Federal Authority Advice Record (FAAR)
FAAR Response must be submitted by October 6, 2025
Riverside Generating Station Project – Atura Power
Registry File #89801

Department/Agency	Environment and Climate Change Canada
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1. Will your department or agency exercise a **power, perform a duty or function**, or provide **financial assistance**, related to the project to enable it to be carried out in whole or in part?

   As relevant,

   a) Specify the power, duty or function, or financial assistance, and the likelihood that it will be required to construct the project, based on the Initial Project Description, as either Required, Potential, Likely, Unlikely or Not Required

   ECCC does not expect that it will be required to exercise a power or perform a duty or function related to the Project to enable it to proceed. The project does not impact federal land and the proponent states that there is no natural vegetation at the project site and that no vegetation clearing is anticipated. Once the scope of the Project and of the assessment are established by the Agency, this may change as additional activities or project components could come into scope.

   Please note the following requirements that may apply to the Project:
   - *Species at Risk Act* (SARA) permits –unlikely
   - *Migratory Birds Convention Act* (MBCA) permits –unlikely

   b) Describe any associated Indigenous or public consultation, including timelines

   ECCC does not expect to exercise any powers or perform a duty or function under any Act of Parliament in relation to the Project that will involve public and Indigenous Consultation. In the event that a SARA permit is required, ECCC would evaluate and determine consultation requirements, if any.

   ECCC-led Indigenous consultations related to the issuance of SARA permits will be coordinated with consultation during the impact assessment where possible.

   If applicable, ECCC encourages Proponents to submit clear and complete permit applications at least 4 – 6 months prior to the anticipated start of project activities that require a SARA permit. During the analysis and before the regulatory decision, ECCC may undertake additional Indigenous consultations, as required under s.73(4) and (5) of SARA.

   c) Describe any associated information requirements (e.g., alternative means assessment, habitat offsetting), and specify those that may be coordinated with the impact assessment process, if an impact assessment is required[1]

[1] The Government of Canada has set a target of five years or less to complete federal impact assessments and related permitting processes for federally designated projects and a three-year target for nuclear project reviews.

If the Proponent has identified that a SARA permit is required, they can apply for the permit concurrent to the impact assessment process. Note, that a SARA permit cannot be issued prior to an impact assessment decision, under *IAA.*

• Guidelines for permitting under Section 73 of *Species at Risk Act*, and *Permits Authorizing an Activity Affecting Listed Wildlife Species Regulations*.

d) Identify any associated project-specific guidance or issues of which the proponent should be aware, or information the proponent should provide.

Based on the information provided, ECCC does not have any project-specific guidance or issues of which the Proponent should be aware. However, the Proponent should be aware of the general information related to SARA permits and MBCA permits.

Species at Risk Act permits

For species listed on Schedule 1 of SARA as Extirpated, Endangered or Threatened, a permit may be required from ECCC (section 73 of SARA) for activities that affect a listed terrestrial wildlife species, any part of its critical habitat, or the residences of its individuals, where those prohibit ions are in place.

Prohibitions are in place for individuals and residences on federal lands in a province, reserve or any other lands under the *Indian Act*, or lands under the authority of the Minister of the Environment, and for birds listed under the MBCA wherever they occur regardless of land tenure.

Species that are both a migratory bird protected under the MBCA and listed on Schedule 1 of SARA as endangered, threatened, or extirpated, receive protections under the MBCA and SARA. For some migratory bird species listed under SARA, the residence prohibition (section 33) will protect nest and/or roost sites that are not active, for example when a species reuses these sites in subsequent years. Please note that the protection afforded may differ between the two pieces of legislation, though both pieces of legislation/protection apply.

Refer to the Species at Risk Registry for more information on migratory bird residence and protection requirements: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/residence-descriptions.html

Furthermore, prohibitions may be in force on land other than federal land pursuant to other orders or regulations under SARA. It is possible that additional prohibitions may come into force in the future through orders made by the Governor in Council for individuals, residences and critical habitat on non-federal lands and/or for critical habitat on federal lands. It is also possible that, over the course of the assessment or after the assessment, additional species could be listed under SARA; permits may be required for project activities that affect these additional species. Proponents are advised to monitor for such developments on the SARA Registry https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html .

