significant adverse environmental effects on migratory birds. Therefore, this proposed condition provides no basis to conclude that the Project will not cause significant adverse effects on migratory birds, since effects on bird habitat are clearly also effects on the birds.</p> <p>Also, for migratory birds that are also species at risk, in general, vegetation clearing should only take place in such a manner that it does not contravene the MBCA. That is, vegetation clearing should, in general, only take place when it can be demonstrated that there is no nesting activity taking place, regardless of whether they are Species at Risk or not.</p> <p>The Minister of Environment and Climate Change is responsible for the protection and recovery of migratory birds and species at risk on federal lands, but this Project is not on federal lands. It is also understood that the provinces and territories will undertake actions and enforce prohibitions for the conservation of species at risk under their jurisdiction.</p>
<p>8.2 The Proponent shall ensure that vegetation in migratory bird habitat located within the Designated Project Development Area remains undisturbed during the breeding season for migratory birds. The Proponent shall determine the dates of the breeding season, in consultation with Environment and</p>	<p>The proposed condition is not sufficiently clear and detailed to be executed. In particular, it is not clear what "consultation" includes or how any differences in interpretation/expectations will be resolved.</p> <p>This proposed condition also requires amendment because it provides no indication of what the additional measures would entail. Given that the proposed condition is to develop additional mitigation measures, it is not possible to know whether they will</p>

¹ We note, by contrast, that the Province of Ontario has exercised jurisdiction, retained expertise, and applied enforcement resources to address all aspects of natural heritage including bird habitat. Similarly, various provincial statutes provide legal jurisdiction for municipalities and regional bodies like Conservation Halton to do the same for specific effects on bird habitat (i.e., wetlands) not fully addressed by the Province.

Potential Conditions: 8 – Migratory Birds

Potential Condition	Comments
<p>Climate Change Canada, for any year that vegetation clearing shall occur. If vegetation clearing outside of the breeding season is not technically feasible during any year, the Proponent shall develop and implement additional mitigation measures, in consultation with Environment and Climate Change Canada, to avoid effects on migratory birds and their nests. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>be effective if performed, until the list and situational context are clear.</p> <p>This proposed condition also contemplates vegetation clearing possibly occurring during the breeding season. However, if nesting activity is taking place, all vegetation clearing is prohibited further to the MBCA.</p>
<p>8.4 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of all mitigation measures to avoid harm to migratory birds, including migratory birds that are listed species at risk, their eggs and nests. The follow-up program shall include the mitigation measures used to comply with conditions 8.1 to 8.3, 8.12 and 8.24. The Proponent shall implement the follow-up program during all phases of the Designated Project.</p>	<p>This proposed condition requires amendment to provide more specifics on the timing, frequency and intensity of monitoring, thresholds for when action is required such as additional mitigation measures, and the actions to be taken.</p>

Halton Municipalities' Comments on Potential Conditions – Listed Species at Risk

Overview

Effects on terrestrial species at risk are s. 5(2) effects. The Panel assessed effects on numerous terrestrial species at risk and concluded that Project effects on ten species were likely to be significant unless the mitigation identified by the Panel was implemented.

There are several major problems with the proposed conditions. The most important problem arises from the location of the Project – it will require clearing and regrading of grassland habitat and the realignment of portions of Indian Creek. Therefore, mitigation is necessary to avoid significant adverse effects on wildlife that use these habitats, including species at risk. However, for Project effects on multiple terrestrial species at risk found on the Project site – western chorus frog, eastern milksnake, little brown myotis, snapping turtle, midland painted turtle, and the monarch butterfly – CEEA provides no authority to enforce the conditions proposed to implement the necessary mitigation. As such, the Agency has no authority to enforce the proposed conditions. Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.¹

Absent federal power to enforce all mitigation considered necessary by the Panel, the Project is likely to cause significant adverse environmental effects on all of the species at risk and habitat found at the Project site.

Additionally, based on input from experts, the Halton Municipalities have identified several proposed conditions that will not be effective at requiring the mitigation necessary to avoid several significant adverse environmental effects, including:

- For the **western chorus frog**, Proposed Condition 8.8 requires the Proponent to replace culverts outside the breeding season. However, frogs are most likely to move beyond their breeding sites outside of the breeding season. Therefore, culvert replacement should occur during their hibernation period only. Additionally, Proposed Condition 8.9 requires the Proponent to create restored hibernation habitat for Western Chorus Frog in order to compensate for habitat losses. However, these frogs hibernate in underground crevices, burrows, and cavities below the frost line, all of which are difficult to reproduce in artificially created habitat.
- Proposed Condition 8.14 directs that compensation grassland bird habitat be created off-site in Luther Marsh, and then monitored to assess the successful re-establishment of **bobolink** and **eastern meadowlark**. These species are being displaced due to the significant loss of grassland habitat on the Project site. However, as the Panel noted, grassland bird species in particular are suffering from serious general decline. In order to properly assess the performance of the displaced birds in the Luther Marsh habitat, it will be necessary to first

¹ For example, the federal *Species at Risk Act* (SARA) has designated three terrestrial species listed above but, absent a special order of the Minister, directly regulates terrestrial species at risk mitigation on federal lands only. The Project site contains no federal lands. SARA also makes provision to apply to approvals under other federal Acts (s.77), but it is not clear where or how the proposed conditions for this application apply here. We note, by contrast, that the Province of Ontario has exercised jurisdiction, retained expertise, and applied enforcement resources to address all aspects of species at risk and their habitat. Similarly, various provincial statutes provide legal jurisdiction for municipalities and regional bodies like Conservation Halton to do the same for specific effects on endangered species and their habitat not fully addressed by the Province.

Potential Conditions: 8 – Listed Species at Risk

understand the previously existing populations at Luther Marsh, so that species displaced by the Project can be isolated and tracked. Baseline studies in Luther Marsh are therefore necessary in advance of Project displacement, but the proposed conditions do not address this requirement.

- For **eastern milksnakes**, the Panel concluded that the Proponent’s original surveys were not adequate. Proposed Conditions 8.26, 8.27, 8.28 and 8.29 direct CN to conduct surveys, report sightings, and determine the effectiveness of its mitigation measures. However, this highly secretive species demands multi-year, multi-season surveys of high intensity to understand its local occurrence. As well, this species only breeds every two years. The proposed conditions are not sufficient to properly monitor and follow-up on Project effects. It is therefore likely that the species will be locally extirpated before problems with the mitigation measures are detected.
- There are also concerns regarding the measures to ensure **habitat connectivity**. Proposed Condition 8.32 requires connections and ecopassages, but lacks guidance on mapping their locations. Absent mapping, it is not possible to assess the success of these measures to facilitate movement of local wildlife. Additionally, the proposed conditions fail to make any provision to address additional ecopassages that may be required as a result of the large workpads required by the Project, including over the railway tracks. In addition, the Britannia Road truck entrance overlaps Tributary A, which forms part of a restored corridor and infrastructure node to connect the upstream Boyne region into the local natural heritage system. The proposed conditions do not fully address impacts on habitat connectivity of this entrance.

There are also issues with lack of specificity in many of the IAAC proposed conditions, which will reduce their effectiveness, as detailed in the chart below.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on ten species at risk only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on ten species at risk are likely.

Potential Condition	Comments
<p>8.5 The Proponent shall conduct, in consultation with Environment and Climate Change Canada and Conservation Halton, springtime pre-construction surveys of the Designated Project Development Area and of the Local Assessment Area, defined by the Proponent in section 3.2 of the document entitled Technical Data Report Terrestrial (Appendix E.16) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57), to identify the presence or absence of western chorus frog (<i>Pseudacris triseriata</i>) and breeding</p>	<p>The proposed condition is not sufficiently clear and detailed to be executed. In particular, it is not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.</p> <p>As well, this proposed condition is contingent upon a series of more detailed proposed conditions being met. However, given the ambiguity with respect to what the consultation encompasses, it is unclear whether the proposed conditions will effectively mitigate potential negative impacts.</p> <p>Western chorus frog is designated as threatened under the federal <i>Species at Risk Act</i>. Provincial and/or local authorities should also have involvement in measures pertaining to this species, including Conservation Halton and the local municipalities. This would ensure that the strategy for this species at risk is addressed through the lens of the</p>

Potential Conditions: 8 – Listed Species at Risk

Potential Condition	Comments
<p>and hibernating sites (residences) for western chorus frog (<i>Pseudacris triseriata</i>) prior to carrying out any disturbance associated with the Designated Project. In doing so, the Proponent shall:</p>	<p>subwatershed work and through use of a systems approach appropriate for the area.</p>
<p>8.5.1 develop the survey methodology in consultation with Environment and Climate Change Canada and Conservation Halton prior to conducting the surveys;</p>	<p>This proposed measure will not necessarily be effective at mitigating adverse impacts on the western chorus frog. Environment and Climate Change Canada (ECCC) was previously involved in developing the survey methodology with CN, but this did not ensure that all potentially suitable breeding habitat was surveyed.</p> <p>This measure should be amended to require consultation with the Province's Ministry of Environment, Conservation and Parks and Halton Region.</p>
<p>8.5.2 identify connectivity between all habitat necessary to support the annual life cycle of western chorus frog (<i>Pseudacris triseriata</i>), including breeding and hibernating sites (residences) identified through the surveys; and</p>	<p>The proposed measure is not sufficient to mitigate adverse impacts: the identification of connectivity does not automatically ensure protection will take place or will be sufficient.</p> <p>Similar to the other proposed measures, this proposed measure should be amended to require the Proponent to consult with Environment and Climate Change Canada and local authorities to ensure that the identified connections proposed for protection are ecologically viable.</p>
<p>8.5.3 develop, in consultation with Environment and Climate Change Canada and Conservation Halton, and implement modified or additional mitigation measures if western chorus frog (<i>Pseudacris triseriata</i>) and/or breeding or hibernating sites (residences) for western chorus frog (<i>Pseudacris triseriata</i>) is identified through the surveys to mitigate adverse environmental effects on western chorus frog (<i>Pseudacris triseriata</i>) and/or its breeding or hibernating sites (residences) attributable to the Designated Project during any phase of the Designated Project. The Proponent shall submit</p>	<p>Breeding sites are highly sensitive habitats. Should a breeding site be found within the Designated Project, avoidance would be preferable to mitigation; however avoidance will not be possible since there appears to be no contingency to modify the Project footprint. The role of this proposed measure is to develop additional mitigation measures, but the measure fails to ensure that this will occur on the basis of clear information or that such mitigation will be effective.</p> <p>Further, the proposed measure should be amended to ensure that whatever mitigation measures are developed, there are specific targets to evaluate their success.</p>

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Potential Condition	Comments
these measures to the Agency prior to implementing them.	
8.6 The Proponent shall install, prior to construction and during the breeding season for western chorus frog (<i>Pseudacris triseriata</i>), and maintain, during construction, exclusion fencing to prevent western chorus frog (<i>Pseudacris triseriata</i>) from entering construction areas. In doing so, the Proponent shall:	ECCC should also be consulted to ensure that the exclusion fencing is long enough to prevent western chorus frogs from travelling around the fencing and into construction areas.
8.6.1 determine the dates of the breeding season, based on ambient temperatures and in consultation with Environment and Climate Change Canada, for any year that construction shall occur; and	A precautionary buffer in time should be applied to ensure that any errors in interpretation do not result in inadvertent impacts on western chorus frogs.
8.6.2 ensure, based on the results of the surveys conducted pursuant to condition 8.5, that construction areas do not contain western chorus frog (<i>Pseudacris triseriata</i>) breeding residence prior to installing exclusion fencing.	This proposed measure is not sufficiently clear. Specifically, it is not clear if IAAC is requesting that construction areas do not contain (1) western chorus frog breeding habitat, or (2) exclusion fencing be installed when western chorus frogs are not present at breeding sites within the construction area. This measure should be clarified.
8.7 The Proponent shall install, prior to construction and before the breeding season determined for that year pursuant to condition 8.6.1, and maintain, during construction and operation, exclusion fencing between the railway tracks located within the Designated Project Development Area and breeding and hibernating sites (residences) for western chorus frog (<i>Pseudacris triseriata</i>) identified through the surveys conducted pursuant to condition 8.5.	<p>This proposed condition is not clear whether the exclusion fencing will be effective at mitigating adverse impacts on western chorus frog because it depends on exactly where the fencing is installed between the railway tracks and known breeding/hibernation sites. The Project Development Area should not contain breeding/hibernation sites.</p> <p>The plan to install exclusion fencing should be reviewed by ECCC to ensure the locations selected and lengths required are appropriate given the proposed development concept.</p>
8.8 The Proponent shall only replace culverts located adjacent to breeding and hibernating sites (residences) for western chorus frog (<i>Pseudacris triseriata</i>), identified through the surveys conducted pursuant to	This proposed condition is not sufficient to ensure effective mitigation of adverse impacts. Outside of the breeding season, western chorus frogs move away from their breeding sites and will therefore be at higher risk of being crushed by heavy equipment.

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Potential Condition	Comments
<p>condition 8.5, outside of the breeding season for western chorus frog (<i>Pseudacris triseriata</i>) determined pursuant to condition 8.6.1.</p>	<p>To ensure that western chorus frogs are not negatively impacted by culvert replacement activities, construction works should only be conducted while western chorus frogs are hibernating so as to ensure that they are not crushed on the surface by heavy equipment.</p> <p>If the culverts are located within a municipal right-of-way, CN will be required to obtain a permit. If on private land, a permit from Conservation Halton may be required relative to work within regulated areas.</p>
<p>8.9 If any hibernating site (residence) for western chorus frog (<i>Pseudacris triseriata</i>) identified through the surveys conducted pursuant to condition 8.5 will be temporarily or permanently affected by the Designated Project, the Proponent shall replace the affected site (residence) with, at least, a one-to-one ratio of restored habitat in location(s) determined in consultation with Environment and Climate Change Canada and the Town of Milton. The Proponent shall maintain the restored habitat throughout all phases of the Designated Project.</p>	<p>The proposed condition described is not sufficiently clear. It is not clear how “maintain the restored habitat...” will be measured to know whether the Proponent is in compliance with the request. It also is not clear who sets the threshold for compliance and whether it will be adequate, nor is it clear whether the restored habitat must be functional prior to the construction phase of the development being initiated. Finally, it is not clear who will determine what if any actions will be required of the Proponent, if the restored habitat is deemed inadequate.</p> <p>The proposed condition may not be effective at mitigating adverse impacts. While it may be possible to recreate suitable overwintering habitat, it may not be possible to recreate the actual hibernation sites, which have been identified as underground crevices, animal burrows, or cavities below the frost line. Other reported overwintering sites include ant mounds, crayfish holes and even surface debris (Dodd, 2013). Also, negative impacts/total loss of the population in the Project Development Area or Local Assessment Area may have negative impacts on the broader western chorus frog population in the surrounding areas.</p> <p>More detailed guidance should be provided so that compliance with this proposed condition can be more easily evaluated. Compliance should not be ambiguous.</p> <p>Conservation Halton should also be involved, and any necessary permitting/approval required under the provincial <i>Endangered Species Act</i> must be secured.</p>
<p>8.10 The Proponent shall design, prior to construction and in consultation with Environment and Climate Change Canada and Conservation Halton, and construct ecopassages under the railway tracks located within the Designated</p>	<p>The proposed condition is not sufficiently clear since it does not distinguish whether the construction of the ecopassages is meant to mitigate adverse impacts on western chorus frogs that occur on or adjacent to the Project Development Area or whether the ecopassages are meant to mitigate adverse impacts to the broader western chorus frog community.</p>

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Potential Condition	Comments
<p>Project Development Area to ensure habitat connectivity for western chorus frog (<i>Pseudacris triseriata</i>). The Proponent shall maintain these ecopassages throughout construction and operation.</p>	<p>Construction of the ecopassages may not be effective at mitigating adverse impacts, depending on what impacts they are targeted to addressing. Conservation Halton should also be involved in the implementation. Given the width of the rail line and overall Project area, such ecopassages may not be feasible.</p>
<p>8.11 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and Conservation Halton, a follow-up program to verify the accuracy of the environmental assessment and the effectiveness of mitigation measures as it pertains to the adverse environmental effects on western chorus frog (<i>Pseudacris triseriata</i>) attributable to the Designated Project. The Proponent shall implement the follow-up program during all phases of the Designated Project. As part of the implementation of the follow-up program, the Proponent shall:</p>	<p>The proposed condition may not be effective at mitigating adverse impacts. The contents of the program, including proposed methodology and thresholds should be explicitly defined through the preparation of a Terms and Reference document.</p>
<p>8.11.1 monitor the use by western chorus frog (<i>Pseudacris triseriata</i>) individuals of the habitat restored pursuant to condition 8.9;</p>	<p>Monitoring intervals should be stated at least approximately in the measure, as the frequency of monitoring is critical to the effectiveness of the measure.</p>
<p>8.11.2 monitor the use by western chorus frog (<i>Pseudacris triseriata</i>) individuals of the ecopassages constructed pursuant to condition 8.10;</p>	<p>The follow-up program should define how usage will be defined and accurately measured.</p>
<p>8.11.3 report the results of all monitoring conducted as part of the implementation of the follow-up program to Environment and Climate Change Canada and Conservation Halton pursuant to condition 2.7.2 to inform future regional habitat creation and restoration efforts; and</p>	<p>The follow-up program should clearly indicate what information will need to be reported.</p>

