

### Enclosure 3: Review Table for the Alexandra Bridge Replacement Project - Initial Project Description (IPD)

IPD submitted on March 15, 2022, by Public Services and Procurement Canada and National Capital Commission (the Proponent). **Response due by: April 21, 2022.**

Please use this document to provide comments on the Alexandra Bridge Replacement Project (the Project). The document consists of two tables.

**Table 1** will enable you to describe potential project effects.<sup>1</sup> The Impact Assessment Agency of Canada (the Agency) requires detailed advice to inform the Summary of Issues provided to the Proponent pursuant to subsection 14(1) of the *Impact Assessment Act* (IAA). Please refer to prompts in the table to guide your responses.

**Table 2** will facilitate the collection of general or editorial comments.

*Table 1: Description of the potential effects of the Project*

| Comment ID | Document Reference                      | Valued Component | Project Component                      | Description of the Potential Effect (Context and Rationale)   | Powers, Duties and Functions | Risk Characterization Rating | Instructions to the Proponent   | Summary of the Issue  |
|------------|---|------------------|--|---|------------------------------|------------------------------|---|---|
| HC-01      | Table 14-9: Planned Studies Pg. 168 PDF | Health – General | Deconstruction and Construction Phases | <p><b>It is not clear if potential impacts to human health will be assessed using Health Canada’s environmental assessment guidance documents related to: drinking and recreational water quality, country foods, and human health risk assessment.</b></p> <p>As noted in our March 2021 comments (Appendix 1) concerning the Alexandra Bridge Replacement Project draft initial Project Description (iPD), Health Canada recognizes that the iPD is a work in progress. The Proponent acknowledges that additional information concerning potential impacts of the proposed Project on human health will be provided in the future for review.</p> <p>The iPD recognizes the importance of the Project area surroundings to nearby Indigenous communities with respect to collection of traditional foods or other cultural and spiritual activities. It will be necessary to identify contaminants of potential concern (COPCs) and to understand the potential uptake of these COPCs into traditional foods consumed by Indigenous peoples, residents, and recreationalists. Additionally, consideration should be given to contaminants emitted into the air that may deposit onto foods prior to being consumed. Health Canada guidance supports the need for a multi-media human health risk assessment (HHRA) when elevated levels of COPCs are identified in environmental media, and there are possible exposure pathways to humans (i.e., through the consumption of traditional foods or drinking water).</p> <p>Health Canada’s guidance documents related to noise and air quality are referenced in the iPD when describing upcoming studies to assess potential impacts of the proposed Project on human health. However, there were no similar references to Health Canada’s guidance documents for drinking and recreational water quality, country food, and HHRA concerning forthcoming studies about groundwater and surface water and baseline conditions for human health, social, and Indigenous peoples.</p> | Not applicable               | Unknown                      | <p>Health Canada recommends an assessment of the potential impacts to human health as per Health Canada’s guidance documents.</p> <p>Health Canada’s guidance documents have been prepared for the benefit of proponents and their consultants and provide generic guidance for assessing potential human health impacts resulting from Project-related activities.</p> <p>Relevant Health Canada guidance documents may include:</p> <p>Health Canada, 2017. <a href="#">Guidance for evaluating human health impacts in Environmental Assessment: Drinking and recreational water quality.</a></p> <p>Health Canada, 2017. <a href="#">Guidance for evaluation human health impacts in Environmental Assessment: Country foods.</a></p> <p>Health Canada, 2019. <a href="#">Guidance for evaluating human health impacts in environmental assessment: Human health risk assessment.</a></p> | Assessment of potential Project-related impacts to human health, based on Health Canada’s guidance documents. |

<sup>1</sup> *effects* in this context means changes to the environment or to health, social or economic conditions and the positive and negative consequences of these changes.