ECCC will require detailed information on the potential effects of the Project, including locations and/or occurrences of species at risk, their use of habitat and critical habitat within the project area, and specific effects on federal land, before ECCC can determine whether a SARA permit is required.

Links to publicly available documents:

- Guidelines for permitting under Section 73 of *Species at Risk Act*

https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html

- Species at Risk Permitting Policy

https://registrelep-sararegistry.gc.ca/virtual_sara/files/policies/Permitting_EN.pdf

If not fully described in the Initial Project Description, the Proponent should provide any anticipated need for species at risk permits during all phases of the Project, in the Responses to Summary of Issues and/or Detailed Project Description if possible. The Proponent is encouraged to collect and submit the information necessary to determine if a SARA permit is required during the impact assessment process, and to submit their application well in advance of the proposed activities to avoid delays.

Further information regarding species at risk permits will be provided in the Permitting Plan.

Migratory Birds Convention Act permits

The *Migratory Birds Regulations*, 2022 (MBR 2022) protect migratory birds, their eggs and their nests, by prohibiting activities that may harm them. Unless a person has a permit or the regulations authorize it, it is prohibited to engage in the following activities:
• Capturing, killing, taking, injuring or harassing a migratory bird or attempting to do so;
• Destroying, taking or disturbing an egg; and
• Damaging, destroying, removing or disturbing a nest, nest shelter, eider duck shelter or duck nesting box, unless the following exceptions apply:
    o The nest does not contain a live migratory bird or a viable egg; and,
    o The nest was not built by a species listed in Schedule 1.

Modernization of the MBCA in 2022 has additionally identified 18 species of birds whose nests are protected year round (Schedule 1 of MBR 2022). The nests of species listed in Schedule 1 are protected at all times, unless the following conditions are met:
• Notification of the unoccupied nest has been submitted/received through the Registry for Abandoned Nests; and,
• The waiting time designated in the regulations has passed, during which time the nest has not been occupied by a migratory bird.

In some situations, it may be possible to obtain a permit to move or destroy an unoccupied nest of a Schedule 1 species. If it is not possible to wait the prescribed period before destroying or relocating the nest of a species listed in Schedule 1, or if there is a need to destroy or relocate the nest of another species of migratory bird where the nest contains a live bird or viable egg and appropriate mitigation measures have been taken, a permit may be available. The MBR 2022 authorize the issuance of permits for damage or danger, as well as scientific permits, which may apply in certain limited situations. For more information, please visit: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html

2. **Using Table 1**, identify project- and context- specific **key issues**, based on the expertise within your mandate[2] and the information in your possession, including the Initial Project Description, any exchanges with the proponent or others related to the project and known means to address the effects of the project. For each key issue:

    a) Specify the key issue (e.g., specific species and location)
    b) Specify the project component or activity linked to the key issue
    c) Explain why it's a key issue based on:
        i. biophysical effect pathway(s) from the specific project component or activity
        ii. concern unique to the project or a priority within your mandate
        iii. the issue being material[3] to decision making under the *Impact Assessment Act*
    d) Identify how the issue could be resolved, including through means other than an impact assessment

[2] Refer to the Memoranda of Understanding with IAAC.
[3] An issue is material to decision making if its analysis is anticipated to affect the conclusions on (1) whether adverse effects within federal jurisdiction or direct and incidental adverse effects (collectively adverse federal effects) are likely not significant, or of low, medium or high significance; (2) appropriate mitigation measures for significant adverse federal effects; or (3) justification in the public interest.

e) Identify additional information the proponent could provide including to give confidence on how the issue can be addressed through other means.

Additional information that can assist the Proponent in their assessment and development of mitigation measures for a variety of key issues is available through the Open Science Data Platform (OSDP).

