

**Direction générale des opérations réglementaires et de  
l'application de la loi**

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**Regulatory Operations and Enforcement Branch**

Environmental Health Program - Quebec  
101 Roland-Therrien Blvd- Suite 400  
Longueuil (Québec) J4H 4B9

Thursday, August 28, 2025

Reference No.: 80151

Laurence Piché  
Project Manager  
Impact Assessment Agency of Canada  
Québec Regional Office  
901-1550 Estimauville Avenue  
Quebec, Quebec G1J 0C1

Sent by email only to "[laurence.piche@iaac-aeic.gc.ca](mailto:laurence.piche@iaac-aeic.gc.ca)"

**Subject:** Response to your request for final advice<sup>1</sup> as part of the environmental assessment of the Timiskaming Dam-Bridge of Quebec Replacement Project<sup>2</sup>

Madam,

Further to your email dated August 11, 2025, here is our final expert advice on the valued component "human health of populations (Indigenous and non-Indigenous)".

Your correspondence indicated that you have officially received the responses to the second information request (IR-2). Health Canada (HC) has evaluated the additional information received. This information does not change the final expert advice that was sent to you on December 20, 2024. You will find it attached.

I would like to take this opportunity to remind you that this advice complements all previous submissions that have been sent to the Impact Assessment Agency of Canada by HC as part of the environmental assessment process for this project.

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<sup>1</sup> Email from the Impact Assessment Agency of Canada to Health Canada received on August 11, 2025, with the subject line: "*Projet barrage-pont- Réponses officielles de la DI-2 et avis finaux*"

<sup>2</sup> For more information on the project: [Timiskaming Dam-Bridge of Quebec Replacement Project](#)



Hoping everything meets your expectations, please accept, Ms. Piché, my sincerest regards.

*Christine Gagnon*

Christine Gagnon, M.sc  
Environmental/Impact Assessment Specialist (Health)  
Environmental Health Programs  
Health Canada – Quebec Region

Attachment:

Final expert advice initially submitted on December 20, 2024

c.c.: [by email]

Isabelle Lampron, Regional Manager, Environmental Health Program – Quebec Region, Health Canada  
Aurelia Thevenot, Acting Manager, Environmental Assessment Division, Health Canada  
Claudia Schiocchet, Environmental Officer (Health), Environmental Health Program, Health Canada  
Isabelle Vézina, Environmental/Impact Assessment Specialist (Health), Environmental Health Program,  
Health Canada

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Friday, December 20, 2024

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**Subject:** Response to your request for final advice<sup>1</sup> as part of the environmental assessment of the Timiskaming Dam-Bridge of Quebec Replacement Project<sup>2</sup>

Madam,

Further to your email dated October 22, 2024, here is our final expert advice on the valued component "human health of populations (Indigenous and non-Indigenous)".

Given your request, the nature of the project, Health Canada's (HC) expertise<sup>3</sup>, and the environment in which this project would take place, HC's analysis focused on the potential impacts of the project on human health that would result from changes to: **air quality, noise (acoustic environment)**, and the perception of chemical contamination of **traditional foods**.

Health Canada would like to point out, however, that health is not defined solely by the absence of disease or infirmity caused by the physical environment, but by a state of physical, mental, and social well-being. The authorities responsible for these other determinants of health should be consulted.

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<sup>1</sup> Email from the Impact Assessment Agency of Canada to Health Canada received on October 22, 2024, with the subject line: "Projet barrage-pont-Lettre\_Avis expert"

<sup>2</sup> For more information on the project: [Timiskaming Dam-Bridge of Quebec Replacement Project](#)

<sup>3</sup> Refer to Health Canada's participation in environmental assessment: <https://www.canada.ca/en/health-canada/corporate/publications/health-canada-participation-environmental-assessments.html>

You will find the responses to the questions in your request in **Appendices 1 to 3** of the attached document. References are provided in **Appendix 4**.

This advice supplements all advice sent to the Impact Assessment Agency of Canada by HC as part of the environmental assessment process for this project.

Hoping everything meets your expectations, please accept, Ms. Piché, our sincerest regards.