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Potential Condition	Comments
<p>8.11.4 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 8.11.1 or 8.11.2 demonstrate that modified or additional mitigation measures are required to mitigate adverse environmental effects on western chorus frog (<i>Pseudacris triseriata</i>) individuals attributable to the Designated Project. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>The point at which action will be taken following negative monitoring results should be stated in the proposed measure. If the results of the monitoring indicate additional mitigation measures are required, the measures should be developed in conjunction with and require approval from the ECCC.</p>
<p>8.12 The Proponent shall conduct vegetation clearing outside of the breeding season for eastern meadowlark (<i>Sturnella magna</i>) and bobolink (<i>Dolichonyx oryzivorus</i>) in areas identified by the Proponent as habitat for eastern meadowlark (<i>Sturnella magna</i>) and bobolink (<i>Dolichonyx oryzivorus</i>) on figure 5 of the document entitled Technical Data Report Terrestrial (Appendix E.16) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).</p>	<p>This proposed condition would be effective to mitigate the adverse impacts on this species as long as the areas identified in Figure 5 continue to be the only areas that support habitat for significant species. Should grassland (i.e., hay) be planted in other areas, they too should be considered habitat for grassland birds.</p> <p>The mitigation corresponds with that described within the recovery strategy. However, it should be noted that in general, vegetation clearing can only take place in such a manner that it does not contravene the purpose of the <i>Migratory Birds Convention Act</i>. That is, vegetation clearing should, in general, only take place when it can be demonstrated that there is no nesting activity taking place regardless of whether they are Species at Risk or not.</p> <p>Pre-construction surveys are conducted as a ‘self-assessment’, with Environment Canada investigating only if a violation is reported.</p>
<p>8.13 The Proponent shall cause to be established and maintained, during construction and operation, 40.7 hectares of suitable replacement grassland habitat (containing hay and meadow fields) in the Luther Marsh Wildlife Management Area to compensate for the loss of eastern meadowlark (<i>Sturnella magna</i>), bobolink (<i>Dolichonyx oryzivorus</i>) and monarch butterfly (<i>Danaus plexippus</i>) suitable habitat within the Designated Project Development</p>	<p>This proposed condition requires amendment to describe basic factors relating to the suitability of the proposed compensation habitat. Some guiding parameters should be included, particularly the setting for the compensation habitat, the configuration of the habitat and the species that should be planted (or a reference should be provided to the specifications that should be followed).</p> <p>In addition, the compensation habitat must be rendered suitable immediately prior to construction activities being initiated. It would not be sufficient to simply start preparing the compensation habitat when construction activities begin.</p>

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Potential Condition	Comments
<p>Area. The Proponent shall cause the suitable replacement grassland habitat to be established before removing the existing grassland habitat within the Designated Project Development Area.</p>	<p>Should the compensation habitat be in a suitable configuration, in the appropriate setting, and maintained appropriately, it will be effective.</p> <p>Provision of suitable compensation habitat is the standard for removal of existing habitat.</p> <p>Environment Canada oversees compensation habitat, and should be responsible for final approval and sign-off.</p>
<p>8.14 The Proponent shall cause to be developed, prior to construction and in consultation with Environment and Climate Change Canada, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to the suitable grassland habitat established pursuant to condition 8.13. The Proponent shall cause the follow-up program to be implemented for a period of 20 years following the start of construction. As part of the implementation of the follow-up program, the Proponent shall cause to:</p>	<p>This proposed condition appears to require the Proponent to report on the compensation habitat for a total of 20 years, though compensation habitat must be maintained for as long as the Project is in operation. This discrepancy should be corrected to ensure proper maintenance of habitat.</p> <p>Also, given the significant distance between Luther Marsh and the Project Development Area, it will be particularly important to determine that displaced birds are successfully using the compensation habitat.</p>
<p>8.14.1 monitor the breeding success of eastern meadowlark (<i>Sturnella magna</i>) and bobolink (<i>Dolichonyx oryzivorus</i>) in the suitable grassland habitat;</p>	<p>This proposed measure requires amendment to include details on frequency of monitoring and basic parameters for monitoring protocols (or reference to appropriate protocols).</p> <p>Monitoring of the proposed compensation site should be implemented prior to the construction of new habitat. It is important that existing populations of Bobolink and Eastern Meadowlark in Luther Marsh not be affected by construction of the new habitat, and that numbers of grassland birds be evaluated in the context of the existing populations in Luther Marsh (i.e., to determine the contribution of the new habitat over and above the populations already present in existing habitat, if any).</p> <p>Environment and Climate Change Canada would be responsible for approving the monitoring program as part of the Net Benefit permit for destroying existing grassland habitat.</p>
<p>8.14.2 provide the results of the monitoring conducted as part of the</p>	<p>This proposed measure requires amendment to include details on frequency of reporting. A date by which monitoring results</p>

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Potential Condition	Comments
<p>implementation of the follow-up program to Environment and Climate Change Canada and other relevant authorities pursuant to condition 2.7.2;</p>	<p>should be reported should also be indicated (such as September 1st) so that if the results of the monitoring suggest that there is something wrong with the suitability of the compensation habitat, changes could be made prior to the start of the next breeding season.</p> <p>Environment and Climate Change Canada (Species at Risk biologists) would be responsible for reviewing monitoring data and reviewing future compensation.</p>
<p>8.14.3 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 8.14.1 demonstrate that modified or additional mitigation measures are required to mitigate adverse environmental effects on meadowlark (<i>Sturnella magna</i>) and bobolink (<i>Dolichonyx oryzivorus</i>) attributed to the Designated Project. The Proponent shall cause these measures to be submitted to the Agency prior to them being implemented; and</p>	<p>This proposed measure requires amendment to include details on which results would lead to action. However, it would be difficult to develop “triggers” that would require change in mitigation measures. For example, if there were declines in numbers of grassland birds within the compensation habitat, it would be difficult to separate the declines from declines in the population as a whole (and populations are declining continent-wide). The measure must include a relative measure of population declines within the compensation site relative to Ontario-wide population declines, and must include a baseline derived from surveys of the existing habitat.</p> <p>A clear flow chart describing the “triggers” and consequent actions that would lead to modifying or providing additional mitigation measures must be provided. The time frame within which action will be taken if the habitat becomes unsuitable or declines are observed must be shown.</p>
<p>8.14.4 develop and implement, in consultation with Environment and Climate Change Canada, modified or additional mitigation measures and/or additional follow-up requirements if, after 20 years following the start of construction, the results of the monitoring referred to in condition 8.14.1 indicate that the suitable grassland habitat is not functioning as predicted during the environmental assessment as a replacement habitat for eastern meadowlark (<i>Sturnella magna</i>) and bobolink (<i>Dolichonyx oryzivorus</i>). The Proponent shall cause these modified or additional mitigation measures and/or additional follow-up requirements to be implemented until such time that monitoring results indicate that the suitable grassland</p>	<p>This proposed measure requires amendment to include details on what is meant by the “environmental assessment” to clarify that this includes the original survey work.</p> <p>This proposed measure also requires amendment to shorten the 20 year requirement. 20 years is too long a timeframe without management action. Action needs to be taken earlier if the habitat is not functioning. As noted above, timing of monitoring events and actions to be taken after each monitoring event if the monitoring indicates the habitat is not functioning.</p> <p>As noted above, determining whether the grassland is functioning as predicted will depend on having an appropriate baseline for the existing populations in Luther Marsh as well as on the status of Ontario populations, as this species’ declines may affect the numbers that inhabit the compensation habitat over the 20 year timeframe. However, the prediction must be framed in the light of the precautionary principle so that if monitoring results show a decline in Luther Marsh populations, every effort will be used to create a better-functioning habitat:</p>

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Potential Condition	Comments
<p>habitat is functioning as predicted during the environmental assessment. The Proponent shall cause these modified or additional mitigation measures and/or additional follow-up requirements to be submitted to the Agency prior to them being implemented.</p>	<p>i.e., continental declines must not be used as an excuse for abandoning attempts to maintain the habitat.</p> <p>More specific examples of mitigation measures should be provided, which could include but not be limited to:</p> <ul style="list-style-type: none"> a. Purchase of additional areas for restoration of grassland habitat b. Management of habitat to maintain preferred physiognomy of the habitat (i.e., appropriate height and proportion of grasses, forbs and shrubs) c. Planting of preferred vegetation for nesting habitats <p>A two-tiered monitoring/action plan should be developed, listing the type of actions that would be taken in the short term and more drastic actions that would be taken in the longer (20 year) term.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals. The Grand River Conservation Authority may be involved in approving projects on land in their ownership.</p>
<p>8.15 The Proponent shall identify, prior to construction and in consultation with Environment and Climate Change Canada, Conservation Halton and the Six Nations of the Grand River, foraging, nesting and overwintering habitat for snapping turtle (<i>Chelydra serpentina</i>) and midland painted turtle (<i>Chrysemys picta marginata</i>) within the Designated Project Development Area and within the Local Assessment Area, defined by the Proponent in section 3.2 of the document entitled Technical Data Report Terrestrial (Appendix E.16) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).</p>	<p>The proposed condition is not sufficiently clear and detailed to be executed. For example, it is not clear what “consultation” includes or how any differences in interpretation/expectations will be resolved.</p> <p>This proposed condition is contingent upon a series of additional proposed conditions being met. However, given the ambiguity with respect to what consultation encompasses, it is unclear whether the proposed conditions will effectively mitigate potential negative impacts.</p> <p>Assuming additional details are provided where requested, the following list of conditions will likely do an adequate job of mitigating adverse impacts on Snapping Turtle and Midland Painted Turtle.</p> <p>Conservation authorities are often involved in providing guidance with respect to the identification of wildlife habitat. Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario</p>

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Potential Condition	Comments
	Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals.
<p>8.16 The Proponent shall implement, prior to operation, habitat enhancement features for snapping turtle (<i>Chelydra serpentina</i>) and midland painted turtle (<i>Chrysemys picta marginata</i>) in Indian Creek and in ponds located within the Designated Project Development Area and shall maintain these features throughout operation. In doing so, the Proponent shall locate constructed nesting mounds outside of areas where nesting habitat has been identified pursuant to condition 8.15.</p>	<p>This proposed condition requires amendment to include details on what habitat enhancement features will be implemented and how many of them are required. It also is not clear what maintenance will be required and how it will be evaluated and by whom.</p> <p>The proposed conditions, as described, should help mitigate some adverse impacts. However, it is not clear yet how effective the mitigation measures will be since it is not clear what they will be. To help ensure that the mitigation measures are as effective as possible, it is recommended both ECCC and the Six Nations of the Grand River be consulted.</p> <p>Conservation Authorities are often involved in recommending habitat enhancement features to help mitigate negative environmental impacts from development proposals. This is particularly true for species that are not designated Threatened or Endangered in the Province. In addition, for construction work within Indian Creek, Fisheries and Oceans Canada would need to be involved to ensure whatever enhancement features are proposed for Indian Creek are acceptable and would not impact fish or fish habitat.</p>
<p>8.17 The Proponent shall conduct in-water construction activities outside of the overwintering period for snapping turtle (<i>Chelydra serpentina</i>) (October 1 to April 30), unless not technically feasible. If the Proponent must conduct in-water construction activities within the overwintering period, the Proponent shall have a qualified individual, who is a biologist, relocate snapping turtles (<i>Chelydra serpentina</i>) observed within in-water construction areas to an accredited facility for the duration of the overwintering period, prior to conducting any in-water construction activity.</p>	<p>This proposed condition requires amendment. The term “technically feasible” is too vague.</p> <p>As well, if in-water construction activities are necessary during the overwintering period, it will be difficult to locate the hibernation sites. In addition, permits to handle wildlife must be obtained prior to any in-water works commencing. Avoidance of sensitive hibernation sites would be preferable to mitigation (especially if the site proves to be a hibernation site for a large number of individuals and especially if it harbours large, sexually mature individuals), but it appears that avoidance will not be considered.</p> <p>Given the expected challenges associated with identifying turtle hibernation sites in Indian Creek, the need to conduct in-water construction activities during the overwintering period must be thoroughly justified and vetted.</p>
<p>8.18 The Proponent shall install, prior to construction, and maintain, throughout construction, exclusion fencing to prevent snapping turtle</p>	<p>The proposed condition, if adequately performed, should be effective at preventing Snapping Turtles (and Midland Painted Turtles) from entering construction work areas. However, frequency of monitoring of exclusion fencing by a qualified</p>

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Potential Condition	Comments
(Chelydra serpentine) from entering construction work areas. The Proponent shall take into account the location of the foraging, nesting and overwintering habitat identified pursuant to condition 8.15 when installing the exclusion fencing.	biologist should be specified as exclusion fencing fails frequently.
8.19 The Proponent shall install, prior to operation, and maintain, throughout operation, exclusion fencing between the nesting mounds constructed pursuant to condition 8.16 and roads located within the Designated Project Development Area. In doing so, the Proponent shall take into account the location of the foraging, nesting and overwintering habitat identified pursuant to condition 8.15 when installing the exclusion fencing.	The proposed condition, if adequately performed, should be effective at preventing Snapping Turtles (and Midland Painted Turtles) from interacting with Project vehicular traffic. As noted above, frequency of monitoring by a qualified biologist should be specified.
8.20 With respect to all exclusion fencing referred to in conditions 8.18 and 8.19, the Proponent shall:	
8.20.1 install all exclusion fencing taking into account Ontario’s Reptile and Amphibian Exclusion Fencing: Best Practices, Version 1.0. Species Technical Note;	<p>This proposed measure should be amended to require that the exclusion fencing proposed by CN is consistent with guidance provided in the document (“taking into account” is language too vague for a measure).</p> <p>This measure should be amended to require use of Version 1.1 (July 2013) of this document instead of the one listed. OMNRF’s April 2016 <i>“Best Management Practices for Mitigating the Effects of Roads on Amphibians and Reptile Species at Risk in Ontario”</i> should also be consulted to see if any new information related to exclusion fencing has become available since the July 2013 document was published.</p> <p>MNRF/MECP could also be consulted although it is noted that presently, approvals are not necessary since neither Snapping Turtle nor Midland Painted Turtle are designated Threatened or Endangered in Ontario.</p>
8.20.2 take seasonal variations into account when installing all exclusion fencing; and	This proposed measure is not sufficiently clear. More specifically, it is not clear to what seasonal variations are being referred to and what their perceived significance is. It is not clear what “take into account” means.

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Potential Condition	Comments
	<p>As currently written, it is not possible to determine whether the proposed measure will help prevent adverse impacts from occurring on the local turtle population.</p> <p>This proposed measure should be reworded to be more explicit with respect to what is being requested so that CN will clearly know what needs be done and when. It will also allow compliance to be evaluated.</p>
<p>8.20.3 inspect all exclusion fencing at least monthly and repair as necessary.</p>	<p>This proposed measure requires amendment as it is not clear whether the measure, if adequately performed, would be effective at preventing Snapping Turtles (and Midland Painted Turtles) from being subject to adverse impacts (i.e., interacting with Project vehicular traffic). Although the proposed measure requires that exclusion fencing be inspected, at a minimum, monthly, this may not be enough if (1) severe weather events have occurred, (2) construction is occurring in very close proximity to the exclusion fencing, or (3) if the fencing is sufficiently degraded such that breaches could reasonably be considered imminent. This is especially true when turtles are most likely to be on the move (i.e., during the nesting season and immediately before or after entering hibernation). Furthermore (although likely implied), the measure does not require breaches be immediately fixed.</p> <p>More explicit wording should be provided so that it better ensures that inspections occur frequently enough to quickly spot and fix breaches, and that the intent of the fencing is not compromised. The proposed measure should require that CN fix all identified breaches quickly (e.g., within two business days).</p> <p>It is not clear whether any agencies check to see whether exclusion fencing is being inspected as required. However, if some did, Conservation Authorities would be the most likely candidates. If Threatened or Endangered Species at Risk are known to be present, then it is also possible that MNR/MECP may be involved.</p>
<p>8.21 The Proponent shall install and maintain, during all phases of the Designated Project, signs to notify drivers of the risk of turtle collisions along any temporary and permanent road located within the Designated Project Development Area.</p>	<p>The proposed condition requires amendment as it does not provide any guidance as to how this is to be done. For example, it does not describe what types of signs (e.g., flashing signs, etc.) should be installed, and how to determine how many signs are required.</p> <p>It is not clear whether the proposed condition, as described, will be effective at preventing turtles from being killed on roadways.</p>