The Open Science Data Platform (OSDP) provides information relevant to cumulative effects and development activities across Canada, and is publicly available at the following website: https://osdp-psdo.canada.ca/dp/en. More specifically, the platform provides a single window to access data and scientific knowledge relevant to understanding cumulative effects from existing federal, provincial, and territorial on-line databases and registries, including publications from the federal government and its scientists. It provides an interactive geospatial mapping tool to enable mapping of multiple datasets from multiple sources. It offers various features, including keyword-based searching, interactive data visualization on maps, and educational resources covering key topics such as cumulative effects, water, air, climate, biodiversity, land, economy and industry, health, and society and culture.

OSDP information may be of value to persons preparing and reviewing projects assessments, including cumulative effects assessments. The following are some examples of ECCC information available on the OSDP.

Water – quality and quantity:

- National long-term water quality monitoring data
- Real-time hydrometric data
- Canadian Aquatic Biomonitoring Network (CABIN)
- National Pollutant Release Inventory (NPRI)
    - Facilities that reported releases to water
- Find additional water-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Biodiversity (e.g., birds, species at risk, wetlands):

- Critical habitat for species at risk (terrestrial)
- Range map extents – Species at risk
- Canadian wetlands
- Canadian Protected and Conserved Areas Database (CPCAD)
- Canadian Breeding Bird Census plots
- Priority places for species at risk
- Find additional biodiversity-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Air Quality:

- National Pollutant Release Inventory (NPRI), including:
    - Facilities that reported release of criteria air contaminants
- Canadian Environmental Sustainability Indicators (CESI), including
    - Average ambient fine particulate matter concentrations
    - Peak ambient ozone concentrations
    - Ambient volatile organic compound concentrations
    - Average ambient sulphur dioxide concentrations
    - Peak ambient nitrogen dioxide concentrations
- Find additional air-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Climate, including climate change:

- Hourly and daily climate observations
- Monthly climate observation summaries
- Climate normals, averages and extremes 1981-2020
- Climate data: homogenized surface air temperature data

- Homogenized precipitation
- Find additional climate-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Beyond ECCC's mandate, the OSDP also contains resources on topics led by departments and other levels of government (e.g., human health, economy and industry). The OSDP also provides access to regulatory registries that list government authorizations of other developments (e.g., *Fisheries Act* Registry), which can be useful in understanding the cumulative pressures on an area.

Wes Plant, A/Regional Director
Environment and Climate Change Canada

October 6, 2025

Date

Table 1: Key Issues to inform the impact assessment process

This table should outline key issues to inform the impact assessment process, including whether an impact assessment is required and, if so, the scope of the assessment and tailoring of the Tailored Impact Statement Guidelines.

Key issues are the major concerns directly related to a project component or activity, the analysis of which is anticipated to be material to decision-making under the *Impact Assessment Act*.

Federal authorities' advice should be guided by the identification and resolution of key issues. If an impact assessment is required, it will be focused on key issues.