Claudia Schiocchet, M. Env.  
Environmental Officer (Health)  
Environmental Health Program  
Health Canada – Quebec Region



Isabelle Vézina, M. Env  
Environmental/Impact Assessment Specialist (Health)  
Environmental Health Program  
Health Canada – Quebec Region

Attachments:

- Appendix 1: Air Quality
- Appendix 2: Noise (acoustic environment)
- Appendix 3: Country Foods (or food taken from nature)
- Appendix 4: References

c.c.: [by email]

Isabelle Lampron, Regional Manager, Environmental Health Program – Quebec Region, Health Canada  
Heather Jones-Otazo, Manager, Environmental Assessment Division, Health Canada  
Aurélia Thévenot, Senior Health in Impact Assessment Specialist, Environmental Assessment Division, Health Canada  
Christine L. Gagnon, Environmental/Impact Assessment Specialist (Health), Environmental Health Program, Health Canada

## APPENDIX 1 – Air Quality

### Human Receptors

The distances between the project site and potential Indigenous human receptors were established using geographic maps. Communities and traditional territories were presented on Map 4.3 of the Environmental Impact Statement (EIS) (Tetra Tech, February 2023). The closest human receptors to the site (Table 9.2, Tetra Tech, February 2023) are in the municipality of Timiskaming, 0.5 km northeast of the project. However, the EIS contradicts this information in section 11.1.6, stating that the identified sensitive receptors are located more than 1 km from the construction area of the project site (Tetra Tech, February 2023, p.11-9). This contradiction should be corrected.

**Recommendation No. 1** - Potential human receptors have been adequately identified, with particular attention paid to Indigenous peoples throughout most of the report, with the exception of one contradiction. Health Canada recommends that the proponent correct the inaccurate information.

### Public Concerns

During consultation activities, concerns were raised about declining air quality due to dust, as well as odors<sup>1</sup> associated with construction and sulfur during the construction phases. Concerns were also expressed about the potentially serious health effects of air pollution (Tetra Tech, February 2023, Appendices 8.2, 8.3).

### Baseline Measures and Project Emissions Estimates

It is important that reference (baseline) concentrations and estimated changes in air quality are representative (or conservatively determined), as not to underestimate the health risk.

Figures 11-1, 11-2, and 11-3 illustrate the annual baseline concentrations for PM<sub>2.5</sub>, SO<sub>2</sub>, and O<sub>3</sub> over the years and compare them to the regulatory limits set by the *Ministère de l'Environnement et de la Lutte contre les changements climatiques* (MELCCC)<sup>2</sup> and the Canadian Ambient Air Quality Standards (CAAQS) (Tetra Tech, February 2023, pp. 11-5 – 6). **All are below the limits except for fine particulate matter (PM<sub>2.5</sub>), whose annual concentrations exceed the 2020 CAAQS.** For nitrogen dioxide (NO<sub>2</sub>), the proponent compared the total quantities (in tons) predicted with the quantities emitted by the neighboring Rayonier industrial project to justify the lack of need to document the baseline concentration (low contribution from the project).

<sup>1</sup> Health Canada does not have the expertise required to mitigate or assess the potential effects of odors (HC, 2023a).

<sup>2</sup> Now known as the *Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs*

Section 11.2 of the EIS addresses the project's impacts on air quality. Given the low residential density around the project and the fact that these emissions would be temporary and limited to the construction period, it was determined that atmospheric dispersion modeling was not necessary (Tetra Tech, February 2023, pp. 11-51). Instead, the proponent calculated emissions estimates based on activities such as machinery time and diesel consumption.

Health Canada relies on the expertise of Environment and Climate Change Canada (ECCC) to determine whether the initial concentrations selected by the proponent are representative of the existing environment and to assess the quality of the estimates calculated. **If these data were to be revised, it could affect the conclusions of this advice.**

### Potential Repercussions

The proponent's predictions are quantities (tons) emitted per pollutant (CO, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>2.5</sub>) and for the entire project. It is not possible to compare these predictions with the usual ambient air quality standards and criteria. That said, as the project's contribution to air quality has been deemed low, and if ECCC supports this assumption, the health impact associated with substances with threshold effects should be negligible.