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|  |  |  |  | Based on the information provided by the Proponent, Health Canada cannot characterize the potential risks to human health. |  |  |  |  |
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Table 2: General and editorial comments - include comments such as formatting, layout or grammar

| Comment ID               | Document Reference  | Context and Background   | Instructions to Proponent   |
|--------------------------|---|--|---|
| <b>Example:</b><br>TC-01 | <b>Example:</b><br>Initial Project Description<br>Part D, section 17<br>Pg. 11                      | <b>Example:</b><br>The Proponent has identified the Navigation Protection Act under the list of federal powers, duties, or function; however, the section appears to be consistent with changes to the legislation introduced in 2019.   | <b>Example:</b><br>In 2019, the Navigation Protection Act was amended and renamed the Canadian Navigable Waters Act please ensure that the correct title is used. |
| HC-01                    | Initial Project Description (IPD), Section 15.3.1.2 Mitigation and Protective Measures, Pg. 201 PDF | The IPD states, "...Best Management Practices (BMPs) intended to satisfy safety thresholds by limiting dust, and vibrations as specified in any applicable regulating standards, health Canada's regulations and by-laws." It should be noted that Health Canada does not have any regulations and by-laws related to the Impact Assessment process. | Health Canada suggests that the statement be revised to "... and vibrations as specified in any applicable regulating standards and Health Canada's guidance".    |
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Appendix 1

Table 1: Health Canada's Draft iPD Comments – submitted March 2021

| Comment ID | Document Reference   | Valued Component     | Project Component                      | Description of the Potential Effect (Context and Rationale)   | Powers, Duties and Functions | Risk Characterization Rating | Instructions to the Proponent  |
|------------|--|----------------------|--|---|------------------------------|------------------------------|--|
| HC-01      | 15.1.1 Atmospheric Environment Pg. 105-107<br><br>Table 15-10: Planned Studies Pg. 131 | Health - Air Quality | Deconstruction and Construction phases | <p><b>The initial project description (iPD) does not provide detail on potential air quality impacts on human health.</b></p> <p>The iPD identifies potential air emissions from construction equipment and vehicles and dust from construction activities. Thus, changes to ambient air quality may occur during construction activities. Impact on air quality during destruction of the existing bridge is not mentioned in Section 15.1.1.</p> <p>The mitigation measures listed to reduce air emissions and dust (such as reducing vehicle idling time, shutting down equipment when not in use, stabilizing disturbed areas through the use of water for dust control, etc.) appear to be standard mitigations to address potential air quality effects. Please note that Health Canada is unable to comment on the effectiveness of the planned mitigation measures. Health Canada relies on Environment and Climate Change Canada (ECCC) for the "technical" effectiveness and the uncertainty surrounding mitigation measures.</p> | N/A                          | 3                            | <p>Health Canada recommends the following be requested from the proponent:</p> <ol style="list-style-type: none"> <li>1) Confirm that health impacts from air emissions will be assessed for all relevant project phases (i.e., deconstruction and construction phases). Health Canada suggests to identify a complete inventory of all potential air pollutants (including but not limited to nitrogen dioxide, sulphur dioxide, carbon monoxide, ozone, fine particulate matter (PM<sub>2.5</sub>), coarse particulate matter (PM<sub>10</sub>), polycyclic organic compounds, volatile organic compounds, diesel particulate matter (DPM) and metals).</li> <li>2) Consider a follow-up monitoring plan to confirm the effectiveness of mitigation measures.</li> </ol> |