Comment ID	Key issue	Project component or activity	c)(i) Biophysical effect pathway(s)	c)(ii) Concern unique to the project or a priority within your mandate	c)(iii) Material to federal decision-making	d) Means for issue resolution	e) Additional information from the proponent
Identify comments by organization and comment number. *e.g.: IAAC-01*	*Specify the key issue (e.g., specific species and location).*	*Identify the project component or activity linked to the key issue.* *Be specific about the nature, scale, novelty and complexity or the component or activity.*	*Identify the specific biophysical effect pathway between the project component or activity and the affected environmental or human receptor (including Indigenous Peoples).*	*Describe why it's a key issue within the mandate of your department or agency, including in terms of priorities of the federal government and in terms of anticipated likelihood, severity or uncertainty of effects.* *Identify if the key issue is common for projects of this nature or in this sector, or whether it's unique to this project due to its complexity, size or novelty; a sensitive or rare receiving environment; and/or proximity of sensitive environmental or human receptors (including Indigenous Peoples).*	*Describe why the key issue is material to decision-making as either:* • *an adverse effect within federal jurisdiction, or a direct or incidental adverse effect, that may be significant based on available evidence including:* o *federal experts' knowledge and experience with past project assessments;* o *presence of sensitive species, habitats or human receptors (including Indigenous Peoples);* o *novel or complex project activities, components or technologies;* o *high uncertainties in effects or in the effectiveness of mitigation measures;* o *unknown or unproven mitigation; or* • *a factor for the justification in the public interest anticipated to be material to decision-making such as a likely positive effect contributing to sustainability, to Canada's environmental obligations or climate change commitments or in supporting governmental priorities, such as reconciliation with Indigenous Peoples.*	*Describe how the key issue could be resolved or addressed by:* • *Any means, including powers, duties, functions, frameworks, policies or guidance that your department or agency has;* • *Any means, including powers, duties, functions, frameworks, policies or guidance from another jurisdiction, including the province;* • *Common, proven, well-understood or standard mitigation measures to mitigate the effect or effect pathway(s); or* • *Commitments made by the proponent (e.g., in the Initial Project Description).*	*Describe information the proponent can provide, or commitments the proponent can make, in their Response to the Summary of Issues that would provide confidence that the issue can be resolved by existing means.* *Consider whether information, studies, analyses or collaborative work with other authorities would be required to address the issue beyond existing means.*
ECCC-01	Confirmation of species at risk (SAR) and migratory birds present within the project area. Confirmation that species at risk and migratory bird habitat adjacent to the project area will not be impacted.	The activities linked to the construction, operation, and decommissioning of the Project and associated infrastructure could adversely affect species at risk listed on the *Species at Risk Act* (SARA), and their habitat (e.g. wetlands) and critical habitat.	The Proponent states that the project area will not require any vegetation clearing and there are no impacts to species at risk or migratory bird habitat within the project area. The extent to which the project may impact adjacent natural habitats is less clear. The project is within an area that contains critical habitat for Bank Swallow. The Proponent states that targeted surveys for snakes were not	Species at Risk and their Habitat are within the mandate of ECCC under the SARA. Adequate knowledge of potential effects to species at risk and migratory birds and their habitat is needed to select appropriate valued components and understand project impacts. It is common for construction projects to impact areas beyond the project area.	Adverse effects within federal jurisdiction could occur if species at risk or migratory bird individuals, nest, residences, or habitat are impacted.	Common, proven, well-understood or standard mitigation measures to mitigate effects or effect pathways to SAR and/or migratory birds are likely available; however the potential pathways of effects need to be better understood and described in order to ensure adequate mitigation.	The Proponent should provide: • Further information on the surveys for species at risk and migratory birds that have taken place (number, timing, methodologies, map of survey locations in relation to project footprint) • Surveys for reptiles, including species at risk snakes and turtles • A full list of species at risk and migratory birds observed

