

**Comment Form – Draft Permitting Plan and Draft Tailored Impact Statement Guidelines – Federal Review Team**

**Great Bear Gold Project**

**Response required by: June 7, 2024**

All comments should be submitted via the Submit a Comment feature available on the Project’s Canadian Impact Assessment Registry page (<https://iaac-aeic.gc.ca/050/evaluations/proj/85832?culture=en-CA>). Documents can be uploaded using this feature. If you have any difficulties submitting this way, please contact the Registry directly at [registry-registre@iaac-aeic.gc.ca](mailto:registry-registre@iaac-aeic.gc.ca). All comments submitted using this form will be posted on the Registry website for the Project.

Please note that this is your opportunity to customize the draft Tailored Impact Statement Guidelines.

Department/Agency:	Health Canada		
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**Section 1 – Draft Permitting Plan:**

1. Confirm that all applicable legislative and regulatory oversight that may apply to the Project, under the authority of your department or agency, is accurately listed in the draft Permitting Plan.

<b>Not applicable</b>
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2. Indicate whether your department or agency has identified any power that it will be unable to exercise to allow the Project to proceed, in whole or in part. For more information, please refer to subsection 17(1) of the IAA.

<b>Not applicable</b>
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**Section 2 – Draft Tailored Impact Statement Guidelines:**

1. Please review the draft Tailored Impact Statement Guidelines (the Guidelines) sections that are applicable to your department’s or agency’s mandate.
2. Using the table below, given the context of the Project, please provide any comments and include your recommendation for how the final Tailored Impact Statement Guidelines should be adapted to address any comments.
  - Please indicate any corrections, additions or deletions that should be made to the text. Please provide a clear context and rationale for your recommendations.
  - Federal expert advice should be commensurate to the situational context of the Project and informed by risk-based prudence and evidence in the proponent’s Detailed Project Description<sup>1</sup> and Response to the Summary of Issues<sup>2</sup>, with a strong reliance on well-understood mitigation measures, existing guidance, and regulatory instruments that will manage effects.

Department – Comment ID (e.g., ECCC-01)	Draft Guidelines Section	Context and Rationale (provide an explanation of your comments)	Recommendation: provide text to be inserted or deleted. Be specific on the location within the draft Guidelines that the text would be added/deleted.
HC-01	<p><b>7.1 Baseline methodology, pdf p.34</b></p> <p><b>7.2 Selection of valued components, pdf p.36</b></p> <p><b>7.6 Cumulative effects assessment, pdf p.43</b></p> <p><b>8.6.2 Effects to groundwater</b></p>	<p>The draft Tailored Impact Statement Guidelines (the Guidelines) do not identify all potential valued components (VCs) or geographic boundaries for the impact assessment.</p>	<p>Health Canada recommends the following additions and deletions to the Guidelines in bold and strikethrough:</p> <p>a) Section 7.1, 5<sup>th</sup> bullet: “describe modelling methods and include assumptions, calculations of margins of error, and other relevant statistical information. Models should be validated using field data from the appropriate LSA <del>and</del> RSA;”</p> <p>b) Section 7.2, insert a new bullet under 6<sup>th</sup> paragraph (that begins with “Based on comments from participants...”): “<b>air quality</b>”</p> <p>c) Section 7.6, insert a new VC under 4<sup>th</sup> sub-bullet (that begins with “VCs for which cumulative effects were identified...”): “<b>air quality</b>”</p>