However, for substances without an effect threshold, and particularly for PM<sub>2.5</sub>, as baseline measurements are already above the CAAQS, the project could contribute to health effects. For these substances, it is not possible to identify a threshold below which no adverse health effects occur. Concentrations of fine particulate matter and nitrogen dioxide (NO<sub>2</sub>) should therefore be kept as low as possible (HC, 2023a).

**Recommendation No. 2** – In light of the information provided, the health impact associated with substances with a threshold effect should be negligible. However, health effects associated with exposure to fine particulate matter (PM<sub>2.5</sub>), a substance without a threshold effect, could occur given the high baseline concentrations (HC, 2023a).

Health Canada relies on Environment and Climate Change Canada to validate the methodology used to estimate the proponent's predictions.

### Key Mitigation Measures

In the context of this project, the most important mitigation measures would be those aimed at limiting emissions of non-threshold substances, namely: fine and respirable particles, including dust, and nitrogen dioxide (Table 23.1, PSPC, March 2024, pp. 32–34).

**Recommendation No. 3** - Given the concerns expressed by First Nations and Métis Nations regarding the potential impacts of the project on air quality, land use, and non-threshold substances, all measures to mitigate air quality impacts presented in the impact statement, as well as the rigorous implementation of the *Environmental and Social Management Plan* (PSPC, September 2024, Appendix D) (which includes the air quality management plan) would be very important.

It should be noted that Health Canada relies on the expertise of Environment and Climate Change Canada and the MELCCC regarding the “technical” effectiveness and uncertainty surrounding the effectiveness of mitigation measures aimed at protecting air quality.

### *Effects of combustion*

The proponent refers to the use of Tier 4 certified mobile equipment for off-road construction equipment and on-road truck engines (Tetra Tech, February 2023, pp. 11–52 and 23–5).

**Recommendation no. 4** - Reducing idling and using Tier 4 certified and electric mobile equipment would significantly reduce nitrogen dioxide and particulate matter emissions from combustion. These measures are proven to be very important in addressing these two substances, which have no threshold effect.

### *Dust*

Proposed mitigation measures to reduce dust emissions include speed limits on site roads, handling complaints about air quality and dust, using water-based dust suppressants, and avoiding demolition and blasting activities in windy conditions (Tetra Tech, February 2023, pp. 11-52 and 23-5).

The proponent specifies that these measures will be implemented if the daily visual inspection shows that dust has traveled more than 2 meters from the source (PSAC, September 2024, p. 7).

**Recommendation no. 5** - The application of water as a dust suppressant would be a key mitigation measure. However, the criteria for determining the most appropriate times to apply dust suppressants should have been specified in the *Environmental and Social Management Plan*.

**Recommendation no. 6** - While the reception and resolution of complaints does not, in itself, constitute a mitigation measure, it could help identify additional mitigation measures related to activities on site and on access roads to the construction site (unpaved).

## Blasting

When detonation conditions are not optimal, potential blasting operations may also generate nitrogen dioxide and dust. The proponent has planned the following mitigation measures for dust:

*“If blasting is deemed required for the demolition of the Quebec Dam, the exposed portion of dam elements charged with explosives would be covered with rubber blasting mats as well as the use of suspended geotextile apron for protection against potential flying debris escaping the blast. A blasting specialist would be on site and could recommend any changes in blasting process such as improving blasting mat placement and fabric to limit fly ice (if conducted in winter) and/or fly concrete.” (PSPC, September 2024, p.21)*

In addition, the proponent describes among the dust mitigation measures that during demolition [...] work should be stopped in high wind conditions if a significant amount of dust is displaced (Tetra Tech, February 2023, Table 18.1).

**Recommendation no. 7** - In cases where blasting is necessary, conducting it during a period when weather conditions are most optimal is a key mitigation measure for reducing dust dispersion in this demolition scenario.

## Monitoring and Follow-up Program

Section 22.1 stipulates that all proposed mitigation measures, including those proposed to mitigate air quality and dust, will be subject to critical monitoring during construction. Furthermore, it states that if monitoring results show that actual impacts differ from those anticipated and mitigation measures are insufficient, other mitigation measures or additional measures will be implemented as an adaptive mitigation strategy (Tetra Tech, February 2023, p. 22-2).

