Agence d'évaluation d'impact du Canada | Impact Assessment Agency of Canada

Région du Québec
901-1550, avenue d'Estimauville
Québec (Québec) G1J 0C1

Quebec Region
901-1550, d'Estimauville Avenue
Québec, QC G1J 0C1

Québec, March 16, 2023

Judith Brousseau
Project Manager
Public Services and Procurement Canada
165 Hôtel de Ville Street, Place du Portage, Phase II
Gatineau (Quebec) K1A 0S5
judith.brousseau@tpsgc-pwgsc.gc.ca

SUBJECT: Environmental Impact Assessment of the Timiskaming Dam-Bridge of Quebec Replacement Project - Results of the Conformity Review

Hello,

On October 6, 2022, the Impact Assessment Agency of Canada (the Agency) received the Environmental Impact Statement (EIS) for the Timiskaming Dam-Bridge of Quebec Replacement Project (the project) prepared by Public Services and Procurement Canada.

Following a conformity review of the EIS with the project's EIS Guidelines (the Guidelines), the Agency, in consultation with the Environmental Assessment Technical Committee, determined that the EIS was incomplete and did not meet some of the requirements of the Guidelines. Some information is essential to begin the technical analysis of the EIS.

Below are the sections of the Agency's Guidelines for which information is required to begin the analysis of the EIS. It is recommended that you refer to the descriptions of the sections in the Guidelines for the details of the information requested. The assessment of environmental effects, including mitigation measures and residual effects, will need to be adjusted based on the new information provided. A detailed justification must be submitted if no information is provided for any of the items requested in this letter.

The examples given in this letter are not exhaustive and are provided for information purposes only. Any relevant information that would complement the items requested must be provided.

…/2

MISSING DOCUMENTS

The following documents referenced in the EIS must be provided:

GHD, (2017). Reconnaissance des sols et caractérisation environnementale préliminaire – remplacement du barrage Témiscamingue, Témiscaming, Québec, 11133230, A1, rapport n°1, septembre 2017.

KPMG, (2010). Socio-Economic Impact Study for the Timiskaming Dam Complex.

KPMG, (2010a). Stakeholder Analysis for the Timiskaming Dam Complex. 74 p.

LVM-Fondatec inc., (1999). Caractérisation complémentaire. Complexe du barrage de Témiscamingue. Sault Island, Ontario, Canada. Pour Travaux publics et services gouvernementaux du Canada. 10 p. + appendices.

Soft dB, (2020). Étude acoustique environnementale. Remplacement du barrage-pont de Témiscamingue du Québec sur la rivière des Outaouais, dans la ville de Témiscaming. 26 p. + annexes. Réalisé pour Tetra Tech. Juillet 2020. Dossier 18-08-15-ML.

Tetra Tech, (2017). SR3 – Rapport d'élaboration et d'analyse des options conceptuelles (SR3.2b). 42 p. + annexes.

Tetra Tech, (2017a). Remplacement du barrage Témiscamingue situé sur la rivière des Outaouais - SR.2.2.H – Analyse des aspects hydrauliques – Pour examen et approbation. Rapport présenté à Travaux et Services gouvernementaux Canada. N/Réf. Tt : 32760TT V/Réf. : R.073116.307. 30 p. + annexe.

Tetra Tech, (2018). SR.5 – Plan de gestion des eaux de construction. Remplacement du barrage Témiscamingue situé sur la rivière des Outaouais. 3 mars 2018. Révision 0.

Tetra Tech, (2020). Note technique – Calculs de crues et révision de l'étude hydrologique. 28 avril 2020. 4 p.

Tetra Tech, (2021). Statement of Work: Fish and Turtle Survey. 2021-01-06

Trow Associates Inc., (2006). Phase II Environmental Site Assessment. Temiscamingue Land. Temiscaming, Quebec. DFRP, 31338. Prepared for Public Works and Government Services Canada. 14 p. + appendices.

Trow Consulting Engineers Ltd., (1998). Phase II Environmental Site Assessment Temiscamingue Dam Complex Sault Island, Ontario. DFRP, #11684.

…/3

Trow Consulting Engineers Ltd., (2002). Phase III Environmental Site Assessment (ESA) for the Temiscamingue Dam, Flood Control Land, Sault Island, Ontario. DFRP, #11684.