<sup>1</sup> <https://iaac-aeic.gc.ca/050/evaluations/document/155992>

<sup>2</sup> <https://iaac-aeic.gc.ca/050/evaluations/document/153313>

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	and surface water, pdf p.63		<p>d) Section 8.6.2, insert new 2<sup>nd</sup> and 3<sup>rd</sup> last sub-bullets: ”</p> <ul style="list-style-type: none"> <li>○ at project area boundary; and</li> <li>○ <b>at LSA boundary;</b></li> <li>○ <b>at RSA boundary; and”</b></li> </ul>
HC-02	<p><b>9.2.1. Biophysical determinants of health, pdf p.94</b></p> <p><b>Appendix 2 – Resources and guidance, pdf p. 154</b></p>	<p>While Health Canada supports the use of the Canadian Ambient Air Quality Standards (CAAQS) as the most stringent evaluation criteria for air quality (Sections 8.5.1 and 8.5.2), it should be noted that some CAAQS values are not entirely "<i>health-protective</i>" and cannot be used to fully estimate health risks.</p> <p>For a quantitative health risk assessment, Health Canada recommends using the World Health Organization (WHO) global air quality guidelines for fine particulate matter (PM<sub>2.5</sub>) and nitrogen dioxide (NO<sub>2</sub>) (24-hour and annual averaging periods). These guidelines have been set at the lowest exposure level of an air pollutant above which the WHO is confident that there is an increase in adverse health effects. Adding the new risk assessment approach to the Guidelines would help to inform health-based recommendations for air quality management.</p>	<p>Health Canada recommends the following additions to the Guidelines in bold:</p> <p>a) Section 9.2.1, insert a new footnote linked to 1<sup>st</sup> sub-bullet: "○ air quality*"</p> <p><b>"*It is recommended to use World Health Organization's (2021) global air quality guidelines for a quantitative risk assessment of PM<sub>2.5</sub> and NO<sub>2</sub> (24-hour and annual averaging periods). Although a 1-hour WHO global air quality guideline for NO<sub>2</sub> exists, it has not been re-evaluated in the latest update (2021). Thus, the 1-hour CAAQS for NO<sub>2</sub> is more stringent and might be more appropriate."</b></p> <p>b) In Appendix 2, Human Health, add a new reference: <b>WHO global air quality guidelines: particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide. World Health Organization. 2021. Available at: <a href="https://apps.who.int/iris/handle/10665/345329">https://apps.who.int/iris/handle/10665/345329</a></b></p>

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HC-03	<b>9.2.1. Biophysical determinants of health, pdf p.96</b>	Health Canada’s updated guidance <sup>3</sup> provides technical information on both quantitative and qualitative approaches to characterize the carcinogenic risk of diesel exhaust from a project. As such, the Guidelines no longer need to elaborate on these approaches.	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>Section 9.2.1., 10<sup>th</sup> bullet: “provide an assessment of the carcinogenicity of diesel exhaust <del>gases</del> when diesel engines are a source of air pollutant emissions for the Project [<b>refer to Health Canada’s Guidance for Evaluating Human Health Effects in Impact Assessment: Air Quality (2023)</b>]<sup>3</sup>]. In characterizing the carcinogenic risk of project-related diesel exhaust <del>gases</del>, the proponent has two options:</p> <ul style="list-style-type: none"> <li>○ <del>carry out a quantitative risk assessment based on the information in Health Canada’s (2022) report, which provides a quantitative assessment of the relationship between ambient PM2.5 exposure and lung cancer risk. A sample calculation is available upon request to: ia-ei@hc-sc.gc.ca; or</del></li> <li>○ <del>provide a qualitative risk assessment of the carcinogenic risk of diesel exhaust gases related to the Project, which includes three different elements to ensure transparency:</del> <ul style="list-style-type: none"> <li>▪ <del>identification of the main sources of diesel emissions for the Project and acknowledgement of the relative importance of diesel emissions as a source of air pollution for the Project;</del></li> <li>▪ <del>acknowledgement that diesel emissions have been labelled a human carcinogen by international authorities such as Health Canada, World Health Organization’s International Agency for Research on</del></li> </ul> </li> </ul>

<sup>3</sup> Health Canada. 2023. 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)

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			<p><del>Cancer, the U.S. Environmental Protection Agency and the California Environmental Protection Agency; and why a quantitative assessment of the carcinogenic risk of diesel emissions for the Project is not being done;</del></p>
HC-04	<p><b>9.1 Baseline conditions, pdf p.93</b></p> <p><b>9.3 Mitigation and enhancement measures, pdf p.99</b></p>	<p>The Guidelines do not consider surface waterbodies used for recreational purposes in the baseline health study. The areas near the Project site are known for various recreational activities, including fishing and canoeing, by local communities and tourists [Detailed Project Description (DPD)<sup>1</sup>, Sections D.8.2 and D.8.3, Figure D.8]. All potential exposure pathways, including those via recreational waters, should be considered in a Human Health Risk Assessment, or excluded based on a proper justification, to accurately characterize human exposure and associated health risks.</p>	<p>Health Canada recommends the following additions to the Guidelines in bold:</p> <p>a) Section 9.1, 5<sup>th</sup> last bullet: “describe drinking <b>and recreational</b> water sources, both surface and/or groundwater (permanent, seasonal, periodic or temporary), including approximate wellhead capture zones and the distance from project activities;”</p> <p>b) Section 9.1, 3<sup>rd</sup> last bullet: “provide baseline contaminant concentrations in ambient air, drinking <b>and recreational</b> water <b>sources</b>, and tissues of traditional foods consumed by Indigenous Peoples. The proponent should work with local Indigenous communities to collect tissue samples where appropriate;”</p> <p>c) Section 9.3, last bullet: “mitigation to avoid human health effects caused by changes to drinking <b>and recreational</b> water quality (such as signage, or alternative drinking water sources)”</p>
HC-05	<p><b>9.2.1. Biophysical determinants of health, pdf p.95</b></p>	<p>For a comprehensive assessment of project-related impacts on human health, the Guidelines require information on all potential Project-related contaminants, their emission sources, and human exposure pathways, including atmospheric deposition of diesel exhaust emissions [e.g., diesel particulate matter (DPM) and polycyclic aromatic</p>	<p>Health Canada recommends the following additions to the Guidelines in bold:</p> <p>Section 9.2.1, insert the following new bullet after 1<sup>st</sup> bullet: <b>“provide a list of project-related activities that may result in the release of contaminants of potential concern (COPCs) and an inventory of COPCs. Describe their environmental fate, and</b></p>