**Recommendation no. 8** - It would have been desirable for the proponent to specify the additional mitigation measures that could be implemented if necessary.

Health Canada encourages the use of all available mitigation measures that are technically and economically feasible to minimize the potential impacts of the project on air quality.

In the Information Request No. 1, the proponent indicated that the project's estimated emissions will be minimal compared to those of the neighboring Rayonier project and has therefore chosen to monitor only dust, excluding other potential contaminants from its air quality monitoring efforts (PSPC, September 2024, p. 78).

**Recommendation no. 9** – Given that baseline concentrations are already above the CAAQS, Health Canada recommends monitoring fine particulate matter (PM<sub>2.5</sub>) at the closest human receptors in order to maintain the lowest possible levels and ensure that the project does not further contribute to the deterioration of local air quality for this contaminant.

Long-term exposure to particulate matter increases the risk of developing cardiovascular and respiratory diseases and lung cancer<sup>3</sup>.

The proponent estimates that dust emissions will be negligible to insignificant. However, no measures are planned other than a daily visual assessment (PSPC, March 2024, p. 21; Tetra Tech, February 2023, pp. 11–51).

**Recommendation no. 10** – Given the potential health effects (particulate matter) and public concerns about dust, it would be very important for the monitoring program to confirm the assumption that the proponent is a low emitter of dust.

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<sup>3</sup> World Health Organization (WHO). Ambient (outdoor) air pollution and health: [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health). October 2024.

## APPENDIX 2 – Noise (Acoustic Environment)

### Existing environment and baseline conditions

#### Human Receptors

The identification and characterization of human receptors were adequately performed by the proponent. However, Health Canada notes some inconsistencies between the different chapters of the impact assessment (see Recommendation No. 1 in Appendix 1).

#### Public Concerns

Members of the Métis Nation of Ontario expressed concern that increased noise could affect their perception of conditions as favorable or preferable for practicing traditional activities on lands located near the project. This situation could lead to increased avoidance behavior around the project area and, as a result, affect the exercise of their rights. Concerns were also expressed about the effects that noise could have on the staff and commercial customers of the Algonquin Canoe Company, as well as other sensitive receptors such as hospitals, schools, ceremonial sites, and any other locations where noise could have a significant impact on health or the smooth running of operations (Tetra Tech, February 2023, Appendix 8.3).

#### Baseline Sound Measurements

The main sources of noise in the study area are road traffic, the Rayonier plant, and the dam itself. These sources of ambient noise are unlikely to vary significantly throughout the year. Apart from these sources, natural sources of noise are mainly related to river flow and wind (Tetra Tech, February 2023, p. 11-8).

The proponent modeled the baseline noise level (i.e., pre-construction) at five points (P1, P2, P3, P4, P5). These points are representative of sensitive receptors and those closest to the project construction area (Tetra Tech, February 2023, Figure 11.6). These points include nearby residences (P1, P3, P4, P5) as well as Long Sault Island, where the Algonquin Canoe Company and the dam operator's residence are located (P2) (Tetra Tech, February 2023, p.11-10).

The results for baseline daytime noise levels ( $Ld_{(7\text{ a.m.}-10\text{ p.m.})}$ ) (Table 10.30) show that for P2, noise levels exceed the recommended level for speech comprehension (<60 dBA) and that noise levels at the location of residences on the Ontario side of the river and facing the dam (P3) are close to this limit. The main sources of noise contributing to this exceedance are the nearby industrial facility, road traffic noise, and river flow (Tetra Tech, February 2023, pp. 11-12).

**Recommendation no. 1** – Health Canada is of the opinion that the baseline acoustic environment has been adequately described and documented for the purposes of the environmental assessment.

## Project Noise – Construction Phase

The Environmental Impact Statement (EIS) compares the relevant criteria in the HC 2017<sup>1</sup> guide (the percentage of people highly annoyed (%HA)) (Tetra Tech, February 2023, Table 11.32) and interference with speech comprehension (Tetra Tech, February 2023, Table 11.30) to assess the impact on the sound environment at sensitive receptors during the construction phase (Tetra Tech, February 2023, p.11-66).