			conducted but that no snakes were incidentally observed. Given the cryptic and elusive nature of many snakes and that there are nearby records of SAR snakes and turtles, this likely warrants further surveys to determine presence of individuals, residences and habitat within the area impacted by the project including the project footprint and areas beyond that footprint that may be impacted.				during surveys of the project area and adjacent areas that may be impacted by project activities • Further consideration of pathways of effects that may impact adjacent natural habitat for SAR and migratory birds, including critical habitat for Bank Swallow.
ECCC-02	Air quality assessment and dispersion modelling for the construction phase	The construction, operation, and decommissioning of the Project can result in adverse effects on air quality from the release of emissions through combustion of natural gas or diesel. Projects that involve on-road vehicles and mobile offroad machines for construction, operation and decommissioning, or that lead to an increase in road traffic have the potential to adversely affect air quality.	Emissions of particulate matter (PM) and dust during construction may contribute to local degradation of air quality. These emissions have the potential to affect nearby sensitive human receptors, including residential areas located as close as 0.5 km (section 13.3, p.41 of the Initial Project Description) and Indigenous Peoples.	Air quality assessment and dispersion modelling was carried out for the operation phase, but not for the construction phase. As construction is expected to be the main source of PM emissions, the absence of modelling creates some uncertainty in understanding potential short-term air quality impacts. Given the proximity of sensitive receptors, including Indigenous Peoples, the project has the potential to lead to a non-negligible adverse change to their health and well-being. ECCC provides expertise on the fate of air emissions to help support Health Canada's assessment of potential impacts on nearby Indigenous communities	Without air quality assessment and modelling for the construction phase, it is not possible to understand potential impacts that may present an adverse effect within federal jurisdiction due to the presence of sensitive human receptors, including Indigenous Peoples such as at Willow Park directly across the road from this site and the traditional use of the St. Clair River by the Walpole Island First Nation.	The Proponent should conduct air dispersion modelling for the construction phase to complement the Construction Environmental Management Plan (CEMP). The results, including isopleth maps of $PM_{2.5}$, would support tailoring of both mitigation measures and monitoring within the CEMP to site-specific conditions and the proximity of sensitive receptors. In Appendix C (page 2, Table 1-1 in the Initial Project Description) of the air quality modelling report, the Proponent applied the 2025 CAAQS standard for $PM_{2.5}$. If construction-phase modelling is undertaken, using the 2030 CAAQS would provide a more conservative approach.	Provide construction-phase air quality assessment and dispersion modelling results, including isopleth maps of $PM_{2.5}$.
ECCC-03	Absence of isopleth maps and impacts to air quality from nitrogen dioxide	The construction and operation of the Project can result in adverse effects on air quality due to emissions of nitrogen dioxide (NO_2) and fine particulate matter (PM2.5) through the combustion of natural gas or diesel.	Emissions of nitrogen dioxide (NO_2) and fine particulate matter ($PM_{2.5}$) during operation may contribute to local degradation of air quality. These emissions have the potential to affect nearby sensitive human receptors, including residential areas located as close as 0.5 km (section 13.3, p.41 of the Initial Project Description) and Indigenous Peoples.	Air quality impacts have the potential to lead to a non-negligible adverse change to the health of sensitive receptors, including Indigenous Peoples of Canada. While the modelling results are clearly presented in tables (Table 5-6 to 5-9, p.17 of Appendix C in the Initial Project Description), it is not common practice to exclude isopleth maps from an air quality assessment. These maps are generally helpful to illustrate the spatial distribution of predicted concentrations and to clarify whether maximum levels may be located near sensitive receptors,	Without isopleth maps and with limited information on emission factors, mitigation measures, and planned monitoring, it is difficult to understand potential air quality impacts during the construction and operation phases. This limits the ability to assess whether there may be an adverse effect within federal jurisdiction, which could be significant due to the presence of sensitive human receptors, including Indigenous Peoples at Willow Park directly across the road from the site and the traditional use of the St. Clair River by the Walpole Island First Nation.	The Proponent should include isopleth maps for key contaminants and operating scenarios to provide clearer visualization of predicted effects. These maps could also identify the locations of the sensitive receptors used in the modelling to better illustrate their proximity to areas of higher predicted concentrations. The Proponent should provide additional information on the emission factors and assumptions used for the gas turbine, as well as clarify whether ambient air quality monitoring near sensitive receptors is planned during construction and operation. This would provide greater clarity, help support the interpretation of the modelling results, and allow a better understanding of the monitoring that is planned. It would also be	Provide isopleth maps for key contaminants (NO_2 and $PM_{2.5}$) and scenarios, with the sensitive receptor locations identified, to better support the interpretation of results. Provide details on the emission factors and assumptions used for the gas turbine, along with information on whether ambient air quality monitoring near sensitive receptors is planned during