MISSING ITEMS RELATED TO PART 1 OF THE GUIDELINES

Subsection 4.5 (Summary of the Environmental Impact Statement)

- The Environmental Impact Statement (EIS) summaries in English and French must be reviewed and modified in light of the information provided in response to this letter.

MISSING ITEMS RELATED TO PART 2 OF THE GUIDELINES

Section 1 (Introduction and Overview)
Subsection 1.1. (The Proponent)

- The mechanism used to ensure that corporate policies will be implemented and respected for the project must be specified.

Subsection 1.4. (Regulatory Framework and the Role of Government)

- Section 5.1 and Appendix 5.1 of the EIS provide a complete list of the regulatory framework, but the EIS does not identify government policies, resource management plans, planning or study initiatives pertinent to the project and/or environmental assessment and their implications. Please provide this information.

Section 3 (Project Description)
Subsection 3.1. (Project Components)

- Storage and management of fuels, explosives, and hazardous waste: The EIS does not identify potential storage locations for explosives should they be required. Please provide this information.

Subsection 3.2. (Project Activities)

- A summary of changes to the project since it was originally proposed, including the benefits of these changes to the environment, Indigenous Peoples, and the public must be included in the EIS.

Section 6 (Impacts to Potential or Established Aboriginal or Treaty Rights)

- With respect to the potential adverse impacts of the project on potential or established Aboriginal or treaty rights, the Environmental Impact Statement must provide the information set out in Section 6 of the Guidelines with respect to the Kebaowek, Wolf Lake, and Timiskaming First Nations.

…/4

Section 7 (Effects Assessment)
Subsection 7.1. (Project Setting and Baseline Conditions)
Subsection 7.1.1. (Atmospheric, Light and Noise Environment)

- The profile of ambient air quality is limited to what is measured at Quebec's Ministère de l'Environnement et de la Lutte contre les changements climatiques monitoring station (fine particulates smaller than 2.5 microns [$PM_{2.5}$], sulphur oxides [SOx] and ozone). The EIS must identify emission sources and quantify all contaminants in the project areas and in the airshed likely to be affected by the project.
- Identification and quantification of existing emission sources in the project study area for each greenhouse gas (GHG) must be provided. GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3).

Subsection 7.1.3. (Topography, terrestrial environments and soil)

- Local topography and bathymetry are described in Section 11.1.8 and illustrated in Figures 11.11, 11.12, and 11.13. Baseline mapping and description of the landforms and soils in the regional project area must also be provided.

Subsection 7.1.5. (Surface Water)

- The Environmental Impact Statement must describe any local and regional potable surface water resources.

Subsection 7.1.6. (Fish and Fish Habitat)

- The EIS must present the baseline information in sufficient detail to be able to identify how the project may affect the valued components and to allow for an analysis of these effects. A description of rearing, feeding, and overwintering habitats by species present and potentially present in water bodies affected by the project must be provided.
- The EIS must include the description and location (including a map at an appropriate scale) of habitats suitable for:
  - hickorynut upstream and downstream of the dam;
  - lake sturgeon for habitat functions other than reproduction.

Subsection 7.1.7. (Birds and bird Habitat)

- The EIS must present the baseline information in sufficient detail to be able to identify how the project may affect the valued components and to allow for an analysis of these effects. A detailed description of the habitats of migratory and non-migratory birds likely to be found in the work area must be provided. For example, the study must provide information on whether the existing bridge may be a nesting site for certain bird species, including swallows, in the work area.

…/5

- Survey data for the spring migration and breeding season are presented in the EIS. The study must describe the use of the area by migratory and non-migratory birds throughout the year and must therefore also include the fall migration and winter periods. Data used to adequately describe the use of the study area during these periods may include data from existing sources as long as they are sufficient and up-to-date. Where applicable, survey data may be required.