To assess the effects, the proponent estimated the noise levels attributable to the project, as well as the total noise combining current levels and those anticipated for the construction phase (including the potential blasting scenario). This estimate is based on a preliminary list of equipment required for the various phases of construction (Tetra Tech, February 2023, Table 11.29). However, as the contractor's exact methodology is not yet known, the assessment is based on measurements taken in the past by SoftdB (estimation based on measurements taken for previous projects), as well as theoretical data (theoretical estimation) based on a review of the literature (Tetra Tech, February 2023, pp. 11-64).

Sound levels were modeled at the five receptor points identified in Figure 11.6 using software that employs the ISO-9613 calculation methodology. The modeled noise levels for daytime ( $L_{d(7\text{ a.m.}-10\text{ p.m.})}$ ) (Table 11.30) show exceedances of the recommended level for speech comprehension ( $>60\text{ dBA } L_{d(7\text{ a.m.}-10\text{ p.m.})}$ ) at Long Sault Island (P2) during the 15 construction phases for which noise is anticipated. Noise levels at residences on the Ontario side of the river and facing the dam (P3) almost reach this same limit (Tetra Tech, February 2023, pp. 11-12).

The anticipated noise during construction will be temporary and limited to the bridge dam construction phase. Work will only be carried out during the day, as municipal regulations in the City of Timiskaming<sup>2</sup> prohibit noise on construction sites at night.

The predicted %HA at the five points would remain below the level estimated as a severe impact by HC (i.e., a %HA of 6.5), with the noisiest phase of construction producing a %HA of 3.6.

That being said, it would nevertheless be important to rigorously implement noise mitigation measures to avoid noise pollution and complaints, as the predictions are close to the recommended limit for speech comprehension (HC, 2023b).

**Recommendation No. 2** – Health Canada notes that the project is proposed in an area where noise levels are already high. The project's noise contribution will be limited to the construction phase and is expected to be minimal based on the proponent's preliminary estimates and modeling. However, it would be necessary to revalidate noise levels once the proponent has the

<sup>1</sup> The proponent cites the Health Canada document *Guidance for Evaluating Human Health Effects in Impact Assessment: Noise* using the year 2016, but it is a publication from 2017

<sup>2</sup> Regional County Municipality of Timiskaming unorganized territory. Bylaw No. 168-06-2014. *Règlement concernant les nuisances en territoire non organisé et applicable par la sûreté du Québec*. Available at: [https://www.mrcstemiscamingue.org/app/uploads/2023/05/reglement\\_168-06-2014\\_tno\\_nuisances.pdf](https://www.mrcstemiscamingue.org/app/uploads/2023/05/reglement_168-06-2014_tno_nuisances.pdf) (available only in French)

information required to update its modeling. This will determine whether changes in noise levels could have health effects and require additional mitigation measures.

### Perception of Noise Impacts

Sound perception is individual and varies from person to person depending on a variety of factors, including individual physical sensitivities, cultural/perceptual concerns, the existing environment, duration of exposure, etc. There is always uncertainty as to how a given individual may react to noise.

For this reason, complaints about noise related to the project should be rigorously assessed, which may require the proponent to consider additional noise mitigation measures even when limit values used are not exceeded. Proactive communication activities planned by the proponent in the *Environmental and Social Management Plan* (ESMP), as well as the system for receiving and handling complaints, are important.

**Recommendation No. 3** - Health Canada would like to clarify that compliance with the criteria used by the proponent to assess the project's impact on the acoustic environment does not necessarily guarantee that there will be no health effects.

Noise impacts therefore depend largely on the interference of noise with individuals' activities in relation to their expectations of peace and quiet during these activities (HC, 2023).

### Mitigation Measures

The proponent proposes 20 noise mitigation measures during the construction phase (Tetra Tech, February 2023, Table 18.1). However, other common measures could also apply to the project, such as those listed in Appendix H of the document *Guidance for the Assessment of Human Health Effects in an Impact Assessment: Noise* (HC, 2023).

**Recommendation No. 3** - It is very important that all mitigation measures presented in the impact study and to be developed in the *Environmental and Social Management Plan* be rigorously implemented. Particular attention should be paid to measures that would limit noise impacts on Long Sault Island, given that baseline noise levels exceed the criterion for speech comprehension and concerns expressed by the nearby Algonquin Canoe Company.