				including Indigenous Peoples. Their absence may limit the ability to fully evaluate areas of high concentration and potential health risks and adverse changes to human health. The modelling report indicates that a Continuous Emissions Monitoring System will be installed next to the exhaust stack for continuous monitoring of selected parameters (p.22 of the Initial Project Description), but it does not provide information on whether additional ambient air monitoring near sensitive receptors is planned during construction or operation. For the gas turbine, emission rates are presented, but the reference used to obtain the emission factors and the assumptions applied are not described. Given the presence of residences as close as 0.5 km and nearby Indigenous communities, additional information on monitoring and methodology would be valuable to adequately review the assessment. The report also refers generally to mitigation measures under the Construction Environmental Management Plan, including measures related to fugitive dust. Some measures are mentioned in Table E-3 (p.E-6 of the Initial Project Description), however the full list is not provided and it is also not specified whether off-road Tier 4 equipment will be used during construction.		useful to describe the mitigation measures referenced in the Construction Environmental Management Plan, including those related to fugitive dust, to show how potential emissions during construction are expected to be managed.	construction and operation, as well as on the mitigation measures mentioned in the Construction Environmental Management Plan, including those related to fugitive dust and the type of off-road vehicles and equipment to be used (e.g., Tier 4).
ECCC-04	Water Quality – excavation dewatering which can contain total suspended solids and other contaminants of concern.	The construction and operation of the Project can result in adverse effects on water quality due to excavation dewatering which can contain total suspended solids and other contaminants of concern.	Excavation dewatering may result in the release of contaminants into aquatic environments, potentially degrading water quality and impacting fish and fish habitat.	Excavation dewatering is a key issue within the mandate of ECCC due to its potential to introduce contaminants of concern into receiving water bodies, which may adversely affect fish and fish habitat protected under the *Fisheries Act*. The likelihood of adverse effects is elevated when treatment protocols are undefined, and the severity may be significant depending on the volume and composition of discharge.	In Table 24-1 (p.91 of the Initial Project Description): Types of Wastes and Emissions likely to be Generated during the Construction Phase, the Proponent indicated that excavation dewatering, if required, will generate discharge of groundwater and/or runoff. Furthermore, the Proponent has indicated that the Construction Environmental Management Plan will include a dewatering management plan that specifies treatment and discharge protocols and includes industry standard best management practices to be implemented. Based on the Initial Project Description, ECCC is	The Proponent should provide detailed information on the monitoring program for excavation dewatering discharges, including parameters to be tested, frequency of sampling, and thresholds for contaminants of concern. Additionally, the Proponent should clearly outline mitigation measures that will be implemented if contaminant levels exceed acceptable limits.	Provide a dewatering management plan to ECCC.

					unable to determine if discharges from excavation dewatering will be monitored for contaminants of concern and what, if any, mitigation measures will be put in place to prevent contaminants of concern from entering waterways.		
ECCC-05	Environmental Emergencies	The project activities linked to the construction, operation, and decommissioning of the natural gas-fuelled facility may result in the handling, storage, and use of hazardous substances, including hydrogen, cooling mediums, and carbon dioxide. Given the hazardous nature of several of the substances handled, stored, and used as part of the project, there is potential for adverse effects within federal jurisdiction if accidents and malfunctions result in their release to the land, air, or water.	Adverse effects to air quality, water quality, species at risk, fish and fish habitat, migratory birds, or changes to the environment resulting in non-negligible adverse impacts to Indigenous Peoples of Canada could result from the accidental release of hazardous substances to the land, air or water.	Accidents and malfunctions that may occur during construction, operation, and decommissioning are not unusual in terms of complexity or scale, and many can be addressed through industry standard practices and mitigation measures. However, this Project has the potential to trigger accidents and malfunctions with direct impacts on environmental components under federal jurisdiction. ECCC provides environmental emergency management planning advice and guidance related to potential accidents and malfunctions involving unplanned or uncontrolled releases or spills of hazardous substances into the environment, including scenarios where such releases could result in non-negligible adverse environmental effects within ECCC's mandate. These effects include impacts to air quality, water quality, species at risk, fish and fish habitat, migratory birds, or changes to the environment resulting in non-negligible adverse impacts to Indigenous Peoples of Canada. Additionally, ECCC coordinates expert review of atmospheric transport and dispersion modelling of airborne contaminants, the fate and behaviour of contaminants, and hydrologic trajectory modelling of contaminants in water.	During construction, operation, and decommissioning of the project, accident and malfunction scenarios could result in the release of hazardous substances to the environment, with potential adverse effects to air quality, water quality, species at risk, fish and fish habitat, migratory birds, and changes to the environment resulting in non-negligible adverse impacts to Indigenous Peoples of Canada. The implementation of effective mitigation measures (e.g., secondary containment for tanks storing hazardous substances, spill kits) and plans (e.g., spill contingency plan, emergency response plan, waste management plan) will be critical to mitigate the potential for spills and mitigate their impacts. Assessing the risk of accidents and malfunctions and the effectiveness of the proposed mitigation measures and plans is an important component of understanding the overall potential adverse effects of the project on areas under federal jurisdiction. This includes consideration of sensitive receptors such as Indigenous Peoples who use Willow Park, located directly across the road from the site, and the traditional use of the St. Clair River by the Walpole Island First Nation. Furthermore, the site location across the St. Clair River from Michigan, USA, therefore, potential accidents and malfunctions could have transboundary implications.	Optimized spill prevention, preparedness, and response measures and systems will be important during all activities associated with the construction, operation, and decommissioning of the project, given the risk of release of hazardous substances to the environment. This includes: • Implementation of effective mitigation measures, for example use of secondary containment for storage tanks containing hazardous substances, and the presence of appropriately stocked spill kits, which will help to reduce the risk of hazardous substances being released to the environment. • Development of comprehensive plans, including a spill response plan, emergency response plan, and waste management plan, which will help to reduce the risk of accidents and malfunctions from occurring, and equip responders with knowledge necessary to rapidly and effectively respond should spills occur. Part 8 of the *Canadian Environmental Protection Act*, 1999 on environmental emergencies (sections 193 to 205) addresses the prevention of, preparedness for, response to, and recovery from environmental emergencies caused by uncontrolled, unplanned, or accidental releases. It also addresses the reduction of any foreseeable likelihood of releases of toxic or other hazardous substances listed in Schedule 1 of the Environmental Emergency Regulations, 2019. This act may apply if Schedule 1 substances onsite meet or exceed the threshold to be regulated under the *Canadian Environmental Protection Act*. Technical Guidelines for the Environmental Emergency Regulations, 2019 may be found at: https://www.canada.ca/en/environment-climate-change/services/environmental-emergencies-	The Proponent is encouraged to adopt all relevant industry best-practices regarding prevention, preparedness, response, and recovery in the context of spills resulting from accidents and malfunctions.