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Potential Condition	Comments
	<p>Standard road signs are not necessarily effective at reducing the risk of turtle collisions.</p> <p>Since truck traffic volumes are expected to dramatically increase during the lifetime of the Project, and adverse impacts on turtles (due to collisions with large trucks and other associated vehicles) are not limited to the Project Development Area, this proposed condition should be expanded to include all areas at potential risk along the primary routes used to access Hwy 401, Hwy 407 or Hwy 403 (QEW).</p> <p>It is not clear if any agencies oversee such a condition.</p>
<p>8.22 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Conservation Halton and the Six Nations of the Grand River, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the adverse environmental effects on snapping turtle (<i>Chelydra serpentina</i>) and midland painted turtle (<i>Chrysemys picta marginata</i>) attributable to the Designated Project. The Proponent shall implement the follow-up program. As part of the implementation of the follow-up program, the Proponent shall:</p>	<p>The proposed condition requires amendment as it does not distinguish how the follow-up program differs from the requirements set out in Proposed Conditions 8.15 through 8.21. It also is not clear which “environmental assessment” it is referring to.</p> <p>It is not also clear whether the proposed condition, as described, will be effective at verifying the accuracy of the “environmental assessment” or determining the effectiveness of mitigation measures as it pertains to Snapping Turtle and Midland Painted Turtle.</p>
<p>8.22.1 monitor, during the time that the Proponent shall maintain the exclusion fencing referred to in condition 8.18, the effectiveness of the fencing in preventing snapping turtle (<i>Chelydra serpentina</i>) and midland painted turtle (<i>Chrysemys picta marginata</i>) from entering in-water construction work areas;</p>	<p>This proposed measure requires amendment as it does not provide any guidance as to how effectiveness should be measured.</p> <p>It is also not clear whether the proposed measure, as described, will be effective at monitoring the effectiveness of the exclusion fencing in preventing Snapping Turtle and Midland Painted Turtle from entering in-water construction work areas. Additional guidance should be provided to help evaluate effectiveness.</p>
<p>8.22.2 monitor, during all phases of the Designated Project, roads located within the Designated Project Development Area for turtle</p>	<p>This proposed measure is sufficiently clear at a general level. However, the proposed measure requires amendment as it</p>

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Potential Condition	Comments
<p>crossings and/or collisions with vehicles; and</p>	<p>does not provide any guidance as to how the monitoring should be conducted, how frequently and at what time during the day.</p> <p>It is also not clear how effective this proposed measure, as described, will be at monitoring roads within the Project Development Area for turtle crossing and/or collisions.</p> <p>The proposed measure should also be amended to provide additional guidance that describes in detail how the monitoring should occur. For example, will it occur on foot? Will it occur daily? Providing greater clarity may help to more quickly document potential breaches in the exclusion fencing.</p>
<p>8.22.3 develop and implement modified or additional mitigation measures, taking into account Ontario's Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario, if the results of the monitoring referred to in condition 8.21.1 or 8.21.2 demonstrate that modified or additional mitigation measures are required to mitigate the risk to turtles, including the risk of collisions with vehicles. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>The proposed measure requires amendment to define what thresholds would need to be surpassed for the development and implementation of modified or additional mitigations to occur.</p> <p>For the above stated reason, it is not clear whether any modified or additional mitigation measures will be developed, and, if so, whether, they will help mitigate any adverse impacts identified. As noted in our original review, large, sexually mature turtles are exceptionally important to the population so it will not require many mortalities to threaten the population.</p> <p>The proposed measure should be amended to provide additional guidance that describes in detail what thresholds need to be surpassed in order to develop and implement any modified or additional mitigation measures.</p>
<p>8.23 The Proponent shall submit sightings of turtles within the Designated Project Development Area during any phase of the Designated Project to the Natural Heritage Information Centre of the Ontario Ministry of Natural Resources and Forestry.</p>	<p>This proposed condition requires amendment as it is not clear whether all turtle sightings should be submitted and when submission should occur.</p> <p>It is also not clear how the documentation and submission of turtle observations within the Project Development Area will help mitigate adverse impacts on turtles within the Project Development Area. The Natural Heritage Information Centre (NHIC) is a provincial body that is not usually involved in federal projects of this nature. NHIC's role is to track provincial sightings. However, since local populations are most at risk, local agencies (such as the Conservation Authority or Halton Region) should be involved in tracking these sightings.</p> <p>The proposed condition should also be amended to direct the Proponent to regularly monitor and document vehicular collisions with turtles along the primary routes to Hwy 401, Hwy 407 and Hwy 403 (QEW). This should occur before construction of the Project begins and continue annually for a</p>

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Potential Condition	Comments
	<p>period of at least 20 years through the construction and operation phases. This would help determine what the long-term impact that this Project is having on turtles.</p> <p>The NHIC is involved only in collecting and storing information. It does not have any oversight of measures to protect species.</p>
<p>8.24.1 retain and maintain nesting habitat for barn swallow (<i>Hirundo rustica</i>) located in the barn identified by the Proponent on figure U24-1 submitted in response to Undertaking 24 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 939);</p>	<p>This proposed measure should be amended to clarify that the barn itself will be maintained to ensure that it is structurally sound. Barn Swallow will continue to need easy access to the inside (assuming that is where they were nesting).</p> <p>The proposed measure will be effective if other elements of appropriate habitat remain such as foraging habitat within 200 m, and if the barn is sound.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals.</p>
<p>8.24.2 install, prior to construction, artificial nesting structures to replace the artificial nesting habitat for barn swallow (<i>Hirundo rustica</i>) located in the shed identified by the Proponent on figure U24-1 submitted in response to Undertaking 24 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 939). The Proponent shall install the artificial nesting structures before removing the shed and shall maintain the structures during all phases of the Designated Project;</p>	<p>This proposed measure should be amended to specify that artificial nest structures should be installed on the subject lands if suitable habitat is present.</p> <p>Nesting habitat structures have been observed generally to attract many fewer breeding Barn Swallows than barns in many areas of Ontario. Birds Canada should be consulted to help direct to the most successful artificial nest structure designs. A monitoring program should be put in place to determine if Barn Swallows continue to nest in the structure, and to take action if they do not return to nest.</p> <p>Maintenance of foraging habitat within 200 m is also important. A location should be chosen for the nest structure that is near wetlands and ponds and other open areas. Artificial nest structures as far away as possible from active noisy work areas.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals.</p>
<p>8.24.3 manage stockpile slopes located within the Designated Project Development Area during construction in a manner that prevents bank swallow (<i>Riparia</i></p>	<p>This proposed measure is problematic. It deals with a Best Management Practice to prevent Bank Swallows from establishing colonies in areas requiring disturbance during the breeding season (MNR 2017), but this proposed measure is not intended to provide habitat for Bank Swallows.</p>

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Potential Condition	Comments
<p>riparia) from nesting in the stockpiles; and</p>	<p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals.</p>
<p>8.24.4 establish and maintain buffer zones and setback distances, in consultation with Environment and Climate Change Canada, if the Proponent encounters a barn swallow (<i>Hirundo rustica</i>) or bank swallow (<i>Riparia riparia</i>) nest during the removal of a culvert during any phase of the Designated Project.</p>	<p>This proposed measure should be amended as the time interval for this measure should be stated (i.e., until the young leave the nest).</p> <p>This is a management standard – as stated above, the time interval for maintaining the buffer zones and setback distances should be stated.</p> <p>Further, the proposed measure should ensure that culverts are checked prior to the initiation of any construction activities. It should be noted that Bank Swallows do not nest in culverts. If there is an ultimate loss of nesting habitat, habitat should be compensated in the same way as described above.</p> <p>It is noted that Environment Canada would oversee these measures with regard to compensation for a federal project. However, the Ontario Ministry of Environment, Conservation and Parks will need to be involved if the project includes provincial approvals.</p>
<p>8.25 The Proponent shall compensate for the loss of monarch butterfly (<i>Danaus plexippus</i>) habitat attributable to the Designated Project by establishing, in consultation with Environment and Climate Change Canada, 18.8 hectares of replacement habitat within the Designated Project Development Area. The Proponent shall maintain the replacement habitat throughout operation. The Proponent shall incorporate vegetation species in the replacement habitat that provide breeding and nectaring functions for monarch butterfly (<i>Danaus plexippus</i>).</p>	<p>Maintenance of this species and additional nectaring species requires maintenance of open habitat.</p> <p>This proposed condition should be amended to restrict use of herbicides/insecticides.</p>
<p>8.26.1 monitor the use by monarch butterfly (<i>Danaus plexippus</i>) of the grassland habitat established pursuant to condition 8.13 (at Luther Marsh);</p>	<p>This proposed measure requires amendment to specify the timing and frequency of monitoring events, as well as actions to be taken and timing of when actions would occur if monitoring indicated the habitat was not functioning as designed.</p>

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Potential Condition	Comments
	<p>Without specification of monitoring intervals and timing until action is implemented, it is uncertain whether this proposed measure would mitigate adverse impacts on this species. If the surveys are conducted too early in the season, the results will not be accurate since they may not have arrived in typical numbers. If they are conducted too late, they may start to record southbound migrants. Also, depending on what survey methodology is developed, and to better account for seasonal fluctuations in abundance, more than one survey a season should be conducted. Baseline surveys need to be conducted before construction begins. It cannot be determined if the mitigation measures are effective unless it can be accurately compared to the original condition.</p> <p>Specification of monitoring interval is necessary to determine this.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals. Grand River Conservation Authority would be involved in decisions on their property.</p>
<p>8.26.2 monitor the use by monarch butterfly (<i>Danaus plexippus</i>) of the replacement habitat established pursuant to condition 8.25 (18.8 ha on-site habitat);</p>	<p>This proposed measure requires amendment to specify the timing of monitoring events (see above), as well as actions to be taken and timing of when actions would occur if monitoring indicated the habitat was not functioning as designed.</p> <p>Without specification of monitoring intervals and timing until action is implemented, it is uncertain whether this proposed measure would mitigate adverse impacts on this species.</p> <p>Specification of monitoring intervals is necessary to determine this.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals.</p>
<p>8.26.3 report the results the monitoring referred to in conditions 8.26.1 and 8.26.2 to Environment and Climate Change Canada pursuant to condition 2.7.2; and</p>	<p>The proposed measure is generally clear but should be amended to set out a deadline for the results being reported.</p> <p>An action plan must accompany the monitoring plan and reporting.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. However, the</p>

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Potential Condition	Comments
	Ontario Ministry of Environment, Conservation and Parks will need to be involved if the project includes provincial approvals.
<p>8.26.4 develop and implement modified or additional mitigation if the results of the monitoring referred to in condition 8.26.1 or 8.26.2 demonstrate that modified or additional mitigation measures are required to mitigate the adverse environmental effects on monarch butterfly (<i>Danaus plexippus</i>) attributable to the Designated Project. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>This proposed measure should be amended as it is not clear without a specified time frame for taking action as a result of monitoring.</p> <p>It is unknown if this will be effective without a timeframe specified within which action will be taken if monitoring shows adverse results. How will the Proponent know whether their results indicate that modified or additional mitigation measures are required? What is considered an adverse environmental effect on Monarchs? A threshold needs to be established in consultation with ECCC.</p> <p>Specification of a timeframe within which action will be taken if adverse impacts are detected.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks will need to be involved if the project includes provincial approvals.</p>
<p>8.27 The Proponent shall conduct pre-construction surveys of eastern milksnake (<i>Lampropeltis triangulum</i>) in Tributary A and in wooded areas near where Indian Creek intersects the railway tracks. The Proponent shall develop the methodology for the surveys in consultation with Environment and Climate Change Canada and other relevant authorities.</p>	<p>This proposed condition requires amendment as it provides too few details to determine whether this plan would be effective. Existing protocols are available from MNRF, but they are designed to determine presence/absence of this species, not to determine all the places where this species could be found: where the species forages, breeds and hibernates. It would be important to search all these habitats to ensure that all Eastern Milksnakes were found if they are planned to be removed. More than one year of multi-season surveys may be required. Surveying for snakes is much more difficult than surveying for birds that sing loudly and regularly throughout the breeding season. The need for multi-year, multi-season surveys should be confirmed.</p> <p>Eastern Milksnake is a mobile and cryptic species. If Eastern Milksnake is present in the area, follow-up surveys would need to be conducted to determine where foraging, breeding and hibernation habitat is located, and ensure that these habitats and the linkages between them are within the habitat that will be protected, or that snakes are removed from all habitat if relocation is needed. Tracking studies are intensive surveys requiring specialized expertise and equipment, but they could help answer these questions.</p> <p>Time of year and number of surveys are critical to the success of these surveys. Details on timing and intensity of effort are</p>

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Potential Condition	Comments
	<p>required to evaluate effectiveness. See above comments regarding this species.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks will need to be involved if the project includes provincial approvals.</p>
<p>8.28 If the presence of eastern milksnakes (Lampropeltis Triangulum) within the Designated Project Development Area is confirmed through the surveys conducted pursuant to condition 8.27, the Proponent shall:</p>	<p>n/a</p>
<p>8.28.1 implement, prior to construction and in consultation with Environment and Climate Change Canada, a snake capture and relocation program to remove eastern milksnakes (Lampropeltis Triangulum) from the Designated Project Development Area and relocate them in accordance with wildlife care protocols to suitable habitat within the Local Assessment Area, defined by the Proponent in section 3.2 of the document entitled Technical Data Report Terrestrial (Appendix E.16) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57);</p>	<p>Please see above notes for this species: timing of surveys and intensity of survey effort should be specified, at least approximately, to evaluate whether a capture and relocation program would be effective.</p> <p>As above, this proposed measure will be effective only if the effort and timing are appropriate to allow all snakes to be found. It is not clear how it will be determined whether the replacement habitat within the Local Assessment Area is suitable. For example, will it include suitable overwintering sites (hibernacula)?</p> <p>Avoidance of critical habitat such as breeding and hibernation areas is more effective than relocation of snakes to new habitat where the availability of such habitat has not been documented. However, this is likely not feasible. To be on the safe side, construction of multiple artificial hibernacula to better ensure all their life history requirements are present in the replacement habitat.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals.</p>
<p>8.28.2 develop, prior to construction and in consultation with Environment and Climate Change Canada, measures to mitigate adverse environmental effects on eastern milksnake (Lampropeltis Triangulum) attributable to the</p>	<p>This proposed measure requires amendment as it provides no detail showing what this mitigation entails.</p> <p>Avoidance of critical habitat such as breeding and hibernation areas is more effective than any other method.</p>

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Potential Condition	Comments
<p>Designated Project, in addition to the snake capture and relocation program referred to in condition 8.28. The Proponent shall implement these measures during all phases of the Designated Project. The Proponent shall submit these measures to the Agency prior to implementing them; and</p>	<p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks will need to be involved if the project includes provincial approvals.</p>
<p>8.28.3 determine, prior to construction and in consultation with Environment and Climate Change Canada, if any of the exclusion fencing referred to in conditions 8.6, 8.7, 8.18 and 8.19 can mitigate adverse environmental effects on eastern milksnake (<i>Lampropeltis Triangulum</i>) attributable to the Designated Project. If the Proponent determines that none of the exclusion fencing implemented for other listed species at risk can effectively mitigate adverse environmental effects on eastern milksnake (<i>Lampropeltis Triangulum</i>), the Proponent shall develop and implement, in consultation with Environment and Climate Change Canada, modified or additional mitigation measures for eastern milksnake (<i>Lampropeltis Triangulum</i>), which may include appropriately adapting any existing exclusion fencing. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>This proposed measure requires amendment as it contains too little detail to ensure it is sufficient. A description of the frequency of monitoring of the fence, which is critical to its effectiveness, is required. Exclusion fencing is designed for Western Chorus Frog and Snapping Turtle/Midland Painted Turtle. If the exclusion fencing is also supposed to accommodate Eastern Milksnake, the design of the exclusion fencing should also change.</p> <p>As noted above, monitoring of the fence and immediate repair should it be damaged are critical to its effectiveness. Monitoring frequency and repair of the fence should be specified.</p> <p>Frequent monitoring, especially after rain events, and immediate repair of the exclusion fencing are essential components.</p> <p>The Agency likely does not have the expertise to evaluate the effectiveness of fencing. Environment Canada should oversee these measures with regard to compensation for a federal project. It is recommended that the Ontario Ministry of Environment, Conservation and Parks also be consulted in development of exclusion fencing for Eastern Milksnake.</p>
<p>8.29 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects on eastern milksnake (<i>Lampropeltis Triangulum</i>) attributable to the</p>	

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Potential Condition	Comments
<p>Designated Project. The Proponent shall implement the follow-up program. As part of the follow-up program, the Proponent shall:</p>	
<p>8.29.1 monitor sightings of eastern milksnake (Lampropeltis Triangulum) during all phases of the Designated Project;</p>	<p>This proposed measure requires amendment to clarify whether monitoring would be within the Project Area, or in protected habitat within the Local Assessment Area. The goals of monitoring would be different for each of these areas. It is critical to find any snakes that venture into the Project Area so they can be relocated. If an estimate of the population is required, detailed surveys are needed both within and outside the Project Area with methods that allow accurate results to be obtained.</p> <p>This species is unlikely to be detected as “sightings”. Active searches under debris must be completed to find this species. Monitoring methods should specify the methods for finding Eastern Milksnake and the frequency with which it will be monitored. Cover boards should be considered as a method that will increase the probability of finding snakes during regular monitoring.</p> <p>Effectiveness of monitoring is critical to success of relocating Eastern Milksnake from within the Project Area, so at least some detail of method is required. Relying on casual sightings is not sufficient.</p> <p>An active monitoring program with active searches of debris (including placed debris such as coverboards) would provide increased certainty that snakes will be detected.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks should be consulted for their extensive knowledge of methods for obtaining estimates of snakes, capture and relocation of snakes.</p>
<p>8.29.2 report the results of the monitoring referred to in condition 8.29.1 to Environment and Climate Change Canada pursuant to condition 2.7.2; and</p>	<p>This proposed measure requires amendment to provide the frequency for conveying monitoring results to ECCC. It also needs to clearly set out the requirement to submit these results.</p> <p>Frequent monitoring and action would be required for this to contribute to mitigation for adverse impacts. It is not possible to gauge the effectiveness of this mitigation without an understanding of the frequency of monitoring and reporting.</p>