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		hydrocarbons (PAHs)] and fugitive dust onto the surface of edible plant tissues and subsequent human consumption.	<b>identify relevant human exposure pathways, including indirect effects, such as deposition of air contaminants (e.g., dust, diesel particulate matter, and PAHs) onto the surface of edible plant tissues”</b>
HC-06	<b>9.2.1. Biophysical determinants of health, pdf p.95</b>	<p>Health Canada supports evaluating potential exposure to cadmium and lead, as well as arsenic and mercury, via consumption of country foods due to their toxicological significance to human health.</p> <p>Additionally, treated mine effluent during operation, as well as overflow from pit lakes after decommissioning, is anticipated to flow into the Pakwash Lake via the Chukuni River (DPD, Sections C.3.3 and D.7.3). As an Ontario fish consumption advisory is currently in place for mercury and chromium in the Pakwash Lake<sup>4</sup>, it is prudent to take into consideration Project-related changes to chromium levels of the Pakwash Lake and its downstream waterbodies.</p>	<p>Health Canada recommends the following additions to the Guidelines in bold:</p> <p>Section 9.2.1, 3<sup>rd</sup> bullet: “describe how the project-related contaminants (e.g. arsenic, mercury, <b>cadmium, lead, chromium</b>) that can potentially end up in the water, air, or soil, may be taken up in country foods (i.e. foods that are trapped, fished, hunted, harvested or grown for subsistence, cultural or medicinal purposes);”</p>
HC-07	<b>9.2.1. Biophysical determinants of health, pdf pp.94 to 97</b>	<p>The bullets referring to psychosocial effects (e.g., food security) are misplaced in the biophysical determinants of health section.</p> <p>Additionally, food security includes four equally important pillars: availability (adequate supply),</p>	<p>Health Canada recommends the deletions to the Guidelines in strikethrough.</p> <p>a) Section 9.2.1, 4<sup>th</sup> and 5<sup>th</sup> sub-bullets:</p> <ul style="list-style-type: none"> <li>⊖ “current and future <del>accessibility, availability and quality</del> of country foods (traditional foods); and</li> </ul>

<sup>4</sup> Ministry of the Environment, Conservation and Parks (MECP). 2021. Fish consumption advisory. Available at: <https://www.ontario.ca/page/fish-consumption-report?id=50459330>

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		access (physical, financial and social access to preferred food), utilization (nutritious, safe, culturally appropriate food), and stability (having the resilience and security to maintain access, availability and utilization) <sup>5</sup> .	<ul style="list-style-type: none"> <li>⇨ current and future <del>accessibility, availability and quality</del> of water for drinking, recreational and cultural uses;”</li> </ul> <p>Health Canada recommends the following bullets be moved to Section 9.2.2 (Social determinants of health) from 9.2.1 (Biophysical determinants of health).</p> <p>b) Section 9.2.1, 4<sup>th</sup> last bullet: “document and take into account tolerance thresholds for potential adverse effects on health identified by Indigenous communities;”</p> <p>c) Section 9.2.1, 2<sup>nd</sup> last bullet: “with regard to potential effects on food security:</p> <ul style="list-style-type: none"> <li>○ describe changes in terms of accessibility, availability, <del>use, consumption, and quality</del> <b>utilization (quality and use) and stability</b> of country foods (traditional foods), and the potential effects related to these changes on physical and mental health of Indigenous Peoples;</li> <li>○ identify possibilities of avoidance of certain country food sources or drinking or recreational water sources by the Indigenous Peoples due to the perception of contamination; and”</li> </ul>
HC-08	<b>Section 8.5.2 Effects to the atmospheric, acoustic, and visual</b>	Health Canada has published updated guidance documents for evaluating human health effects in 2023. The most up-to-date guidance documents should be referenced throughout the Guidelines.	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>a) Section 8.5.2, 2<sup>nd</sup> last paragraph: “The proponent should refer to Health Canada’s Guidance for Evaluating Human Health</p>