Subsection 7.1.8. (Species at Risk)

- There is only a partial description of residences, seasonal movements, movement corridors, habitat requirements, key habitats, critical habitats and designated recovery habitats (if any), and life cycle of species at risk or assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that are likely to be found in the project area or affected by the project. The potential residences and habitats used by each species (at risk or assessed by COSEWIC) during their lifetime (including breeding, rearing, growth, staging, wintering, feeding, or hibernating) must be presented. Their critical habitat, as defined in the *Species at Risk Act*, must also be described. If the critical habitat of a species is not identified, an explanation and the sources consulted to verify it must be provided.
- Mapping of potential habitat for species at risk present or potentially present in the study area, taking into account habitat descriptions presented in recovery strategies, action plans, management plans, and COSEWIC reports, is incomplete. A map must be provided at a suitable scale (study area or extended study area) for each species (at risk or COSEWIC assessed) or group of species (fish, birds, etc.). If the critical habitat of a species is identified, it must also be shown on the map.

Subsection 7.1.11. (Human Environment)

- Baseline information on archaeological heritage is not sufficiently detailed to determine how the project could affect it. Although the study of terrestrial archaeological potential appended to the EIS identifies some historical underwater structures, the information is incomplete. A study of underwater archaeological potential and an underwater archaeological survey report must be provided. This information is required to document the presence and nature of submerged archaeological resources in the study area, including those that would be destroyed during the construction phase of the project.

Subsection 7.2. (Predicted Changes to the Physical Environment)
Subsection 7.2.1. (Changes to the Atmospheric, Sound and Light Environment)

- Although atmospheric dispersion modelling was requested in the Guidelines, it would not be required for this type of project due to the magnitude and duration of the work, according to Environment and Climate Change Canada. However, information on sensitive receptors and quantification of main air contaminant emissions throughout the potentially affected area must be provided. Some of the contaminants to be included, but not limited to, are carbon monoxide (CO), sulphur oxides (SO_x), nitrogen oxides (NO_x), volatile organic compounds (VOCs), and dust (total suspended particulates [TSP], fine particulates smaller than 2.5 microns [$PM_{2.5}$], and respirable particulates of less than ten microns [PM_{10}]). The detailed methodology for assessing atmospheric emissions must be provided, taking care to identify, for all phases of the project, the project-related activities/equipment (sources) that are likely to produce maximum contaminant emissions, including blasting activities (worst-case emission scenario), the use of heavy machinery during construction, and road transportation.
- The proponent is required to compare anticipated air quality with the Canadian Ambient Air Quality Standards (CAAQS, 2020) for fine particulate matter, ozone, and sulphur dioxide. The proponent must also consider the Quebec standards and criteria for air quality.
- Dust fallout in aquatic and land environments within the project's zone of influence must be estimated and quantified.
- Comparison of current ambient noise levels (without the project) with total projected noise levels (including blasting) for all project phases must be provided.

Subsection 7.2.2. (Changes to Surface Water)

- A comparison of the projected physicochemical quality (contaminants, turbidity, oxygen content, etc.) of the surface water with the applicable values of the *Canadian Environmental Quality Guidelines* and Quebec's *Critères de qualité de l'eau de surface* must be provided.

Subsection 7.3. (Predicted Effects on Valued Components)
Subsection 7.3.1. (Fish and Fish Habitat)

- The habitat area, excluding that used for breeding, that may be destroyed, altered, or disrupted by the project must also be estimated.
- A discussion of how project construction timing correlates to key fisheries windows for freshwater and anadromous species and any potential effects resulting from overlapping periods must be provided.

…/7

- The EIS must include a discussion of how vibrations, including pressure and sound-level changes, caused by blasting may affect fish behaviour, such as spawning or migration, and how the *Guidelines for the Use of Explosives in or Near Canadian Fisheries Waters* have been taken into account should explosives be used.

Subsection 7.3.4. (Indigenous Peoples - Health and Socio-Economic Conditions)

- All of the information requested in this subsection regarding the effects of environmental changes caused by the project on the health and socio-economic conditions of the Kebaowek, Wolf Lake, and Timiskaming First Nations must be provided.
- When risks to human health due to changes in one or more of these valued components are predicted, the proponent is expected to complete a human health risk assessment (HHRA) that examines all exposure pathways for pollutants of concern to adequately characterize potential risks to human health. No HHRA is included in the EIS. The proponent must provide a justification if it is determined that an assessment of the potential for contamination of country foods (or through other exposure pathways, such as inhalation) is unnecessary or if some contaminants are excluded from the assessment.