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Potential Condition	Comments
	<p>A targeted monitoring program would be more effective than a casual monitoring program without specifications of methods for monitoring, frequency of monitoring and frequency of reporting.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks will need to be consulted for their expertise in monitoring and relocating reptiles.</p>
<p>8.29.3 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 8.29.1 demonstrate that modified or additional mitigation measures are required to mitigate the adverse environmental effects on eastern milksnake (Lampropeltis Triangulum) attributable to the Designated Project. The Proponent shall submit these measures to the Agency prior to implementing them.</p>	<p>Eastern Milksnakes characteristically occur in low numbers. They breed only once every two years. A population of Eastern Milksnake within the Designated Project would likely be vulnerable to extirpation before it was realized that there were adverse environmental effects if intensive methods were not used to locate them. Greater emphasis should be placed on ensuring that all snakes present have been adequately relocated and that the mitigation measures implemented are as sound as possible. Prevention of declines should be the priority.</p> <p>If impacts to Eastern Milksnake are to be avoided, this mitigation would not be sufficient to mitigate impacts to this species.</p> <p>A concentrated search effort should be conducted to find Eastern Milksnake.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks should be consulted for their expertise in monitoring and relocating reptiles.</p>
<p>8.30 The Proponent shall conduct, prior to construction in the area of Indian Creek, surveys for little brown myotis (<i>Myotis lucifugus</i>) habitat in thicket communities along Indian Creek and in the coniferous plantation and deciduous woodland fragment west of the railway tracks. If the results of the surveys indicate the presence of little brown myotis (<i>Myotis lucifugus</i>) habitat, the Proponent shall develop, in consultation with Environment and Climate Change Canada, mitigation measures to protect or replace the</p>	<p>Methods and search intensity for the surveys are critical for the success of this mitigation and should be described. These should be provided by ECCC so that there is no confusion or differences in proposed approach.</p> <p>There is insufficient detail to determine if this proposed condition is effective.</p> <p>ECCC would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks should be consulted for their expertise in conducting surveys and providing compensation habitat.</p>

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Potential Condition	Comments
<p>surveyed habitat. The Proponent shall submit the results of the surveys and the identified mitigation measures, if any, to the Agency prior to construction.</p>	
<p>8.31 The Proponent shall provide awareness training on actions to take to protect wildlife to all Designated Project-related employees and contractors who may encounter wildlife within the Designated Project Development Area.</p>	<p>This proposed condition requires amendment as it is not sufficiently clear. Greater details on what the awareness training is going to include should be provided. Also, how often will employees be required to undergo the training? Which employees will need to undergo this awareness training? Will the training include casual employees or only permanent employees?</p> <p>Most contractors on site will be in vehicles, especially along roads where the hazards to wildlife will be most severe, and where it is unlikely wildlife would be seen. There is a low likelihood of this mitigation measure being effective.</p> <p>Frequent monitoring of roads and construction sites by qualified biologists would be more effective to mitigate adverse impacts.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project.</p>
<p>8.32 The Proponent shall design, prior to construction and in consultation with Environment and Climate Change Canada, Halton Municipalities, Conservation Halton and other relevant authorities, and maintain, throughout operation, a system of culverts and ecopassages within the Designated Project Development Area, including through the mainline embankment, pad tracks, the pad, and associated roadways, to retain habitat connectivity for all terrestrial and aquatic species expected to be present within the Designated Project Development Area, including listed species at risk, while meeting engineering requirements for safe railway and facility operation. The Proponent shall design and maintain all culverts and ecopassages taking into account Ontario's Best Management Practices for Mitigating</p>	<p>This proposed condition requires amendment to reference a figure that shows where these ecopassages are to be located - the present description is not clear. This proposed condition must also be more explicit on how the designs will be developed. That is, will the review agencies have final approval over what is proposed?</p> <p>Given the scale of the proposed development, open landscape connections (i.e., over the top of the railway tracks) might have their place and should also be part of the conversation.</p> <p>Work pads are described in the project description as follows: Hard surface areas located in between the pad tracks, each approximately 65 m wide by 2,000 m long. It is unlikely that a passage this long would be used by terrestrial species. We have found that even with ecopassages under a standard road width many species are hesitant to use them without design that allows light to penetrate, and the applicability of that design has not been tested for work pads that must support trains and a large number of very heavy vehicles. Ecopassages must be accompanied by associated fencing to prevent terrestrial species from crossing work pads and roads at other points.</p>

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Potential Condition	Comments
<p>the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario.</p>	<p>The channelization/removal of Tributary A will have impacts on the connectivity of the site to the north. The maintenance of this connection is more important and would be more effective than providing ecopassages within the proposed design.</p> <p>The design of the culverts should not only accommodate “Terrestrial and aquatic species expected to be present within the Designated Project Development Area.” It should also reasonably accommodate all wildlife species in the Local Assessment Area and Regional Assessment Area as the culverts are critically important at maintaining connectivity in the broader landscape.</p> <p>Given the scale of the proposed development, landscape connections (i.e., overtop of the railway tracks) might have their place and should also be part of the conversation.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Ontario Ministry of Environment, Conservation and Parks may be involved if the project includes provincial approvals.</p>
<p>8.33 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Halton Municipalities, Conservation Halton and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and the effectiveness of mitigation measures as it pertains to the adverse environmental effects on habitat connectivity attributable to the Designated Project, including the effectiveness of culverts and ecopassages referred to in condition 8.32. The Proponent shall implement the follow-up program throughout operation.</p>	<p>This proposed condition requires amendment as it is not sufficiently clear and detailed. Serious deficiencies exist in the EA studies and impact mitigation.</p> <p>“In consultation with ...” is vague and not defined. The proposed condition needs to explicitly identify the role of the Region of Halton, local municipalities and Conservation Halton with respect to the approval, implementation and monitoring of long-term effectiveness of Conditions.</p> <p>As noted in other comments, avoidance of environmental impacts is preferred to mitigation. The Natural Heritage System’s function is to preserve connectivity of habitat within the landscape in the face of change in land use. If the follow-up program indicates that the ecopassages will not be effective in maintaining connectivity, avoidance is not possible within this proposed condition.</p> <p>Effectiveness is uncertain given the spatial challenges of meeting the Openness Index (OI) requirements of species where development cover and operations are both intensive and extensive. The extent of proposed impervious cover limits ability to create effect culvert-based linkages. Also, the elimination of open fields used for movement and foraging is not addressed. Would long ecopassages become mortality sinks for disoriented wildlife?</p>

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Potential Condition	Comments
	<p>Major changes to the development proposal to better reflect a systems (Natural Heritage System)/subwatershed approach per Region and Town standards should be made to ensure adequate mitigation of adverse impacts. A change in design to avoid removing Tributary A and maintain connectivity to the habitat to the north would be preferable to mitigation of impacts.</p> <p>The proposed condition should explicitly include monitoring in an Adaptive Management Framework, to ensure baselines are established, targets set, effectiveness is evaluated and timely corrective measures are implemented if required.</p> <p>Given the complexity of regional and local planning processes, the Region, Conservation Halton and Town have the best ability to oversee and approve, if the design can be justified with available science and guidelines while meeting municipal development policies. Environment Canada would oversee these measures with regard to compensation for a federal project.</p>
<p>8.34 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Halton Municipalities, Conservation Halton, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and other relevant authorities, a wildlife management and connectivity plan that takes into account the most recent detailed design of the Designated Project. The Proponent shall provide the plan to the Agency prior to construction. The Proponent shall implement the plan. The plan shall include:</p>	<p>This proposed condition requires amendment as it unclear.</p> <p>Also it is not appropriate to assume that findings under Proposed Condition 8.32 will confirm that the existing EA and mitigation measures are accurate and adequate.</p> <p>“In consultation with ...” is vague and not defined. The proposed condition needs to explicitly identify the role of the Region of Halton, local municipalities and Conservation Halton with respect to the approval, implementation and monitoring of long-term effectiveness of conditions.</p> <p>Effectiveness is uncertain given the uncertainties related to the outcome under Proposed Condition 8.32.</p> <p>If under Proposed Condition 8.32 the existing EA and mitigation measures are inaccurate, redesign to maintain and enhance open habitat linkages designed through a systems-level approach would be most likely to mitigate adverse impacts.</p> <p>Given the complexity of regional and local planning processes, the Region, Conservation Halton and Town have the best ability to oversee and approve if the design can be justified with available science and guidelines while meeting municipal development policies.</p>
<p>8.34.1 mapping of wildlife habitat, travel patterns and existing and planned wildlife corridors within the</p>	<p>This proposed measure requires amendment to make it effective given the extent of existing linkages in the Regional Assessment Area, role of open agricultural lands in</p>

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Potential Condition	Comments
<p>Regional Assessment Area, defined by the Proponent in section 3.3 of the document entitled Technical Data Report Terrestrial (Appendix E.16) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57);</p>	<p>movements, and weaknesses of field studies of the Regional Assessment Area in the EA.</p> <p>Scoped field investigations focused on key species within the Regional Assessment Area would better inform the mapping as proposed. The Region’s NHS provides the best model addressing a broad range of movements.</p> <p>Given the complexity of regional and local planning processes, the Region, Conservation Halton and Town have the best ability to oversee and approve, if the design can be justified with available science and guidelines while meeting municipal development policies.</p>
<p>8.34.2 how the Proponent shall maintain habitat connectivity for terrestrial species during all phases of the Designated Project, including how the Proponent has considered travel patterns and existing and planned wildlife corridors across the Regional Assessment Area and in adjacent lands within Halton Municipalities’ Natural Heritage System during detailed design of the Designated Project;</p>	<p>This proposed measure requires amendment to commit the Proponent to maintaining biodiversity per the Goal established in the Regional Official Plan. Simply “considering” travel patterns and wildlife corridors does not commit the Proponent to any existing standards that any other development in the Region is subject to. As worded, it is “lower bar” than is set for other development proponents.</p> <p>The measure needs to specifically reference the “Region of Halton”, as “Halton Municipalities” could be construed to mean just the local municipalities. This is especially relevant for this measure to make it clear that it is the Region’s NHS that is being addressed.</p> <p>Effectiveness is uncertain given the extent of changes proposed to existing linkages in the Designated Project Development Area and their effect on the broader Regional Assessment Area. The role of open agricultural lands in allowing safe movements, and weaknesses of field studies of the Regional Assessment Area in the EA, threaten the enforceability of this condition.</p> <p>If under Proposed Condition 8.32 the existing EA and mitigation measures are inaccurate, redesign maintaining and enhancing open habitat linkages designed through a systems-level approach would be most likely to mitigate adverse impacts.</p> <p>Given the complexity of regional and local planning processes, the Region, Conservation Halton and Town have the best ability to oversee and approve, if the design can be justified with available science and guidelines while meeting municipal development policies.</p>
<p>8.34.3 how all travel corridors (including culverts and ecopassages</p>	<p>This proposed measure requires amendment to ensure its effectiveness. It now presumes that the EA has adequately</p>

Potential Conditions: 8 – Listed Species at Risk

Potential Condition	Comments
<p>referred to in condition 8.32) and buffering that the Proponent shall implement in the Designated Project Development Area are adequate (including their design and dimension) based on wildlife species expected to be present within the Designated Project Development Area;</p>	<p>addressed corridors and buffers in the Designated Project Development Area. The lack of focus on the role of open agricultural lands in allowing safe movements, and weaknesses of field studies of the Regional Assessment Area in the EA, threaten the enforceability of this proposed condition.</p> <p>If under Proposed Condition 8.32 the existing EA and mitigation measures are inaccurate, redesign maintaining and enhancing open habitat linkages designed through a systems-level approach is required to mitigate adverse impacts.</p> <p>Given the complexity of regional and local planning processes, the Region, Conservation Halton and Town have the best ability to oversee and approve, if the design can be justified with available science and guidelines while meeting municipal development policies.</p>
<p>8.34.4 how the detailed design and operation of the Designated Project's truck entrance on Britannia Road will not adversely affect Halton Municipalities' Natural Heritage System;</p>	<p>This proposed measure requires amendment. Effectiveness is uncertain given that the proposed west entrance (assuming it is as shown off Britannia Road on figure 3.0 in Technical Appendix E4), overlaps a watercourse (shown as Tributary A) which is detail designed to be integrated into a restored corridor and green infrastructure node immediately upstream in the Boyne residential area. This initiative is currently under construction in the Town based on a subwatershed study and the subsequent Block 1 Subwatershed Impact Study.</p> <p>The substantive relocation of the truck entrance would be required to avoid these impacts.</p> <p>Given the complexity of regional and local planning processes, the Region of Halton, Conservation Halton and Town have the best ability to oversee and approve, if the design can be justified with available science and guidelines while meeting municipal development policies.</p>
<p>8.34.5 all measures to be implemented by the Proponent to mitigate the adverse environmental effects of the Designated Project on wildlife during any phase of the Designated Project, including the mitigation measures set out in this document as it pertains to listed species at risk and migratory birds; and</p>	<p>This proposed measure requires amendment. As noted above, avoidance is preferred to mitigation, and the wildlife management and connectivity plan would not provide the option of maintaining the existing connective linkage provided by Tributary A.</p> <p>It would be preferred to maintain existing connectivity provided by the Natural Heritage System along Tributary A.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. The Region of</p>

Potential Conditions: 8 – Listed Species at Risk

Potential Condition	Comments
	Halton and local area municipalities would likely not have final approval and sign-off.
<p>8.34.6 the information referred to in condition 2.7 for each follow-up program to be implemented by the Proponent to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to wildlife, including listed species at risk and migratory birds.</p> <p>2.7 The Proponent shall, where a follow-up program is a requirement of a condition set out in this document, determine, as part of the development of each follow-up program and in consultation with the party or parties being consulted during the development, the following information:</p> <p>2.7.1 the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;</p> <p>2.7.2 the scope, content, and frequency of reporting of the results of the follow-up program;</p> <p>...</p>	<p>Condition 2.7.5 stipulates that “the technically and economically feasible mitigation measures to be implemented by the Proponent if monitoring conducted as part of the follow-up program shows that the levels of environmental change referred to in condition 2.7.4 have been reached or exceeded.” As worded, this proposed measure’s reference to “technically and economically feasible mitigation measures” is too vague to ensure effective mitigation.</p> <p>Notably, this proposed measure will not address the interruption of the Regional NHS created by the design of the Designated Project. A more effective means of maintaining connectivity would be to engage Halton Region and maintain the Regional Natural Heritage System as designed.</p> <p>Environment Canada would oversee these measures with regard to compensation for a federal project. In our opinion, the Ontario Ministry of Environment, Conservation and Parks must be involved as the protection of SAR is a legal obligation.</p>

Halton Municipalities' Comments on Potential Conditions – Human Health

Overview

As identified by the Panel, the Proponent failed to conduct a sleep disturbance analysis prior to the Panel hearing. Severe health effects can result from chronic nighttime sleep disturbance. On the basis that sleep disturbance can cause significant health effects, the Panel concluded that the Project required specific measures to avoid a significant nighttime sleep disturbance effects on human health on nearby residents.

The major concerns with the proposed conditions are as follows:

- The proposed conditions select 15 nighttime events at greater than 60 dBA Lmax as a threshold. However, the Panel identified a target of fewer than 10 nighttime events, not 15. The Panel approach is consistent with Health Canada and World Health Organization studies that have shown health effects may occur where there are fewer than 15 events at 60 dBA Lmax per night, so 10 events appears to better address health effects.
- The proposed conditions are too vague. They do not provide sufficient detail on what is required to comply with their terms or what occurs if the Proponent is unable to meet the defined threshold.
- Failure to fully implement necessary mitigation identified by the Panel. The Panel recommended that CN work with the Community Liaison Group to “receive complaints related to noise and sleep disturbance and ensure that they are reported to residents on a regular basis to promote transparency and accountability,” and to communicate its complaint investigation process clearly. This condition is only partially reflected in the proposed conditions under 3.2.1.4.2. Tracking sound events and communicating and compiling complaints related to nighttime noise and sleep disturbance alone is inadequate to lead to prompt and effective resolution of noise and sleep disturbances.

The further problem with **all** of the proposed conditions is that effects on health from nighttime noise are s.5(2) effects. As such, the Agency has no authority under CEAA to enforce any of them. Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.¹

Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on human health only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on human health are likely.

¹ We note, by contrast, that the Province of Ontario has exercised jurisdiction, retained expertise, and applied enforcement resources to address the health effects of projects. Similarly, various provincial statutes provide legal jurisdiction for municipalities and regional personnel like Medical Officers of Health to do the same for specific effects on health not fully addressed by the Province.