						program/regulations/technical-guidelines.html	
ECCC-06	Climate Change Resilience	Climate over the lifetime of the Project is likely to be different from past and current climate in the project area. For example, project components and activities for which climate change resilience could be important for this Project include those related to surface water management.	There is potential for climate change to affect the Project which, in turn, may have impacts on the surrounding environment (e.g. through accidents or malfunctions). Climate changes in the project area, such as possible changes in mean and extreme precipitation and temperature and related environmental conditions, may alter baseline conditions, with implications for climate sensitive aspects of project design and associated effects within federal jurisdiction.	There is potential for climate change to affect the Project which, in turn, may have impacts on the surrounding environment.	There is potential for climate change to affect the Project which, in turn, may have impacts on the surrounding environment.	The Strategic Assessment of Climate Change (SACC) was published in 2020 and works in conjunction with the *Impact Assessment Act* to provide guidance on how to consider climate change throughout federal impact assessments. Proponents may find the technical guidance of the SACC helpful in assessing the impacts to climate change and in ensuring consistent, predictable, efficient and transparent consideration of impacts to climate change. Information typically requested for the project description is outlined in the SACC (including section 4.1) and the draft Technical Guide (including sections 2.4, 3.3, and 4.2).	Relevant information is provided in the "Draft technical guide related to the Strategic Assessment of Climate Change: Assessing climate change resilience" published in March 2022. Links: "Strategic Assessment of Climate Change" https://www.strategicassessmentclimatechange.ca "Draft technical guide related to the Strategic Assessment of Climate Change: Assessing climate change resilience" https://www.strategicassessmentclimatechange.ca/28896/widgets/117114/documents/77106
ECCC-07	Water quality and quantity	The project activities linked to the construction, operation, and decommissioning of the project may alter surface flows through site recontouring, changes in land cover, stormwater, dewatering and surface water management structures (e.g., ponds, ditches, water treatment facilities). Undersized water conveyance systems may overflow during extreme floods and poorly monitored stormwater systems without sediment controls that could release contaminants into receiving waters,	Changes to the hydrological regime and to groundwater-surface water interactions within nearby watercourses may degrade fish and fish habitat due to altered hydraulic conditions, morphology, potential for erosion and changes in sediment transport patterns. Water quality may be degraded by changes to groundwater-surface water interactions, stormwater runoff, overflowing of water management structures, and discharges to the receiving environment. Seepage could introduce contaminants into groundwater, which may	Water quality and quantity have potential to lead to a significant adverse impact on fish and fish habitat which are protected under the *Fisheries Act*. Contaminants such as total suspended solids and other pollutants may enter receiving water bodies and degrade habitat quality. The likelihood of adverse effects is elevated when stormwater systems lack defined monitoring or sediment controls, and the severity can be significant depending on the volume and composition of runoff.	Water quality and quantity can result in adverse impacts to fish and fish habitat, which are effects within federal jurisdiction. Furthermore, the site position is across a binational river from Michigan, USA, raises transboundary concerns related to water quality and quantity. In Section 9.2.4.2 of the Summary Initial Project Description, the Proponent has indicated that the modified Stormwater Management System for the project site is anticipated to comprise of a series of storm sewers and catch basins to convey runoff to the existing OPG Lambton site stormwater sewer system and that sediment capture devices may be installed, if determined to be necessary during detailed design. However, the Proponent has not indicated any type of monitoring for the stormwater runoff to determine whether mitigation measures are required. Stormwater runoff can contain a large amount of total suspended solids and other contaminants of concern, which could have adverse effects on waterways. In addition, on p.67 of the Summary Initial Project Description and in other sections, the Proponent seems to give the perception that	Follow best practices to mitigate potential adverse effects associated with erosion, water management and stormwater. It is recommended that the Proponent provide additional information on how they intend to monitor the stormwater runoff in order to determine if sediment capture devices, or any other mitigation measures are required.	ECCC recommends that the Proponent describes all potential effects, both direct and indirect, of project components or activities on water quality and quantity at a suitable spatial and temporal scale. This should include a detailed characterization of the receiving environment under baseline hydrological, hydraulic, and hydrogeological conditions, as well as under project-affected conditions through each phase of the project, for all adjacent watercourses potentially affected by the project. Effects assessment must also account for hydrological impacts related to climate change.