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|       |  |                  |  | <p>The iPD notes that residual effects are anticipated to be low. The information provided is not sufficient to confirm whether there exists potential adverse effects on human health after mitigation measures have been implemented.</p> <p>Based on the information provided by the proponent, Health Canada characterizes the risk rating as 3. However, Health Canada recommends that the effects of air quality be included in the Tailored Impact Statement Guidelines (TISGs).</p>  |     |         | Refer to HC-3 for a link to Health Canada's <i>Guidance for evaluating human health impacts in environmental assessment: Air quality.</i>  |
| HC-02 | 15.1.2 Acoustic Environment<br>Pg. 107-108 | Health - Noise   | Deconstruction and Construction phases | <p><b>The noise assessment does not provide detail on potential noise impacts on human health.</b></p> <p>The iPD mentions that activities from both deconstruction of the existing bridge (associated with the use of pneumatic hammers and blunted chisel tools) and the construction phase (associated with the use of mobile equipment including trucks, cranes, excavators, bulldozers, compactors, tub boats, water pumps, generators, and drilling machines) will cause noise.</p> <p>The mitigation measures listed appear to be known/standard mitigation measures for noise effects (such as muffler systems, temporary noise barriers, restrict construction activities to daytime hours (7 am to 9 pm)). Please note that Health Canada is unable to comment on the effectiveness of the planned mitigation measures.</p> <p>In the context of noise exposure, two of the most common community reactions indicative of potential adverse health are complaints and annoyance. The iPD does not state whether a comprehensive communication plan, including complaint resolution protocols, will be developed as part of noise mitigation measures.</p> <p>The iPD notes that residual effects are anticipated to be low. The information provided is not sufficient to confirm whether there exists potential adverse effects on human health after mitigation measures have been implemented.</p> <p>Based on the information provided by the proponent, Health Canada characterizes the risk rating as 3. However, Health Canada recommends that the effects of noise be included in the TISGs.</p> | N/A | 3       | <p>Health Canada recommends the following be requested from the proponent:</p> <ol style="list-style-type: none"> <li>1) Assess construction noise lasting longer than 1 year as an evaluation of the change in percent highly annoyed (%HA) at each receptor.</li> <li>2) Develop a formalized complaint-response plan that describes how complaints will be received (e.g. website, telephone #, etc.), response time, and method(s) for resolution, including additional mitigation measures if required.</li> <li>3) Consider a follow-up monitoring plan to confirm the effectiveness of mitigation measures.</li> </ol> <p>Refer to HC-3 for a link to Health Canada's <i>Guidance for evaluating human health impacts in environmental assessment: Noise.</i></p> |
| HC-03 | Table 15-10: Planned Studies<br>Pg. 131    | Health - General | Deconstruction and Construction phases | <p><b>Health Canada understands that this draft document is still a work in progress and additional information on potential impacts of the proposed Project-related activities on human health will be provided in the future for review.</b></p> <p>Information concerning all human receptors potentially impacted by the proposed Project, including those considered key receptors, was not provided. Key receptors include sensitive receptors and other current and reasonably foreseeable human receptors that may be affected by project activities. The most sensitive receptors may include, but are not be limited to</p>  | N/A | Unknown | <p>Health Canada recommends an assessment of the potential health impacts as per Health Canada's guidance documents. These available guidance documents should support the proponent in completing an assessment of potential health risks resulting from the Project activities.</p> <p>Air quality (<a href="https://www.canada.ca/en/health-canada/services/publications/healthy-">https://www.canada.ca/en/health-canada/services/publications/healthy-</a></p>  |

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|  |  |  |  | <p>residences, health and social services institutions (hospitals, long-term care facilities, seniors’ residences etc.), educational institutions (schools, daycare centres, early childhood centres etc.), places of worship, tourism establishments (tourism information offices, museums, outdoor recreation areas, camp sites etc.), recreational areas (recreational land, urban parks, parks and conservation areas etc.), and First Nation habitation and traditional use sites (i.e., hunting camps, ceremonial areas etc.).</p> <p>Health Canada acknowledges that several Indigenous communities have submitted concerns about their right to harvest and consume fish as a result of potential impacts to fish and fish habitat in the Project Area. The proponent is anticipated to explore fish and fish habitat mitigation activities to address the concerns of Indigenous communities.</p> <p>Based on the information provided by the proponent, Health Canada cannot characterize the potential risks to human health.</p> |  |  | <p><a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-air-quality.html">living/guidance-evaluating-human-health-impacts-air-quality.html</a>)</p> <p>Noise<br/>(<a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-noise.html">https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-noise.html</a>)</p> <p>Drinking and recreational water quality<br/>(<a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-water-quality.html">https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-water-quality.html</a>)</p> <p>Country food (<a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-country-foods.html">https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-country-foods.html</a>)</p> <p>Human health risk assessment<br/>(<a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-risk-assessment.html">https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-risk-assessment.html</a>)</p> |
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Table 3: General and editorial comments - include comments such as formatting, layout or grammar – submitted March 2021

| Comment ID               | Document Reference   | Context and Background   | Instructions to Proponent  |
|--------------------------|--|--|--|
| <b>Example:</b><br>TC-01 | <b>Example:</b><br>Draft Initial Project Description<br>Part D, section 17<br>Pg. 11 | <b>Example:</b><br>The proponent has identified the Navigation Protection Act under the list of federal powers, duties, or function; however, the section appears to be inconsistent with changes to the legislation introduced in 2019. | <b>Example:</b><br>In 2019, the Navigation Protection Act was amended and renamed the Canadian Navigable Waters Act. Please ensure that the correct title is used. |
| HC-01                    | Draft Initial Project Description<br>Part 15.1.3<br>Pg. 109                          | The following sentence was repeated twice in the same paragraph, “there are no groundwater municipal water supplies near the Project”.   | Recommend revising this section so that the information is only stated once in the paragraph.  |