Potential Conditions: 4 – Human Health

Potential Condition	Comments (limited to nighttime noise)
<p>9.2 The Proponent shall conduct, prior to construction and in consultation with Health Canada, a sleep disturbance analysis based on an evaluation of the distribution of baseline and predicted nighttime noise events. If the results of this evaluation demonstrate that nighttime noise events attributable to the Designated Project may exceed 60 dBA Lmax outdoors more than 15 times per night, at any point of reception identified by the Proponent on figure 3 of the Technical Data Report Noise Effects Assessment (Appendix E.10) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57), the Proponent shall develop, in consultation with Health Canada, and implement, prior to construction, modified or additional mitigation measures to ensure that nighttime noise events attributable to the Designated Project do not exceed 60 dBA Lmax outdoors more than 15 times per night at any point of reception. The Proponent shall submit the results of the analysis and any modified or additional mitigation measure to the Agency prior to implementing them.</p>	<p>This proposed condition lacks sufficient detail and certainty. Even if there are less than 15 events that exceed 60 dBA Lmax, there will still be human health consequences. (see Health Canada (2017) and the World Health Organization (2009 and 2018)).</p> <p>The Proponent’s analysis must include objective measures of sleep disturbance, such as sleep actimetry. This sleep disturbance study should be conducted pre-construction (to establish baseline nighttime noise and sleep patterns of nearby residents) as well as during construction and again after normal operation is achieved.</p> <p>The target threshold should be concise. The 60 dBA Lmax should be one aspect of the health threshold (per Health Canada) such that the proposed condition should require the Proponent to record any noise event that exceeds this level. The second threshold is the number of nighttime events. As there is no health basis for the proposed condition to use a threshold of 15 nighttime events, it should be reduced as the Panel proposed to a threshold of 10 nighttime events.</p> <p>As well, the Proponent’s analysis should include monitoring of the number of nighttime noise exceedances, as well as measurements of the magnitude and duration of these nighttime noise events outside of the homes of residents.</p> <p>Annoyance with noise increases with noise level (and may be related to other characteristics of the noise), but also is influenced by individual perceptions of or attitudes toward the sources of the noise. Individual perceptions and attitudes should be included in the consideration of potential nighttime noise impacts on residents in the reception areas, and thus in this nighttime noise study.</p>
<p>9.3 The Proponent shall develop, prior to operation, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects on human health caused by nighttime noise events attributable to the Designated Project during operation, including any modified or additional mitigation measure developed and implemented pursuant to condition 9.2. The</p>	<p>This follow-up program should be amended to be consistent with the amendments proposed for the condition governing the baseline and Project-based sleep disturbance analysis set out in Proposed Condition 9.2., including the two thresholds set out above and monitoring of the magnitude and duration of nighttime noise events that exceed the 60 dBA Lmax.</p> <p>Also, consistent with current knowledge, the threshold of 15 impulsive nighttime noise events of 60 dBA is arbitrary. In reality, sleep disturbance may occur at lower or higher number of events, but also may depend on other characteristics of the noises (magnitude, duration, sound frequency, etc.). Therefore, the recommended threshold should be viewed as a</p>

Potential Conditions: 4 – Human Health

Potential Condition	Comments (limited to nighttime noise)
<p>Proponent shall implement the follow-up program for at least two years following the start of operation. The Proponent shall determine, based on the results of the follow-up program, if additional monitoring is required after the first two years following the start of operation. As part of the implementation of the follow-up program, the Proponent shall:</p>	<p>starting point from which empirical evidence may shape the need for more mitigation measures.</p> <p>Similarly, follow-up should include consideration of annoyance. As set out above, annoyance with noise increases with noise level (and may be related to other characteristics of the noise), and is influenced by individual perceptions of or attitudes toward the sources of the noise. Individual perceptions and attitudes should be included in the follow-up work.</p>
<p>9.3.3 compile the results of the monitoring referred to in condition 9.3.1 on a monthly basis and make these results available upon request.</p>	<p>Noise monitoring results should be defined and include parameters beyond counts of exceedances of the target threshold, e.g., sound pressure, duration, sound frequency, etc. For example, hourly averages will provide useful information as recent research has indicated noise in the first hours after bedtime and two or three hours prior to waking can affect sleep quality.</p>

Halton Municipalities’ Comments on Potential Conditions - Agriculture

Overview

Project effects on the loss of agricultural lands are s.5(2) effects under CEAA. The Panel found that the Project is likely to cause a cumulative SAEF on the availability of agricultural land in the Region.

The Panel also concluded that the Project would avoid causing a significant adverse environmental effect on agricultural lands only if the mitigation measures it identified as necessary were implemented.

The proposed conditions do not address one of the Panel’s two required mitigation measures. In particular, the proposed conditions fail to provide specifics regarding how much agricultural land will be leased, rehabilitated or improved. This makes it unclear what amount of agricultural land will be lost in total. It appears that – even taking this mitigation measure into account – the Project will cause a loss of 147 hectares of agricultural land, including 30 hectares of Prime Agricultural land.

The proposed conditions also fail to take into account all of the Project’s effects on agriculture. The Project will not only permanently remove agricultural land from production, but will also lead to significant additional losses of agricultural land by creating new pressure to expand the urban area to accommodate demand for new urban land uses such as warehousing near the Project site. The proposed conditions do not address this issue.

The proposed conditions fail to include a follow-up program for effects on agricultural lands.

Further, as effects on agricultural lands are s.5(2) effects, the Agency has no authority under CEAA to enforce the proposed conditions. Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.¹ Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on agricultural lands only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on agricultural lands are likely.

Potential Condition	Comments
10.1 The Proponent shall provide additional agricultural lease opportunities or rehabilitate or improve agricultural lands owned by the Proponent within properties adjacent to the Designated Project Development Area in consultation with Halton Municipalities and representatives of local farmers	<p>The proposed condition lacks clarity and detail and as such is not enforceable. The proposed condition is not well defined, does not indicate how much land is required to be leased, rehabilitated, or improved.</p> <p>Further, it is not clear for how long CN must maintain these additional agricultural opportunities.</p>

¹ We note, by contrast, that the Province of Ontario has exercised jurisdiction, retained expertise, and applied enforcement resources to address all aspects of agriculture related to lands and land use. Similarly, various provincial statutes provide legal jurisdiction for municipalities to address specific effects on agriculture not fully addressed by the Province.

Potential Conditions: 10 – Agriculture

Potential Condition	Comments
and farming organizations, including the Halton Region Federation of Agriculture.	The Town will have issues with compatibility between farm vehicles and truck traffic associated with the intermodal facility.

Halton Municipalities' Comments on Potential Conditions – Physical and Cultural Heritage and Structures

Overview

The Panel concluded that, unless all of the mitigation measures it identifies as necessary are implemented, the Project is likely to cause significant adverse environmental effects on physical and cultural heritage. The Panel found that the necessary measures go beyond what CN had additionally proposed and made additional recommendations. Without the proper establishment and implementation of each one of these mitigation measures, the Project is likely to cause the loss of physical and cultural heritage value through the improper removal of a heritage building, vibration effects and effects of neglect on remaining heritage buildings, and the destruction of archaeological artifacts and ossuaries. With proper mitigation, the Panel concluded that there will still be a residual effect of unspecified magnitude on cultural heritage and a residual adverse effect of low magnitude on archaeological resources.

Project effects of concern to the Halton Municipalities on physical and cultural heritage are s.5(2) effects.¹

Our major concerns with the potential conditions are as follows:

- reliance on future development of plans and procedures, without providing specifics on what triggers future work and what is required by this work; and
- failure to implement all mitigation judged necessary by the Panel.

The proposed conditions differ from Panel requirements in several ways. First, the proposed conditions do not address the Panel requirement that the Proponent seek to avoid disturbance of Archaeological and Heritage Resources wherever feasible (Panel Report, Appendix J, p.33). Avoidance would require the installation of a protective barrier around the site and a buffer zone.

The proposed conditions also fail to include important elements of two other measures required by the Panel. The Panel required that the Proponent make the proposed Cultural Heritage Property Maintenance and Re-use Plan available to all interested communities and organizations to see if anyone wishes to make a proposal (Panel Report, Appendix J, p.32). The Panel also recommended that the Proponent provide financial resources to support the safe return to relevant First Nations communities of artifacts that have already been excavated (Panel Report, Appendix J, p.34).

As well, two of the proposed conditions were not provided or considered by the Panel:

11.8.1.5 consult with the Ontario Ministry of Heritage, Sport, Tourism and Culture, Halton Municipalities, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation with respect to applicable legislative or legal requirements and associated regulations and protocols respecting the discovery, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance.

¹ Consistent with earlier submissions by the Halton Municipalities, our comments will not address effects on Indigenous communities as CN reached agreement with these communities.

Potential Conditions: 11 - Physical and Cultural Heritage and Structures

11.9.4 have a qualified individual, as it pertains to ossuaries and chosen in consultation with the Huron-Wendat Nation, conduct an assessment at the location of the discovery;

Proposed Condition 11.8.1.5 raises concern because it fails to address what is required by the Proponent after consulting with respect to “applicable legislative or legal requirements and associated regulations and protocols”. The proposed condition fails to require that the Proponent follow applicable requirements, not simply consult on them.

The further problem with all of the proposed conditions is that effects on physical and cultural heritage are s.5(2) effects. As such, the Agency has no authority under CEAA to enforce any of them. Nor is there any other federal authority with the authority, expertise, or resources to enforce these conditions.² Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects on physical and cultural heritage only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects on physical and cultural heritage are likely.

Potential Condition	Comments
11.1 The Proponent shall assess, prior to construction, the condition of each cultural heritage property identified by the Proponent in table 6.4 of the document entitled Technical Data Report Cultural Heritage Assessment (Appendix E.3) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57) using photographic records.	“Assess” is a vague requirement. Criteria or a standard of assessment needs to be applied in order to ensure that the condition is sufficiently specific to allow for enforcement.
11.2 The Proponent shall document the land use history and construction details of the shed located at 5269 Tremaine Road, prior to removing the shed. In doing so, the Proponent shall:	We note that a demolition clearance application for the shed must be submitted to the municipality for approval.
11.2.1 make a photographic record of the shed and salvage any component of the building in which	Salvage of heritage structures is provincially regulated.

² We note, by contrast, that physical and cultural heritage is within provincial and municipal authority and expertise through several statutes including the *Ontario Heritage Act*, the *Planning Act*, and the *Municipal Act, 2001*.

Potential Conditions: 11 - Physical and Cultural Heritage and Structures

Potential Condition	Comments
there is public or private interest; and	
11.2.2 submit a report containing the land use history, construction details and photographic record made pursuant to condition 11.2.1 to the Agency and potentially affected parties. The Proponent shall also make that information available to a local library or museum.	This proposed condition should include Heritage Milton (Town) and the Milton Historical Society as potentially affected parties.
11.3 The Proponent shall not carry out any construction activity associated with the Designated Project within 50 metres of any cultural heritage property referred to in condition 11.1, unless required to meet engineering requirements for safe railway and facility operation. If the Proponent must carry out any construction activity within 50 metres of a cultural heritage property, the Proponent shall:	These measures are provincially regulated.
11.3.3 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 11.3.2 exceed the maximum acceptable vibration levels determined pursuant to condition 11.3.1 to ensure that vibration levels remain below acceptable levels. The Proponent shall submit these measures to the Agency prior to implementing them.	<p>This proposed measure should include that, in all cases, work should stop immediately if a mitigation measure is found to be ineffective and should not recommence until such time as new mitigation measures have been approved, not just submitted.</p> <p>Additional mitigation is flagged as potentially required but has not been detailed in the proposed condition. This therefore lacks the required specificity for conditions.</p>
11.4 The Proponent shall inspect each cultural heritage property referred to in condition 11.1 as soon as practical after construction in the vicinity of each property has ended and shall compare the property's condition after construction to its condition prior to construction, based on the photographic records made pursuant to condition 11.1, to	<p>This proposed condition requires the Proponent to “make the necessary repairs” “in a timely manner”. This is lacking in specificity and should be made more specific by providing a standard for repair and a maximum time limit for completing those repairs.</p> <p>Further, the proposed condition should include that i) inspection must be conducted by an appropriately qualified professional, such as structural engineer or architect, and ii)</p>

Potential Conditions: 11 - Physical and Cultural Heritage and Structures

Potential Condition	Comments
<p>determine if any vibration-related damage has occurred as a result of construction. If the inspection demonstrates that vibration-related damage has occurred, the Proponent shall make the necessary repairs to the damaged property in a timely manner.</p>	<p>any repairs ought to be required to maintain the heritage integrity of the structure.</p>
<p>11.5 The Proponent shall develop, prior to construction and in consultation with the Ontario Ministry of Heritage, Sport, Tourism and Culture, the Town of Milton and potentially affected parties, a cultural heritage property maintenance and re-use plan in relation to all cultural heritage properties referred to in condition 11.1. The Proponent shall implement the plan throughout all phases of the Designated Project. As part the plan, the Proponent shall set out:</p>	<p>This proposed condition relies on future development of plans and procedures, without providing specifics on what triggers future work and what is required by this work.</p> <p>This plan lacks the required specificity to know the desired outcome will be achieved.</p> <p>This proposed condition does not specify to what standard, or to whose satisfaction, the plan will be developed, thereby adding to its ambiguity.</p>
<p>11.5.2 how the Proponent shall secure all cultural heritage properties, prior to construction, and inspect and maintain them in working order, during all phases of the Designated Project, or until such time any viable adaptive re-use is identified for any given property; and</p>	<p>This proposed measure lacks the required specificity to avoid demolition by neglect.</p>
<p>11.5.3 the criteria that may be used to identify any feasible adaptive re-use for any given cultural heritage property and, if an adaptive re-use is identified for a property, to determine the terms of that re-use.</p>	<p>This proposed measure should include that the feasibility criteria must take into account land use compatibility.</p>
<p>11.6 If, for any cultural heritage property referred to in condition 11.1, the Proponent has not identified a feasible adaptive re-use pursuant to the criteria referred in condition 11.5.3 three years after the beginning of operation, the</p>	<p>Three years is too long of a time-span and would result in demolition by neglect. The time-span of this proposed condition must either be shortened or the cultural heritage properties must be properly mothballed.</p> <p>The proposed condition should include that the completion of any work identified in the preservation, relocation, or</p>

Potential Conditions: 11 - Physical and Cultural Heritage and Structures

Potential Condition	Comments
<p>Proponent shall conduct, in consultation with the Ontario Ministry of Heritage, Sport, Tourism and Culture, Halton Municipalities and the Town of Milton, a Heritage Impact Assessment to determine whether the property(ies) should be preserved, relocated or demolished with appropriate mitigation. The Proponent shall submit the results of the Heritage Impact Assessment to the Agency, the Ontario Ministry of Heritage, Sport, Tourism and Culture, the Town of Milton and potentially affected parties within 30 days of the Heritage Impact Assessment being completed.</p>	<p>demolition of the properties must be completed to a specified standard, or to the satisfaction of a particular agency.</p>
<p>11.7 The Proponent shall conduct any controlled salvage excavation of archaeological resources required for the Designated Project during any phase of the Designated Project in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation and taking into account the Ontario Ministry of Heritage, Sport, Tourism and Culture's Standards and Guidelines for Consultant Archaeologists.</p>	<p>The Proponent must be required to adhere to the Ontario Ministry of Heritage, Sport, Tourism and Culture's Standards and Guidelines for Consultant Archaeologists, not simply take them into account.</p>
<p>11.8 The Proponent shall develop, prior to construction and in consultation with the Ontario Ministry of Heritage, Sport, Tourism and Culture, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation, an archaeological and cultural resources protection plan for any previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance discovered within the Designated Project Development Area. The</p>	<p>This plan lacks the required specificity to know the desired outcome will be achieved.</p>

Potential Conditions: 11 - Physical and Cultural Heritage and Structures

Potential Condition	Comments
<p>Proponent shall implement the plan during all phases of the Designated Project. As part of the plan, the Proponent shall set out:</p>	
<p>11.8.1.5 consult with the Ontario Ministry of Heritage, Sport, Tourism and Culture, Halton Municipalities, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation with respect to applicable legislative or legal requirements and associated regulations and protocols respecting the discovery, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance.</p>	<p>This proposed measure fails to provide a standard for the consultation.</p>
<p>11.9 The Proponent shall develop, prior to construction and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation and the Ontario Ministry of Heritage, Sport, Tourism and Culture a procedure with respect to the discovery, handling, recognition, recording, transferring and safekeeping of any human remain (including any ossuary) discovered within the Designated Project Development Area during any phase of the Designated Project. As part of the procedure, the Proponent shall:</p>	<p>This plan lacks the required specificity to know the desired outcome.</p>
<p>11.9.4 have a qualified individual, as it pertains to ossuaries and chosen in consultation with the Huron-Wendat Nation, conduct an assessment at the location of the discovery;</p>	<p>This proposed measure lacks specificity with respect to what qualifications the “qualified individual” should hold and to what standards the assessment is to be conducted.</p>

Potential Conditions: 11 - Physical and Cultural Heritage and Structures

Potential Condition	Comments
<p>11.9.6 not recommence work within the no-work zone referred to in condition 11.9.2, unless authorized by relevant authorities and subject to the requirement of condition 11.9.4.</p>	<p>This proposed measure lacks specificity with respect to who the relevant authorities are.</p>
<p>11.10 The Proponent shall require all employees and contractors associated with the Designated Project to undertake, before they conduct any construction activity within the Designated Project Development Area, an awareness training program about the procedures related to the discovery and protection of structures, sites or things of historical, archaeological, paleontological or architectural significance referred to in condition 11.8 and the procedures related to the discovery and protection of human remains referred to in condition 11.9. As part of the awareness training program, the Proponent shall include information on the recognition of artifacts related to Indigenous and Euro-Canadian material cultures that may be found within the Designated Project Development Area.</p>	<p>This proposed condition cannot be monitored and enforced. There is no indication of any opportunity for the Agency or another federal authority to review or verify that this is being completed.</p>
<p>11.11 The Proponent shall discuss with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation about opportunities to return artifacts of Indigenous origin excavated as part of the environmental assessment to the communities for preservation and interpretation. The Proponent shall seek consent from the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation before including, as part of the annual report referred to in condition 2.12, information on any measure</p>	<p>The reference to “discuss” is too weak of a term and lacks specificity. It is not possible to determine what would trigger lack of compliance and resulting enforcement.</p>

Potential Conditions: 11 - Physical and Cultural Heritage and Structures

Potential Condition	Comments
implemented as a result of these discussions.	