### Collaboration and Communication

It has been shown that communities that are consulted are more understanding and willing to accept noise than those that are not, particularly when accurate information is provided, the likely noise levels are not underestimated, and the proponent honors its commitments to restrict noise to specific hours (HC, 2023).

The proponent's commitment to developing a noise management plan in collaboration with Indigenous communities is therefore particularly important (PSPC, September 2024, p. 62).

**Recommendation No. 4** - Consultation, communication, and implementation of a noise management plan with the population and land users is a key measure for mitigating noise impacts. However, the content of the plan is not yet known.

#### Monitoring and Follow-up Program

The proponent has committed to re-modeling the predicted noise levels for the construction phase of the project to take into account the construction method and equipment chosen by the contractor (Tetra Tech, February 2023, p. 22-3). Subsequently, noise measurements will be taken regularly by a specialized firm during the various phases of the work at sensitive receptors (Tetra Tech, February 2023, p. 22-3).

The proponent has committed to developing a noise management plan in consultation with Indigenous groups and sharing it with Health Canada for additional review and comments. The proponent has also committed to complying with the *Ministère de l'Environnement et de la Lutte contre les changements climatiques* (MELCCC)'s *Lignes directrices relativement aux niveaux sonores provenant d'un chantier de construction industriel* (PSPC, March 2024, p. 206).

**Recommendation No. 5** – Health Canada supports the proponent's intention to develop the plan in consultation with Indigenous groups and is available to comment on it.

Health Canada recommends that the monitoring program, in addition to meeting the requirements of the *Ministère du Développement durable, de l'environnement et de la Lutte aux changements climatiques*, allow for the comparison of noise levels with relevant health effect indicators (%HA, speech interference).

#### Complaint Receipt and Management System

Compliance with the criteria used by the proponent to estimate the project's impact on acoustic environment does not necessarily guarantee that there will be no effect on health. The complaint management mechanism can be considered as a means of monitoring acoustic environment. Indeed, HC considers that noise complaints can be an indicator of potential adverse effects on human health (HC, 2023). The proponent should not rely solely on decibel limits.

The proponent has committed to developing a complaint reception and management system in its noise management plan as part of its ESMP. The response time for complaints would be 24 hours (PSPC, September 2024, Appendix D).

**Recommendation No. 6** - The implementation of a formal protocol for receiving and managing complaints as envisaged in the ESMP with a response time of 24 hours (PSPC, September 2024, Appendix D) would be very important. This would make it possible to determine whether mitigation measures are working and whether additional measures are required.

Given the concerns expressed by some community members about the potential impacts of the project on the acoustic environment, it is recommended that the number and handling of complaints related to the acoustic environment be included in the information shared with communities.

### APPENDIX 3 – Country Foods

Traditional foods, as well as the ways in which these foods are sourced, are intrinsically linked to the culture, identity, and way of life of Indigenous peoples and therefore to their overall health. HC recognizes the importance of continuing to consume these foods for their nutritional value, on the one hand, but also for the preservation of social and cultural values (HC, 2019; INSPQ, 2015).

The proponent states that it is aware of the perception of risk associated with the contamination of traditional foods among Indigenous communities potentially affected by the project. It states that it has included this perceived effect in the assessment of effects on human health, even though there are no operational exposure pathways between the project and health that would warrant further assessment (PSPC, September 2024, p. 59).

However, the Métis Nation has expressed concerns that the proponent has not fully considered the potential interaction of perceptions of traditional food contamination with Métis rights. These concerns highlight the impact of increased negative perceptions, which could lead to increased avoidance behaviors in the project area a weakening of the conditions that make the exercise of rights possible. Although the mitigation measures proposed by the proponent have “partially resolved” this issue, the Métis Nation insists on the need for further discussion to better understand and illustrate how project activities could affect Métis values and interests (Tetra Tech, February 2023, Appendix 8.3).