		degrading habitat and impacting fish.	then be transported to aquatic receiving environments and potentially affect water quality.		stormwater discharge from the Project site will only be required to meet provincial regulations. It should be made clear to the Proponent that stormwater discharge from the Project site could fall under the *Fisheries Act*.		Provide a Stormwater Management Plan to ECCC.
ECCC-08	Greenhouse Gas (GHG) Emissions and Climate Change	The construction, operation, and decommissioning of the proposed Project may result in GHG emissions.	NA	Although unlikely to be a key issue material to the decision-making for this Project and although it is not an effect within federal jurisdiction, the assessment of GHG emissions and carbon sinks from this Project would be relevant in considering the extent to which the effects of the designated Project contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change (IAA s.22(i) factor to be considered). Should the Project be subject to an impact assessment under the *Impact Assessment Act* (IAA), the Strategic Assessment of Climate Change (SACC) would apply. The construction, operation, and decommissioning of the proposed Project may contribute to the Government of Canada's ability to meet its commitments in respect of climate change.	GHG information associated with the Project would assist in determining if the Project will contribute to Canada's ability to meet its environmental obligations and its commitments in respect to climate change.	The Strategic Assessment of Climate Change (SACC) was published in 2020 and works in conjunction with the Impact Assessment Act to provide guidance on how to consider climate change throughout federal impact assessments. The Proponent may find the technical guidance of the SACC helpful in assessing the impacts to climate change and in ensuring consistent, predictable, efficient and transparent consideration of impacts to climate change. Information typically requested for the project description is outlined in the SACC (including section 4.1) and the draft Technical Guide (including sections 2.4, 3.3, and 4.2). ECCC recommends the Proponent develop a plan to achieve net-zero emissions by 2050 as the Project's lifetime, including decommissioning, is anticipated to go beyond 2050.	The SACC and the draft Technical Guide can be found at: https://www.strategicassessmentclimatechange.ca/

Please insert additional rows as necessary.