Halton Municipalities’ Comments on Potential Conditions - Effects of the Environment on the Designated Project

Overview

CEAA 2012 provides that a factor that must be taken into account for the environmental assessment of a designated project is any change to the designated project that may be caused by the environment (s. 19(1)(h)). The CEAA decision framework focuses on the s.5 framework of environmental effects. As such, to be relevant to the decision framework, a direct effect of the environment on the Project must give rise to an indirect environmental effect under s.5. For example, a flood may have a direct effect on the Project - such as washing away crossing infrastructure used by the Project - and the loss of crossing infrastructure may affect the use of land and socio-economic conditions for other persons that rely on the crossing.

The Panel provided two conclusions with respect to effects of the environment on the Project:

- CN’s commitments to implement mitigation measures for effects of the environment on the Project, with some modification from the Panel, are necessary to avoiding a significant adverse effect of the environment on the Project; and
- Additional mitigation measures beyond CN’s commitments are necessary to avoid a significant adverse environmental effect.

The Halton Municipalities have a concern over the proposed condition on this topic. The Panel concluded that mitigation was required to avoid a significant adverse environmental effect that was likely to arise from an effect of the environment on the Project.

Not well-defined or specific: The main concern is related to the development and implementation of the infrastructure protection plan. The proposed conditions provide no detail of how the plan will mitigate adverse effects.

Insufficient enforcement authority: An equally important concern is enforcement. Effects related to s.5(1) are enforceable by the Agency (CEAA/IACC), but effects related to s.5(2) effects are not. It seems possible if not likely that a direct effect of the environment on the Project could cause, indirectly, an s.5(1) effect, an s.5(2) effect or both.

Overall, the proposed conditions fail to provide the mitigation required by the Panel to avoid a significant adverse environmental effect from arising indirectly from a direct effect of the environment on the Project

Potential Condition	Comments
12.1 The Proponent shall develop, prior to construction, an infrastructure protection plan that describes how the Proponent shall maintain Designated Project infrastructures secure and in good working order during all phases of the Designated Project and how the Proponent shall restore any damaged infrastructure and prevent future damages, including in the event of an extreme weather event.	The infrastructure protection plan is not well-defined or specific. The proposed condition provides no information on how the Proponent is to maintain infrastructure in secure and good working order or how the Proponent shall restore damaged infrastructure. Absent these details, there is no basis to conclude that this plan will reduce adverse effects. The proposed condition should also be amended to require that the plan specify applicable standards for securing and maintaining infrastructure and that the plan be submitted to the Agency for its review, including review of compliance with applicable technical standards.

Potential Conditions: 12 - Effects on the Environment on the Designated Project

Potential Condition	Comments
<p>The Proponent shall submit the plan to the Agency prior to construction. The Proponent shall implement the plan during all phases of the Designated Project. As part the implementation of the plan, the Proponent shall:</p>	
<p>12.1.1 monitor meteorological conditions, including by receiving advanced notice of flood- producing severe rainfall events;</p>	<p>The proposed measure should be amended to require that the plan include technical guidance on how the infrastructure is to be maintained and protected in the event of catastrophic flooding, an extended freezing rain event or a major ice storm.</p>
<p>12.1.2 regularly inspect all erosion and sediment control devices installed within the Designated Project Development Area, including during and following rainfall events, and repair any defective or damaged device in a timely manner;</p>	<p>The proposed measure should be amended to require that the plan include technical guidance on what procedures will be implemented when damage due to erosion has occurred beyond a stated acceptable level.</p>
<p>12.1.3 report, as part of the annual report referred to in condition 2.12, on any major repair done pursuant to condition 12.1.2; and</p>	<p>The proposed measure should be amended to include annual reporting relating to all major repairs done pursuant to the infrastructure protection plan, not just 12.1.2.</p>
<p>12.1.4 backfill all open excavations in a timely manner, unless not technically feasible.</p>	<p>As part of the annual reporting, the Proponent should be required to report on all actions to backfill open excavations and all situations where it was not technically feasible to backfill open excavations in a timely manner.</p>

Halton Municipalities’ Comments on Potential Conditions - Independent Environmental Monitor

Overview

The Independent Environmental Monitor is responsible for monitoring compliance of the Agency conditions.

The Halton Municipalities’ main concerns with these proposed conditions are that

- the Agency has not identified how these proposed conditions are federally enforceable where they relate to s.5(2) effects,¹ and absent federal enforceability, these conditions cannot be included as a condition in a future decision statement;
- the conditions do not provide adequate clarity and specificity with respect to the procedures and frequency at which the independent environmental monitor is to observe and report on the implementation of conditions; and
- for accountability and transparency, Halton Region and the Town of Milton each fit within the definitions of “affected party” and “relevant authority,” and should therefore be provided with reporting from the independent environmental monitor.

Overall, the Halton Municipalities are concerned that this proposed condition – which is novel and was not proposed or addressed by the Panel – will not result in mitigation that avoids any significant adverse environmental effects of this Project.

Potential Condition	Comments
<p>13.1 The Proponent shall retain, prior to construction, the services of an independent environmental monitor, who is a qualified individual as it pertains to environmental monitoring in Ontario, to observe, record, and report on the implementation of the conditions set out in this document during all phases of the Designated Project.</p>	<p>In order to ensure accountability to the affected parties, this proposed condition should set out in a new paragraph or a new condition the further requirement that the independent monitor shall have sufficient funding to establish and maintain a web-site that is at all times available to the public, and contains a statement of the expertise of the monitor and a record of each action by the monitor to observe, record and report on the implementation of conditions required by Proposed Condition 13.1.</p>
<p>13.2 As part of the reporting requirement pursuant to condition 13.1, the independent environmental monitor shall advise the Proponent if, in their view, any Designated Project activity does not comply with any condition set out in this document. The independent environmental monitor shall also advise the</p>	<p>This proposed condition should state that the independent environmental monitor shall advise the Proponent in writing. This proposed condition should thus be amended as follows (additions bolded and underlined):</p> <p>13.2 As part of the reporting requirement pursuant to condition 13.1, the independent environmental monitor shall advise the Proponent <u>in writing</u> if, in their view, any Designated Project activity does not comply with any condition set out in this</p>

¹ Neither the Panel nor any federal authority has responded to the repeatedly-expressed concerns of the Halton Municipalities regarding federal enforceability to advise which federal authorities have the authority, expertise or resources to enforce proposed conditions related to these s.5(2) effects.

Potential Conditions: 13 – Independent Environmental Monitor

Potential Condition	Comments
Proponent which measure(s) in their view should be taken in respect to any activity that does not comply with any condition set out in this document.	document. The independent environmental monitor shall also advise the Proponent in writing which measure(s) in their view should be taken in respect to any activity that does not comply with any condition set out in this document. Not enforceable on the Proponent.
13.3 The Proponent shall require the independent environmental monitor to prepare reports that include:	Not enforceable on the Proponent.
13.3.1 a description, including through photo evidence, of the Designated Project activities that occurred and the mitigation measures that were applied during the period covered by the report; and	Not enforceable on the Proponent.
13.3.2 a description, including through photo evidence, of occurrence(s) of any alleged non-compliance with any condition set out in this document, as referred to in condition 13.2, observed during the period covered by the report, including:	Not enforceable on the Proponent.
13.3.2.1 the date of the occurrence(s) of non-compliance;	Not enforceable on the Proponent.
13.3.2.2 whether any Designated Project activity was changed or stopped as a result of the occurrence(s) of non-compliance;	Not enforceable on the Proponent.
13.3.2.3 how the occurrence(s) of non-compliance was or were corrected by the Proponent and the date that the corrective action(s) was or were completed by the Proponent; and	The proposed measures should specify a time period by which the Proponent should come into compliance. Not enforceable on the Proponent.
13.3.2.4 if any, the status of any pending occurrence of non-compliance that has not been corrected yet by the Proponent and a description of any adverse environmental effects associated	Not enforceable on the Proponent.

Potential Conditions: 13 – Independent Environmental Monitor

Potential Condition	Comments
with the continued occurrences of non-compliance.	
13.4 The Proponent shall require the independent environmental monitor to provide the reports referred to in condition 13.3 directly to the Agency, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation and relevant federal authorities, at a regular frequency to be determined in consultation with the Agency. The Proponent shall require the independent environmental monitor to retain the reports for 15 years following their production.	<p>The Halton Municipalities should be included in the list of relevant authorities to receive the reports.</p> <p>Also, the term “regular frequency” lacks clarity for the Proponent to ensure it is complying with this proposed condition. The Agency should set this time period to be “immediately upon completion of the reports”. For additional transparency and accountability, these reports should be published on the public registry of IAAC.</p> <p>Not enforceable on the Proponent.</p>
13.5 The Proponent shall require the independent environmental monitor to consult with the Agency, prior to construction, to determine which type of potential occurrence of non-compliance with any condition set out in this document may need to be reported to the Agency more frequently than the regular reports required pursuant to condition 13.3, including how and when this reporting shall occur based on the likelihood of these types of potential occurrence of non-compliance to cause adverse environmental effects and the magnitude of these effects. If the independent environmental monitor observes any of these potential occurrence(s) of non-compliance during any phase of the Designated Project, the Proponent shall require the independent environmental monitor to report this occurrence directly to the Agency, independently of the regular reports required pursuant to condition 13.3.	<p>This proposed condition is not well-defined. There is a high level of ambiguity with respect to “what type of potential occurrence of non-compliance with any condition set out in this document may need to be reported out to the Agency more frequently than regular reports”. This should be simplified to read: <u>“...to determine which conditions will be monitored and reported on more frequently than is required by condition 13.3.”</u> Since the purpose of monitoring and reporting is always related to compliance, this does not need to be stated.</p> <p>For full transparency, potentially affected parties including the Halton Municipalities should be provided the reporting at the same time as the Agency.</p> <p>The proposed condition also fails to specify what the Proponent should do to successfully comply with this condition.</p> <p>Not enforceable on the Proponent.</p>

Halton Municipalities' Comments on Potential Conditions – Accidents and Malfunctions

Overview

The Panel found that CN's commitments to implement mitigation measures for accidents and malfunctions are necessary to avoiding significant adverse environmental effects. The Panel further found that additional mitigation measures beyond CN's commitments are necessary to avoid significant adverse environmental effects.

The significant adverse environmental effects that arise in relation to Project operations include: hazardous material discharge and derailments or train accidents that can affect most components of the environment as well as human health and socio-economic conditions; intermodal container spills that can affect public health and safety; fires that can harm air quality, human health, and wildlife species and habitat.

Although CEAA 2012 provides that project effects from accidents and malfunctions are a factor to consider under subsection 19(1)(a), the effects that must be considered are "environmental effects," so all such effects must fit into the s.5 framework. As such, malfunction/accident effects related to s.5(1) are enforceable by the Agency (CEAA/IACC), but malfunction/accident effects related to s.5(2) effects are not. The Agency has not indicated which federal authority has the authority, expertise, resources or intention to enforce any of these conditions, including conditions beyond railway operations.¹ Absent federal authority to enforce each condition, the condition cannot form part of any CEAA decision statement.

The Halton Municipalities have concerns and suggested amendments with respect to the draft conditions for Accidents and Malfunctions.

Not well-defined and specific: Several key proposed conditions (14.1.1, 14.1.3, 14.1.4, 14.3.1, 14.3.2 and 14.5.2) are not well defined or specific, lack the clarity required to make compliance clear, and fail to ensure that the Proponent knows what it needs to do to fulfill the proposed condition.

Consultations to avoid or mitigate accidents need greater clarity to be effective: Consultation alone is not sufficient to ensure that appropriate technical standards are met when the Proponent is making plans. The Agency should amend the proposed conditions to ensure that consultation expressly addresses, among other things, compliance with applicable standards under the authority of the consulted party, and integrates views on compliance provided by the consulted party. Any new conditions not already incorporated as a condition for malfunctions/accidents i.e., "measures to be implemented to prevent accidents and malfunctions" (14.2) should be submitted and approved by the relevant authority. Further, the Agency should amend the consultation process to set a minimum period between consultation and implementation, for construction or operation (14.2, 14.3, 14.4, 14.6).

The Proponents' plans require approval from Agency: To ensure that all contemplated plans comply with guidance set out by the Agency, the Agency should ensure all contemplated plans are submitted after complete consultation and approved by the Agency before implementation (14.3, 14.3.4, 14.4, 14.6).

¹ While Transport Canada stated to the Panel that it is responsible for regulating the safety of rail operations pursuant to the *Railway Safety Act*, many of the proposed conditions are outside Transport Canada's authority (Panel Report Appendix H – Regulatory Framework p. 6).

Integration with Halton Region and the Town of Milton is Necessary:

- Halton Region and the Town of Milton are each a “relevant authority” and a “potentially affected party” related to accidents and malfunctions that should be explicitly included in the proposed conditions on consultation in these sections (14.2, 14.3, 14.3.4, 14.4, 14.5.2, 14.5.3.3, 14.5.4, 14.6, 14.6.1, 14.6.2, 14.6.3).
- Halton Region and Town of Milton have regulatory authority over emergency response to malfunctions/accidents and thus the Agency should specifically recognize that a condition of approval is to comply with their legal requirements as the Agency’s conditions alone will not be effective in mitigating the effect. Some of Halton Region and Town of Milton requirements are included in the table below (14.1.4, 14.3.4, 14.4, 14.6).

The Panel’s conclusions were that the Project is likely to cause significant adverse environmental effects unless all mitigation identified by the Panel as necessary is implemented. The proposed conditions for Accidents & Malfunctions do not include as conditions all mitigation measures that the Panel found were necessary to avoid a significant adverse environmental effect. These included the following Emergency Response Plans that the Proponent committed to implementing (See Panel Report, p. 256-266 for further detail of CN commitments):

- Construction Emergency Response Plan – to establish an organizational structure and procedures for response to emergency during construction;
- Spill Response and Contingency Plan – to outline the procedures, processes and management practices to handle and respond to spills; Hazardous Materials Action Plan – to identify specific measures to address the risks and responses to a potential spill of a hazardous material; and
- Operational Emergency Response Plan – to establish an organization structure and procedures for response to emergencies during operation.

(Panel Report, Appendix J., p. 35)

Nor do the proposed conditions contain sufficient detail to require that the Proponent’s accident and malfunction plan or communications plan incorporate the requirements of the four plans above.

Overall, the Panel concluded that the Project will avoid causing significant adverse environmental effects related to Project accidents and malfunctions only if the mitigation found necessary by the Panel is implemented. For the reasons summarized above and set out in this Table, the proposed conditions provide no basis to conclude that the mitigation found necessary by the Panel will be implemented. Therefore, significant environmental effects related to Project accidents and malfunctions are likely.