The approach proposed by the proponent to mitigate the negative effects of increased risk perception is to include the participation of Indigenous communities in project monitoring activities and to collaborate with them to determine monitoring parameters (PSPC, September 2024, p.103). In addition, the proponent commits to:

- Develop consultation and communication plans in collaboration with each Indigenous community to ensure that monitoring results are communicated on a regular basis.
- Develop Indigenous participation plans with each interested community, specifying opportunities for participation in monitoring activities.
- Communicate monitoring results, including those related to methylmercury, to Indigenous communities and direct them to Ontario government information sources so they can make informed decisions about fish consumption.
- Inform Indigenous groups about the health risks associated with sediment resuspension in traditional foods and the measures taken to mitigate these impacts.
- Seek input from Indigenous groups on any additional mitigation measures needed to minimize impacts (PSPC, March 2024, pp. 159-160).

Health Canada consulted with the First Nations and Inuit Health Branch of Indigenous Services Canada (ISC). To effectively address community concerns about the potential presence of contaminants in traditional foods (and ensure that communities do not unnecessarily avoid consuming them), it is generally not sufficient to offer communities the opportunity to participate in the planning and implementation of proponents' monitoring activities or to share the results of those activities with them.

**Recommendation No. 1** – An effective way to alleviate communities' concerns about the potential presence of contaminants in traditional foods would be to provide them with the resources they need to carry out or lead the various monitoring activities deemed necessary (e.g., sampling, analysis, interpretation, and communication of results tailored to their communities) themselves. This would be a key mitigation measure supported by Health Canada and the First Nations and Inuit Health Branch of Indigenous Services Canada.

### Accidents and Malfunctions – Emergencies

#### *Communication plan*

Environmental emergencies, such as spills, can have a significant impact on the health of local and Indigenous communities, particularly through the contamination of traditional foods such as fish. It is imperative to ensure proactive risk management and effective communication mechanisms to quickly inform affected populations.

The proponent stated that it had developed consultation and communication plans with the Indigenous groups consulted on the project and that it was committed to involving provincial public health services in monitoring activities and the project-level communication plan to inform Indigenous groups, the public, and industry stakeholders about construction, monitoring, and follow-up activities (PSPC, September 2024).

That said, the proponent has not yet developed its emergency response plan and spill response plan.

Communication surrounding emergency measures and risk communication with Indigenous communities is key. It is imperative that communication plans in emergency plans are clear and culturally appropriate for the affected communities. The plan should ensure rapid and transparent communication of risks, mitigation measures, and health advisories to all stakeholders, including Indigenous groups and local populations, in order to minimize health impacts and maintain trust.

**Recommendation No. 2** - It would be very important to finalize the emergency response plan before the start of the construction phase and to keep it up to date throughout the project.

Health Canada recommends that the final version of the emergency response plan include a procedure for communicating with communities.

## APPENDIX 4: REFERENCES

- CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT (CCME), 2021. *Canadian Quality Standards* July 2021.
- Health Canada (HC), May 2016. *Human Health Risk Assessment for Ambient Nitrogen Dioxide*. [Online] <https://www.canada.ca/en/health-canada/services/publications/healthy-living/human-health-risk-assessment-ambient-nitrogen-dioxide.html>.
- Health Canada (HC), 2017. *Guidance for Evaluating Human Health Effects in Impact Assessment: NOISE*. [Online] <https://publications.gc.ca/site/eng/9.832514/publication.html>
- Health Canada (HC), January 2019. *Canada's dietary guidelines for health professionals and policymakers*. [Online] <https://publications.gc.ca/site/eng/9.852216/publication.html>.
- Health Canada (HC), 2023a. *Guidance for Evaluating Human Health Effects in Impact Assessment: Air Quality*. Available at [https://publications.gc.ca/collections/collection\\_2024/sc-hc/H129-54-1-2023-eng.pdf](https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-1-2023-eng.pdf)
- Health Canada (HC), 2023b. *Guidance for Evaluating Human Health Effects in Impact Assessment : Noise*. Available at [https://publications.gc.ca/collections/collection\\_2024/sc-hc/H129-54-3-2023-eng.pdf](https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-3-2023-eng.pdf)
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- IMPACT ASSESSMENT AGENCY OF CANADA (IAAC), November 2024. Canadian Impact Assessment Registry: Timiskaming Dam-Bridge of Quebec Replacement Project. [Online] [Timiskaming Dam-Bridge of Quebec Replacement Project](#)
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