Subsection 7.3.4. (Indigenous Peoples - Physical and Cultural Heritage)

- All of the information requested in this subsection regarding the effects of environmental changes caused by the project on the physical and cultural heritage of the Kebaowek, Wolf Lake, and Timiskaming First Nations must be provided.

Subsection 7.3.4. (Indigenous Peoples - Current Use of Lands and Resources for Traditional Purposes)

- All of the information requested in this subsection regarding the effects of environmental changes caused by the project on the current use of lands and resources for traditional purposes by the Kebaowek, Wolf Lake, and Timiskaming First Nations must be provided.

Subsection 7.3.5. (Other Valued Components That May Be Affected by the Project)

- The effects of environmental changes caused by the project on underwater archaeological heritage must be assessed.

Subsection 7.4 (Mitigation Measures)

- The Environmental Impact Statement must describe the project's environmental protection plan and the environmental management system through which the proponent will deliver this plan. The plan must provide an overall perspective on how potentially adverse effects would be minimized and managed over time.
- An air quality management plan must be prepared for all phases of the project, describing all sources of contaminant emissions, including dust, and associating the mitigation measures that would be applied to reduce their effects on the environment.
- A detailed archaeological action plan for all work planned during the construction phase, including that planned for the dewatered area downstream of the dam-bridge, must be submitted. This plan must include methods of recording resources, procedures for incidental finds, identification of the laboratory that will process and preserve waterlogged artifacts, and where archaeological collections will be stored.
- The EIS must include a discussion of the mechanisms the proponent would use to require its contractors and subcontractors to comply with its commitments and policies and with auditing and enforcement programs.
- The Environmental Impact Statement must identify who is responsible for the implementation of mitigation measures and the accountability mechanism.
- The EIS must identify the extent to which the technological innovations can contribute to mitigating environmental effects. Where possible, detailed information on the nature of these innovations, their implementation, their management and the requirements of the follow-up program must be included.

Subsection 7.6. (Other Effects to Consider)
Subsection 7.6.1. (Effects of Potential Accidents or Malfunctions)

- The EIS presents potential accident or malfunction scenarios, but no explanation is given for the worst-case credible scenarios. The proponent is required to explain the worst-case credible scenarios and describe their effects on the environment. Additional details to be provided for each scenario are given in the Guidelines.

Subsection 7.6.3. (Cumulative Effects Assessment)

- The assessment of cumulative effects caused by the project in combination with other past, existing, and reasonably foreseeable future physical activities must be conducted on all valued components for which an environmental effect of the project remains after the implementation of mitigation measures. The proponent did not conduct a cumulative effects assessment on the valued components for which it concluded a non-significant effect. A non-significant effect does not imply the absence of a residual effect on a valued component. The proponent must complete the cumulative effects assessment on each of the valued components for which residual environmental effects are predicted, regardless of the predicted significance of those effects.

…/9

- The cumulative effects assessment for fish and fish habitat does not include the reasonably foreseeable installation of a fish passage. Should a fish passage be installed, a list comparing the species that would be present upstream of the dam with those downstream is required.
- The cumulative effects assessment for each valued component must also take into account any reasonably foreseeable future projects, including the Onimiki project which is under development. This project involves the development of two mini power plants in Gordon Creek.

The Agency will contact you in the next few days to set up a meeting to clarify the information required and to answer any questions you may have.

Please submit a revised Environmental Impact Statement and Executive Summary with the changes requested in this letter. Upon receipt of the revised documents, the Agency will review them and inform you if additional information is required or whether there is sufficient information to begin the technical analysis and public consultation period.

If you have any questions, please contact me by email at mireille.lapointe@iaac-aeic.gc.ca or by phone at 418-930-1586.

Yours sincerely,

<Original signed by>

Mireille Lapointe
Project Manager - Quebec

c.c. Étienne Frenette, Health Canada
Catherine Gaudette, Transport Canada
Marie-Claude Martel, Parks Canada
Annie Montpetit, Natural Resources Canada
Myriam Paquet, Ministère des Forêts, de la Faune et des Parcs du Québec
Marc-André Poirier, Fisheries and Oceans Canada
Linda Roberge, Environment and Climate Change Canada
Rosanne Van Schie, Project Manager for the Kebaowek, Wolf Lake, and Timiskaming First Nations