Potential Condition	Comments
14.1.1 store hazardous materials in designated areas with proper primary and secondary containment and in accordance with appropriate	Lack of clarity and certainty on what is “primary and secondary containment” and which “federal, provincial and municipal safety procedures and requirements” the Proponent has to comply with. The Agency should provide a current list of the federal, provincial and municipal safety procedures to be updated on a

Potential Conditions: 14 – Accidents and Malfunctions

Potential Condition	Comments
federal, provincial and municipal safety procedures and requirements;	regular basis, i.e., yearly, so that the Proponent knows whether it is in compliance with this proposed measure.
14.1.3 audit shipments for compliance with safe loading practices; and	This proposed measure lacks clarity with respect to what the audit will entail and what the Agency considers to be “safe loading practices”. The proposed condition requires further detail of how the audit will be conducted (including procedures, frequency of audits, reporting requirements etc.) and guidelines of what the Agency considers to be the “safe loading practices”.
14.1.4 locate spill containment kits in designated locations within the Designated Project Development Area where there is a higher risk of spills.	<p>This proposed measure lacks clarity with respect to how the Proponent will determine where there is a higher risk of spills and the number of spill containment kits that would be required to be effective. This proposed measure takes the form of a plan rather than a measure – it does not have the requisite level of detail that will allow the Proponent to know whether it is in compliance.</p> <p>Town of Milton Fire and other EMS should be made aware of where these spill containment kits are located, as part of this measure.</p>
14.2 The Proponent shall consult, prior to construction, with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and relevant authorities on the measures to be implemented to prevent accidents and malfunctions.	<p>Consultation alone is not sufficient to ensure that appropriate technical standards are met when the Proponent is making plans. The Agency should amend this proposed condition to ensure that consultation expressly addresses, among other things, compliance with applicable standards under the authority of the consulted party, and integrates views on compliance provided by the consulted party. Any new conditions not already incorporated as a condition for malfunctions/accidents i.e., “measures to be implemented to prevent accidents and malfunctions” should be submitted and approved by the relevant authority. Further, the Agency should amend the consultation process to set a minimum period between consultation and implementation, construction or operation.</p> <p>Halton Municipalities should be included in the list of “relevant authorities” to be consulted.</p>
14.3 The Proponent shall develop, prior to construction and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and relevant authorities, an accident and malfunction response plan in relation to the Designated Project. The	<p>Consultation alone is not sufficient to ensure that appropriate technical standards are met under the Proponent’s accident and malfunction response plan. The Agency should amend the proposed conditions to ensure that consultation expressly addresses, among other things, compliance with applicable standards under the authority of the consulted party, and integrates views on compliance provided by the consulted party. The accident and malfunction plan should be submitted and approved by the relevant authority in order to ensure that appropriate technical standards are met to be effective in</p>

Potential Conditions: 14 – Accidents and Malfunctions

Potential Condition	Comments
<p>accident and malfunction plan shall include:</p>	<p>reducing or eliminating accidents and malfunctions. Further, the Agency should amend the consultation process to set a minimum period between consultation and implementation, construction or operation.</p> <p>Halton Municipalities should be included in the list of “relevant authorities” to be consulted.</p>
<p>14.3.1 a description of the types of accidents and malfunctions that may cause adverse environmental effects during any phase of the Designated Project, including spills and spills of hazardous material;</p>	<p>This proposed measure (as well as proposed measure 14.3.2, below) should be amended to reference all of the types of accidents and malfunctions contemplated in the Panel report i) hazardous materials spills; ii) intermodal container spill on land, including within the terminal and along roads between the Project and 400-series highways; iii) traffic accidents in relation to the entry points of the terminal; iv) derailment or train accident within the terminal; v) accidental fire within the terminal; and vi) potential multiple incidents occurring simultaneously.</p>
<p>14.3.2 the measures, including management and organizational procedures, to be implemented in response to each type of accident and malfunction referred to in condition 14.3.1 to mitigate any adverse environmental effect caused by the accident or malfunction. These measures shall include:</p>	<p>Same comments as above - the measures to be implemented under the accident and malfunction plan should be submitted and approved by the relevant authority in order to ensure that appropriate technical standards are met to be effective in mitigating adverse environmental effects caused by accidents and malfunctions. All of the “measures” in subsection 14.3.2 are vague and lack detail to ensure compliance.</p> <p>Measures should be included for all of the accidents and malfunctions considered by the Panel and not just spills.</p>
<p>14.3.4 a description of how the Proponent will evacuate its property and participate in coordinated evacuation procedures with relevant authorities in the case of an accident or malfunction requiring evacuation.</p>	<p>This plan should be submitted and approved by the Agency in order to ensure that evacuation procedures are appropriate and technical standards are met to be effective in reducing or eliminating accidents and malfunctions.</p> <p>A list of the relevant authorities that would be involved in evacuations should be listed.</p> <p>This is a key municipal responsibility and within Halton Region and Town of Milton expertise. Halton Region and Town of Milton have regulatory authority over emergency response to malfunctions/accidents and thus the Agency should specifically recognize that a condition of approval is to comply with their legal requirements as the Agency’s conditions alone will not be effective in mitigating the effect. Some of Halton Region or Town of Milton legal requirements include the following:</p> <ul style="list-style-type: none"> - All of the Proponent’s Emergency Response Plans need to interface with the Region’s Emergency Response structures.

Potential Conditions: 14 – Accidents and Malfunctions

Potential Condition	Comments
	<ul style="list-style-type: none"> - Halton Region Social & Community Services establishes Regional Emergency Evacuation Centres to manage and temporarily shelter Halton residents evacuated due to accidents and malfunctions. Halton Region and Town of Milton require clearly identified municipal notification processes, criteria and contact information in proposed Operational Emergency Response Plan, that should be verified and confirmed by Halton Region
<p>14.4 The Proponent shall maintain the accident and malfunction response plan referred to in condition 14.3 up-to-date during all phases of the Designated Project so that it remains consistent with the Proponent’s Network Operations Emergency Response Plan. The Proponent shall submit any updated accident and malfunction response plan to the Agency and to the parties being consulted during the development of the plan within 30 days of the plan being updated.</p>	<p>The effectiveness of this proposed condition is dependent on the content of the accident and malfunction response plan.</p> <p>Consultation alone is not sufficient to ensure that appropriate technical standards are met when the Proponent is making plans. The Agency should amend the proposed conditions to ensure that consultation expressly addresses, among other things, compliance with applicable standards under the authority of the consulted party, and integrates views on compliance provided by the consulted party. Any updates to the accident and malfunction plan should be submitted and approved by the relevant authority in order to ensure it is technically effective in reducing or eliminating accidents and malfunctions.</p> <p>Halton Municipalities should be included in the list of “relevant authorities” to be consulted.</p> <p>This is a key municipal responsibility and within Halton Region and Town of Milton expertise. Halton Region and Town of Milton have regulatory authority over emergency response to malfunctions/accidents and thus the Agency should specifically recognize that a condition of approval is to comply with their legal requirements as the Agency’s conditions alone will not be effective in mitigating the effect. With respect to this particular condition, Halton Region’s requirement includes that all contact information supplied by Halton Region for the Operational Emergency Response Plan requires yearly update and verification.</p>
<p>14.5.1 implement the communication plan referred to in condition 14.6 as it relates to accidents and malfunctions;</p>	<p>See comments to Proposed Condition 14.6 below.</p>
<p>14.5.2 notify, as soon as possible, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, potentially affected parties and relevant authorities of the accident or malfunction, and notify the Agency in</p>	<p>Halton Municipalities should be included in the list of “potentially affected parties” and “relevant authorities” to be consulted.</p>

Potential Conditions: 14 – Accidents and Malfunctions

Potential Condition	Comments
<p>writing no later than 24 hours following the accident or malfunction. For the notification to the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, potentially affected parties and the Agency, the Proponent shall specify:</p>	<p>The phrase “as soon as possible” is ambiguous and uncertain for the Proponent to know whether it has complied with this condition.</p>
<p>14.5.3.3 any view from the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties and advice from relevant authorities received with respect to the accident or malfunction, its adverse environmental effects and the measures taken by the Proponent to mitigate these adverse environmental effects;</p>	<p>Halton Municipalities should be included as a relevant authority to which views and advice should be received with respect to the accident and malfunction, its adverse environmental effects and measures taken to mitigate.</p>
<p>14.5.4 submit a written report to the Agency no later than 90 days after the day on which the accident or malfunction occurred that includes a description of the changes made to avoid a subsequent occurrence of the accident or malfunction and of the modified or additional measure(s) implemented by the Proponent to mitigate and monitor residual adverse environmental effects and to carry out any required progressive reclamation, taking into account the information submitted in the written report pursuant to condition 14.5.3. The report shall include all additional views from the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties and advice from relevant authorities received by the Proponent since the views and advice referred to in condition 14.5.3.3 were received by the Proponent.</p>	<p>Halton Municipalities should be included as a potentially affected party.</p>
<p>14.6 The Proponent shall develop, in consultation with the Mississaugas of</p>	<p>Consultation alone is not sufficient to ensure that appropriate technical standards are met when the Proponent is making</p>

Potential Conditions: 14 – Accidents and Malfunctions

Potential Condition	Comments
<p>the Credit First Nation, the Six Nations of the Grand River and potentially affected parties, a communication plan for accidents and malfunctions occurring in relation to the Designated Project, including accidents and malfunctions occurring within the Designated Project Development Area which may affect area(s) outside of the Designated Project Development Area. The Proponent shall develop the communication plan prior to construction and shall implement and keep it up-to-date during all phases of the Designated Project. The plan shall include:</p>	<p>plans. The Agency should amend the proposed conditions to ensure that consultation expressly addresses, among other things, compliance with applicable standards under the authority of the consulted party, and integrates views on compliance provided by the consulted party. The communication plan and any updates should be submitted and approved by the relevant authority. Further, the Agency should amend the consultation process to set a minimum period between consultation and implementation, construction or operation. A reasonable period of time should be set for the plan to be approved before construction i.e., 30 days.</p> <p>Halton Municipalities should be included as a potentially affected party.</p> <p>This is a key municipal responsibility and within Halton Region and Town of Milton expertise. Halton Region and Town of Milton have regulatory authority over emergency response to malfunctions/accidents and thus the Agency should specifically recognize that a condition of approval is to comply with their legal requirements as the Agency's conditions alone will not be effective in mitigating the effect. With respect to this particular proposed condition, Incident Communications Plan should be shared with Regional Communications & Customer Service staff for review, to set expectations re: emergency event communications. This is separate from the emergency event notifications process included in the Operational Emergency Response Plan.</p>
<p>14.6.2 the manner by which the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties shall be notified by the Proponent of an accident or malfunction and of any opportunity to assist in the response to the accident or malfunction; and</p>	<p>Halton Municipalities should be included as a potentially affected party.</p>
<p>14.6.3 the contact information of the representatives of the Proponent that the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties may contact and of the representatives of the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties to which</p>	<p>Halton Municipalities should be included as a potentially affected party.</p>

Potential Conditions: 14 – Accidents and Malfunctions

Potential Condition	Comments
the Proponent shall provide notification.	

Halton Municipalities’ Comments on Potential Conditions - Schedules

Overview

The Agency has provided proposed conditions for construction and operation schedules. The main concern for Halton Region and the Town of Milton is to ensure that these schedules are in line with other activities occurring in Halton Region and/or the Town of Milton. As such, we seek amendments to provide a consultation period and Agency approval for all schedules.

Potential Condition	Comments
<p>15.1 The Proponent shall submit to the Agency a schedule for all conditions set out in this document no later than 60 days prior to the start of construction. This schedule shall detail all activities planned to fulfill each condition set out in this document and the commencement and estimated completion month(s) and year(s) for each of these activities.</p>	<p>Comparing Proposed Condition 15.1 to Proposed Condition 15.2, it would seem appropriate to change the order of these proposed conditions so that 15.1 refers to “all activities required to carry out all phases of the Designated Project” and 15.2 refers to “all activities planned to fulfill each condition.”</p>
<p>15.2 The Proponent shall submit to the Agency a schedule outlining all activities required to carry out all phases of the Designated Project no later than 60 days prior to the start of construction. The schedule shall indicate the commencement and estimated completion month(s) and year(s) and duration of each of these activities, including the commencement and estimated completion of each of the three construction phases, the commencement of the operation phase and the commencement of the operation phase at which the Designated Project operates at its full operational capacity.</p>	<p>See comment for condition 15.1</p>
<p>15.4 The Proponent shall provide the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation and potentially affected parties with the schedules referred to in conditions 15.1 and 15.2 and any update to the initial schedule made pursuant to condition 15.3 at the</p>	<p>Halton Region and Town of Milton should be included as potentially affected parties with respect to construction and operation schedules.</p> <p>This proposed condition should be amended to include consultation with potentially affected parties including Halton Region and the Town of Milton.</p>

Potential Conditions: 15 - Schedules

Potential Condition	Comments
<p>same time the Proponent provides these documents to the Agency.</p>	<p>The amended condition should be as follows (additions have been underlined and bolded):</p> <p>15.4 The Proponent shall provide <u>consult with</u> the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation, <u>Halton Region and Town of Milton</u>, and potentially affected parties on the schedules referred to in conditions 15.1 and 15.2 and any update to either schedule made pursuant to condition 15.3 at the same time the Proponent provides these documents to the Agency. <u>The Proponent will initiate all required consultation no later than 30 days prior to commencing the activities contemplated under either schedule or any update.</u></p>

Halton Municipalities’ Comments on Potential Conditions – Record Keeping

Overview

The Panel has provided draft conditions related to record keeping. The main concern and related recommendations from the Halton Municipalities are to seek specific guidance on what should be retained and for how long.

Potential Condition	Comments
<p>16.1 The Proponent shall maintain all records relevant to the implementation of the conditions set out in this document. The Proponent shall provide the aforementioned records to the Agency upon demand within a timeframe specified by the Agency.</p>	<p>This proposed condition is not well-defined or specific: i) “relevant” record is too vague; ii) the format of records is not specified; and iii) there is no timeframe for providing the records.</p> <p>The following amendments should be made this proposed condition (amendments are bolded and underlined) which is also in line with a recent EA decision:</p> <p>16.1 The Proponent shall maintain <u>in an electronic format compatible with that used by the Agency</u>, all records relevant related to its implementation of the conditions set out in this document, including <u>monitoring and follow-up programs</u>. The Proponent shall provide the aforementioned records to the Agency within <u>15 days of the request unless another timeframe is specified by the Agency in writing</u>.</p> <p><u>Unless instructed otherwise by the Agency, the Proponent shall provide any of the aforementioned records to the Environmental Monitor within 15 days of the Monitor’s request.</u></p>
<p>16.2 The Proponent shall retain all records referred to in condition 16.1 at a facility in Canada and shall provide the address of the facility to the Agency. The Proponent shall notify the Agency at least 30 days prior to any change to the physical location of the facility where the records are retained, and shall provide to the Agency the address of the new location.</p>	<p>This proposed condition should be amended to specify that the Proponent shall maintain a website containing all records referred to in Proposed Condition 16.1 that is available to the Agency and relevant authorities such as the Town of Milton and Halton Region. The terms of the existing condition should be limited to records that the Agency agrees cannot be stored electronically.</p> <p>The proposed condition should also be amended to set out that the Proponent shall retain and make available all such records for at least 25 years following the end of operations or until decommissioning of the Designated Project, whichever comes first.</p> <p>The following amendments should be made to this proposed condition (amendments are bolded and underlined):</p> <p>16.2 The Proponent shall retain <u>electronically on a website accessible by the Agency and relevant authorities</u> all records referred to in condition 16.1 <u>unless the Agency agrees</u></p>

Potential Conditions: 16 – Record Keeping

Potential Condition	Comments
	<p><u>that a record cannot be rendered electronic, in which case the record shall be retained with all other such records</u> at a facility in Canada and shall provide the address of the facility to the Agency. The Proponent shall notify the Agency at least 30 days prior to any change to the physical location of the facility where the records are retained, and shall provide to the Agency the address of the new location. <u>The proponent shall comply with these requirements for a minimum of 25 years following the end of operations or until decommissioning of the Designated Project, whichever comes first.</u></p>
<p>16.3 The Proponent shall notify the Agency of any change to the contact information of the Proponent.</p>	<p>This proposed condition should be amended to require the Proponent to notify relevant authorities including Halton Region and the Town of Milton.</p>

APPENDIX B – Major Legal Concerns with the Proposed Conditions and Federal Decision Making

Under the *Canadian Environmental Assessment Act, 2012* (CEAA 2012), federal decision makers – starting with the Minister and concluding with Cabinet – can only rely on mitigation that is set out in conditions, and such conditions must be federally enforceable. However, the Agency has proposed potential conditions that are not enforceable by the Agency under CEAA 2012. The Agency has also failed to identify any other federal authority with the authority, expertise and resources to apply and enforce these potential conditions. The Halton Municipalities have found no basis in law for federal authority to enforce many of these proposed conditions.

This means that the Agency must remove from its proposed conditions all conditions that are not federally enforceable. No CEAA decision statement can include conditions that are not federally enforceable.

In 2015, the Halton Municipalities sought to address this limit of CEAA 2012 by requesting a joint federal-municipal panel on the basis of municipal jurisdiction and expertise to assess and regulate various aspects of this Project. This request was ignored without any explanation.

This appendix sets out the limits on this Agency and federal authorities to enforce conditions in this federal-only environmental assessment of the proposed CN Milton Logistics Hub under CEAA 2012.

CEAA 2012, not the *Impact Assessment Act*, Applies to this Environmental Assessment

CEAA 2012 was repealed on August 28, 2019, when the *Impact Assessment Act* (IAA) came into force. However, the transition provisions of the IAA applicable to this Project provide that this environmental assessment “is continued under the 2012 Act as if that Act had not been repealed” (section 183). Therefore, the Minister and Cabinet must make their decisions under sections 52 to 54 of CEAA 2012, and must apply the CEAA 2012 framework for the conditions under section 53 *as if CEAA 2012 had not been repealed*.

Recent statements by the Agency during consultations do not appear consistent with these transition requirements.

One example is the Agency’s response to our June 18, 2020 letter seeking clarity on enforcement powers. In its response, the Agency references enforcement provisions set out in the IAA. That does not address our request. Powers set out in the IAA are not relevant to decisions that are required to be made under CEAA 2012.¹

A second example is an Agency presentation during the virtual public engagement sessions on July 29 and August 12, 2020. The presentation incorrectly described Cabinet’s decision under CEAA 2012 with reference to the “public interest.” This is not correct. Under CEAA 2012, if the Minister decides that the Project is likely to cause significant adverse environmental effects, Cabinet must decide under subsection 52(4) if the significant effects are “justified in the circumstances”. The CEAA 2012 test makes no reference to the “public interest.” The IAA public interest determination does not apply here.

Decision making in this Federal-Only Environmental Assessment under CEAA 2012

¹ See the Agency’s Draft Conditions document and the July 8, 2020 letter from Julie Mailloux, Manager Decision Statements, replying to June 18, 2020 letter from Curt Benson, Halton Chief Planning Official. The Halton Municipalities will not address in the present submission its constitutional concerns with new IAA enforcement powers.

APPENDIX B – Major Legal Concerns with the Proposed Conditions and Federal Decision Making

The fundamental question for every CEAA 2012 assessment and decision is whether a project is likely to cause significant adverse environmental effects.

The Minister, after taking into account the expert review panel's January 27, 2020 report with respect to its assessment, must make his decisions under subsection 52(1).² The Minister must decide if, taking into account the implementation of appropriate mitigation measures, the adverse environmental effects are likely to be significant. Where the Minister decides the Project is likely to cause significant adverse environmental effects, he must refer the matter to the Governor in Council (Cabinet) who decides if these effects are justified in the circumstances.³ If Cabinet determines that the significant effects are justified, the Minister must establish the conditions with which CN must comply under section 53 and include these conditions in his decision statement under section 54.

As explained below, the Minister is limited in the appropriate mitigation measures he may take into account under CEAA 2012 – the measures must not only be technically and economically feasible, they must also be legally enforceable by a federal authority.

A. The federal decision makers must take into account all environmental effects of the Project under sections 5(1) and 5(2) of CEAA 2012

One of the basic goals of the environmental assessment process is to ensure early identification and evaluation of *all* potential environmental consequences of a proposed project.⁴ CEAA provides guidance on the environmental effects that must be taken into account in the review panel report and in the Minister's decision under section 52. The Minister is required to make decisions on the significance of all effects referenced in subsections 5(1) and 5(2), regardless of federal regulatory authority to impose and enforce conditions to mitigate those effects. It is well established in federal environmental assessment that the power to gather information and make decisions on environmental effects is independent from and broader than the power to regulate.⁵

Through subsections 5(1) and 5(2), CEAA 2012 established two categories of environmental effects.

Subsection 5(1) references direct effects on components of the environment that are clearly within the legislative authority of the federal government – fish and fish habitat as defined in the federal *Fisheries Act*, aquatic species as defined in the federal *Species at Risk Act*, migratory birds as defined in the federal *Migratory Birds Convention Act, 1994*, effects on aboriginal peoples, and territorial effects that have no relevance to this assessment. This list of effects is narrow.

Section 5(2), by contrast, requires federal environmental assessments to consider *any* effect of a change that may be caused to the environment that is “directly linked or necessarily incidental to a federal authority's exercise of a power or performance of a duty or function that would permit the carrying out, in whole or in part, of the physical activity, the designated project or the project,” and the effects of these changes on health, socio-economic conditions, physical and cultural heritage, or cultural heritage. Section 5(2) applies here because CN will require a number of federal regulatory approvals prior to

² Subsection 47(1), CEAA 2012

³ Subsection 52(2), CEAA 2012

⁴ *Friends of the Oldman River Society v. Canada (Minister of Transport)*, [1992] SCJ No 1 at para. 95

⁵ In our December 2016 document, *Brief 2016 – Role of Halton Planning Framework within CEAA Panel Review of the CN Milton Logistics Hub Project*, we provided the panel with a very detailed submission on how to consider the information-gathering power, particularly in relation to effects on localities. The distinction between information gathering and regulation is also evident in the case of *Canada (National Energy Board) v. Hydro-Quebec* [1994] 1 SCR 159 where the Supreme Court of Canada upheld the power of the National Energy Board to gather information on the environmental effects of the James Bay hydroelectric project without ever suggesting that there was federal power to regulate these effects.

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construction of the Project, including approvals from the Canadian Transportation Agency under section 98 of the *Canada Transportation Act*, and authorizations under the *Fisheries Act*, the *Railway Safety Act*, and the *Radiocommunications Act*.⁶ Where applicable, s.5(2) makes provision to reference a broad list of effects.

As Halton Municipalities anticipated in 2015, the federal-only expert panel has identified and assessed some effects referenced in s.5(1) and a broad array of effects under s.5(2) of CEEA 2012. Although the panel wrongly excluded from s.5(2) several effects raised by the Minister in her referral of this Project to a panel,⁷ the panel report does identify whether every effect it identified and assessed is an effect under s.5(1) or s.5(2).

The panel identified section 5(1) effects on:

1. Fish and fish habitat (p. 125);
2. Migratory birds (pp. 142-143)⁸; and
3. Indigenous matters (p. 175).

The panel identified section 5(2) effects on:

1. Air quality (p. 39);
2. Greenhouse gases (p. 39);
3. Light (p. 39);
4. Noise (p. 68);
5. Vibration (p. 68)
6. Surface water (p. 87);
7. Groundwater (p. 87);
8. Wetlands (p. 87);
9. Terrestrial environment (p. 120);
10. Terrestrial species at risk (p. 142)⁹;
11. Habitat connectivity (p. 142);
12. Human health from air quality, country food, water quality and noise (pp. 175, 183);
13. Mental health (pp. 175, 190);
14. Compatibility with residential communities (p. 193);
15. Agriculture (p. 193);
16. Cultural heritage (p. 175);
17. Archaeology (p. 175); and

⁶ Panel report Appendix H

⁷ In her July 20, 2015 letter to legal counsel for the Halton Municipalities, the then-Minister advised that the panel would examine municipal land use, including present and approved land uses, human safety in relation to motor vehicle safety and pedestrian/bicycle safety; and human health, including potential changes in air quality, drinking water quality and noise exposure in the Project vicinity. The panel considered some of these effects as additional “factors” of assessment under s.19(1)(j), but in the case of land use, the panel did not explain and it is not clear from the language of s.5(2) how a change in land resulting in the loss of agricultural land is within s.5(2), but other changes in land to establish new land uses are not within s.5(2). Nor did the panel explain how it is not within the language of s.5(2) for changes to land that cause effects on “socio-economic conditions” does not also encompass effects on “demand for community services and infrastructure” such as new water, wastewater, and fire services. Additionally, the panel did not explain how a change in land to establish new on-site roads and on-site railway tracks is not sufficient to trigger review of the effects of these changes on “socio-economic conditions” such as off-site “truck traffic” and “passenger, commuter and freight rail service.”

⁸ Importantly, although the panel identifies effects on migratory birds as an s.5(1) effect, this effect is limited to migratory birds only, not their habitat. A Project effect on migratory bird habitat is thus an additional s.5(2) effect.

⁹ Note: The panel concluded that the Project was likely to cause significant adverse effects on ten different terrestrial species at risk and/or their habitat absent implementation of all necessary mitigation identified by the panel.

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18. Accidents and malfunctions (p. 256).

The panel wrongly excluded additional s. 5(2) effects on:

- 19. Land use planning;
- 20. Demand for community services and infrastructure;
- 21. Truck traffic and passenger; and
- 22. Commuter and freight rail service (excluded pp. 3-4).

The Agency has recently confirmed that virtually all of the effects of this Project are s.5(2) effects.

B. Limits on federal authority to enforce potential conditions related to effects covered by subsection 5(2)

The Minister is required under CEAA 2012 to take into account the implementation of appropriate mitigation measures when determining whether a project is likely to cause significant effects under section 52. However, the Minister can only take into account the implementation of feasible mitigation measures that are within the authority of the federal government to enforce and control. The Minister must be able to ensure the implementation of these measures.¹⁰ The Minister cannot defer the decision to subsequent regulatory processes¹¹ or delegate compliance activities and responsibilities to other parties.

The panel assessed the significance of the adverse effects in light of all technically and economically feasible mitigation. The panel concluded that, except for greenhouse gases, vibration, human health from country foods, water quality and mental health, the section 5(2) effects it identified were likely to be significant unless all mitigation measures it identified as necessary were implemented. The panel also concluded that, even with mitigation, the Project was likely to cause significant adverse effects on air quality and on human health from air quality.

However, in assessing whether the implementation of feasible mitigation eliminated or reduced the significant effects of the Project, the panel considered *all* feasible mitigation without any consideration of federal enforceability. Despite repeated requests to the panel from the Halton Municipalities to clarify the enforceability of proposed mitigation, the panel expressly left the question of federal enforceability, and the resulting environmental effect if the mitigation measures were not enforceable, to the federal decision makers and authorities.¹²

The Agency's proposed conditions also fail to address the question of federal enforceability. Equally, no document before the panel or on the Agency registry for this Project provides any guidance on who has the authority to regulate the broad array of s.5(2) effects considered by the panel. As made clear by the panel process itself, the power to assess the significance of an effect is distinct from the power to regulate that effect through enforceable conditions.

The omission of specific information to demonstrate the federal capacity to implement and enforce the proposed conditions is a fundamental flaw with this consultation. It also raises fundamental problems for any future decision that seeks to rely on the proposed conditions. There are three problems:

¹⁰ See panel report Appendix H page 3. The Agency confirmed during the July 29, 2020 virtual sessions that the Minister may only take into account the implementation of legally enforceable federal conditions.

¹¹ See *Environmental Resource Centre v. Canada*, 2001 FCT 1423 at paras. 154, 157 & 158 and *Tsleil-Waututh Nation v. Canada (Attorney General)*, 2018 FCA 153 at paras. 455 & 456.

¹² Panel report pp. 5 & 6

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1. The Agency has no authority under CEAA 2012 to enforce any of the subsection 5(2) conditions

CEAA 2012 provides the Agency with no authority to enforce conditions to mitigate subsection 5(2) effects.

Section 6 of CEAA 2012 prohibits a proponent like CN from causing a s.5(1) effect that is contrary to any condition in a CEAA decision statement. CEAA further provides that breach of s.6 is an offence, so the Agency has authority to enforce all conditions related to s.5(1) effects.

CEAA 2012 contains no corresponding provision respecting s.5(2) effects. Nothing in CEAA prohibits a proponent like CN from doing anything that may cause an environmental effect referred to in subsection 5(2) or makes it an offence to cause such an effect. Therefore, nothing in CEAA 2012 allows the Agency to enforce conditions respecting s.5(2) effects.

In response to a Halton Municipalities request, the Agency recently confirmed which proposed conditions for the Project are related to effects covered by subsection 5(1) versus subsection 5(2) of CEAA 2012.¹³ The Agency confirmed it followed the panel's division of effects outlined above – most of the conditions are related to environmental effects covered by subsection 5(2), and others (including administrative conditions) are relevant to both subsections 5(1) and 5(2) effects.

2. The Agency has failed to identify any federal regulator with the authority, expertise and resources to monitor and enforce each of its proposed section 5(2) conditions

The Agency has failed to provide the public with any information on which other federal authorities have the authority, expertise and resources to enforce the draft conditions proposed to mitigate the significant effects identified by the panel that arise under subsection 5(2). By contrast, many of the conditions are properly within the jurisdiction, authority and expertise of the province of the Ontario or the Halton Municipalities, and could have been taken into account in a federal-municipal environmental assessment.

It is telling that the draft conditions propose to establish an independent monitor. There would be no need or rationale for the establishment of this monitor if any federal authority had the existing authority, expertise, and resources to carry out or require this monitoring.

It is also important to go back to the panel report. The panel report identified effects on cultural heritage and archaeology as s.5(2) effects. The Province regulates archaeology and has in fact regulated archaeology effects on the CN lands. Similarly, the Town of Milton regulates built or cultural heritage and has in fact regulated Project effects on heritage buildings on the CN site. There is no authority in the panel record or known to us that provides a federal authority with power to regulate these two categories of effects on lands other than federal lands. None of the CN lands are federal lands.

We acknowledge that the *Fisheries Act* has application to this Project. However, that Act provides authority to regulate fish and fish habitat, not the many effects identified by the panel under s.5(2). Nor do we find authority under the *Species at Risk Act* (SARA) to regulate many, if any terrestrial effects of this Project since its principal application is to federal land.

¹³ Letter from Julie Mailloux, Manager, Decision Statements, IAAC to Curt Benson, Halton Region, dated August 13, 2020

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The panel made repeated reference to the authority of the Canadian Transportation Agency (CTA), which must make a decision under section 98 of the *Canada Transportation Act* if the Project is approved under CEAA 2012.¹⁴ The Halton Municipalities accept that the CTA has broad authority and indeed a duty to consider a broad array of effects, particularly if they arise as concerns of localities such as Halton Region and the Town of Milton. However, the power and duty to consider concerns does not confer power or authority to regulate those concerns. We cannot identify authority in section 98 or the *Canada Transportation Act* generally to provide the CTA with the authority to monitor or regulate the many subsection 5(2) effects of this Project identified by the panel that require mitigation to avoid causing significant effects.

Since the early 1990s, the CTA's authority to address the day-to-day effects of railway operations has decreased due to deregulation. Beginning in 2001 and affirmed most recently in 2018, the Federal Court of Appeal has found that the CTA "no longer exercises control over the day-to-day operations of railway companies."¹⁵

The CTA has only the power expressly or impliedly granted to it by statute. Although the government amended the Act in 2007 to specifically authorize the CTA to respond to noise complaints (s.95.1), this express authority does not extend to other key effects such as air quality or impacts on municipal planning. It thus does not alter the Courts' general conclusion that the *Canada Transportation Act* does not authorize CTA control over day-to-day railway operations including proactive regulation of noise beyond responding to complaints.

Further, while the *Canada Transportation Act* provides the CTA with a general power to attach conditions to an approval under s. 98(2), the CTA itself explicitly acknowledges that those conditions rely on the application of provincial and municipal regulations.¹⁶

In sum, the Halton Municipalities have found no basis in federal law for federal authorities to impose conditions that regulate the many subsection 5(2) adverse effects identified by the panel.

3. Federal decision makers cannot rely on municipal and provincial regulators to enforce CEAA 2012 conditions

CEAA 2012 does not allow the Minister to establish conditions in a federal decision statement that rely on mitigation within the authority of a province or municipality.

It was not always this way. In 2001, under an earlier federal law, CEAA 1992, the Federal Court set aside a federal environmental assessment as illegal because it sought to rely on work done by a province to mitigate a significant adverse effect. The Court found that CEAA 1992 prohibited the delegation of the statutory duty to ensure implementation of mitigation measures. Therefore, the Minister had no authority to rely on mitigation under the control of a province or industry.¹⁷

¹⁴ Pages 2 & 5 and Appendix H of the panel report

¹⁵ See *Canadian National Railway Co. v. Brocklehurst* 2000 CanLII 16794 at para. 28, where the Court carried out a detailed review of changes to federal jurisdiction over railways in order to assess the Canadian Transportation Agency jurisdiction to issue orders against CN respecting control of noise complaints made by nearby residents. The Court set aside the CTA orders.

¹⁶ See CTA Determination No. R-2019-72

¹⁷ See *Environmental Resource Centre v Canada* 2001 FCT 1423 at paras.154, 157

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Following that 2001 decision, Parliament reviewed and amended the Act in 2003 to allow an assessment to consider mitigation that would be outside of federal authority to enforce:

- 37 (2.1) Mitigation measures that may be taken into account under subsection (1) by a responsible authority **are not limited to measures within the legislative authority of Parliament** and include
- (a) any mitigation measures whose implementation the responsible authority can ensure; and
 - (b) any other mitigation measures that it is satisfied will be implemented by another person or body.

Critically, CEAA 2012 **does not include this amendment** or any other similar provision that would allow a decision maker to rely on non-federal regulators to enforce mitigation measures. With CEAA 2012 failing to contain this or any similar provision, federal decision makers were thus limited to relying on mitigation “measures within the legislative authority of parliament”.

Relying on non-federal regulators is not an issue in joint assessments involving other jurisdictions such as a province or municipality. Following such assessment, each jurisdiction is able to address the effects it has direct authority to mitigate. The federal government chose to establish this panel as a federal-only panel.

The federal government is thus solely responsible for addressing all Project environmental effects, but according to the limits of its regulatory authority. If the federal government cannot ensure federal mitigation sufficient to avoid an adverse effect that the panel concluded was significant, then federal decision makers must treat that effect as significant.

Conclusions

The 2015 decision to carry out a federal-only assessment is very consequential for this assessment. The panel has gathered information to assess the significance of adverse effects that are related to ss.5(1) and 5(2) of CEAA. The panel has also gathered information on the mitigation that it judged necessary to avoid many significant effects. The panel did not assess, however, what jurisdiction had the authority, expertise or resources to ensure that mitigation was implemented.

It is thus the responsibility of the Agency to first identify what federal authorities have the necessary authority, expertise and resources to enforce required mitigation. Then, limiting conditions to mitigation measures that can be federally enforced, the Agency must advise the Minister which effects are significant because there is no ability to ensure the implementation of all measures judged necessary by the panel to avoid a significant effect.

The Halton Municipalities conclude that the Agency must remove all proposed conditions that are not federally enforceable from the conditions for consideration by the Minister, as the Minister may not rely on these conditions to mitigate significant environmental effects under sections 52 and 54 of CEAA 2012.