<sup>5</sup> Peng, W., & Berry, E. M. 2019. The concept of food security. Encyclopedia of food security and sustainability, 2(1), 1-7.

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	<p><b>environment, pdf p.55</b></p> <p><b>Section 8.6.2 Effects to groundwater and surface water, pdf p.63</b></p> <p><b>Section 9.2.1 Biophysical determinants of health, pdf pp.95 to 96</b></p> <p><b>Appendix 2 – Resources and Guidance, Human health, pdf p.155</b></p>		<p><del>Impacts</del><b>Effects in Environmental Impact Assessment: Noise<sup>6</sup> and Guidance for Evaluating Human Health Impacts</b><del>Effects in Environmental Impact Assessment: Air Quality<sup>3</sup></del> to ensure that it provides the information and analysis considered necessary to assess the Project’s impacts on human health in relation to changes to the sound environment and air quality.”</p> <p>b) Section 8.6.2, last paragraph: “The proponent should refer to Health Canada’s Guidance for Evaluating Human Health <del>Impacts</del><b>Effects in Environmental Impact Assessment: Drinking and Recreational Water Quality<sup>7</sup></b> to ensure that it provides the information and analysis considered necessary to assess the Project’s effects on human health in relation to changes to water quality.”</p> <p>c) Section 9.2.1, 9<sup>th</sup> bullet: “(...) Use best practices in health risk assessment methods (see Health Canada, <del>2019</del><b>2023</b>. Guidance for <del>Assessing</del><b>Evaluating</b> Human Health <del>Impacts</del><b>Effects in Environmental Impact Assessments: Human Health Risk Assessment<sup>8</sup></b>);”</p> <p>d) Section 9.2.1, 12<sup>th</sup> bullet: “assess the cancer risks of human exposure to all potentially carcinogenic PAHs in the diesel mixture rather than to a single surrogate substance (refer to</p>

<sup>6</sup> Health Canada. 2023. 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)

<sup>7</sup> Health Canada. 2023. Guidance for Evaluating Human Health Effects in Impact Assessment: Drinking and Recreational Water Quality. Available at:

[https://publications.gc.ca/collections/collection\\_2024/sc-hc/H129-54-2-2023-eng.pdf](https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-2-2023-eng.pdf)

<sup>8</sup> Health Canada. 2023. Guidance for Evaluating Human Health Effects in Impact Assessment: Human Health Risk Assessment. Available at:

[https://publications.gc.ca/collections/collection\\_2024/sc-hc/H129-54-6-2023-eng.pdf](https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-6-2023-eng.pdf)



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			<p>Health Canada’s Guidance for Evaluating Human Health <del>Impacts</del><b>Effects</b> in Environmental<b>Impact</b> Assessments: <del>Human Health Risk Assessment</del><b>Air Quality (20192023)</b><sup>3</sup>,”</p> <p>e) Appendix 2, Human health, for all Health Canada guidance documents referenced: “Guidance for Evaluating Human Health <del>Impacts</del><b>Effects</b> in Impact Assessments: (...)”. “Health Canada. <del>2013</del><b>2023</b>”.</p>
HC-09	<p><b>9.1 Baseline conditions, pdf p.93</b></p> <p><b>9.2.1. Biophysical determinants of health, pdf p.95</b></p>	<p>An exposure route refers to the route by which a chemical physically contacts or enters the body (i.e., ingestion, inhalation, and dermal contact), whereas an exposure pathway is inclusive of an exposure route and other components, such as a contaminant source, a mechanism of chemical release, a retention or transport medium, and a point of potential contact with the contaminated medium (exposure point)<sup>9</sup>. For a comprehensive health risk assessment, it is more appropriate to evaluate information on all potential exposure pathways, rather than just exposure routes.</p>	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>a) Section 9.1, last paragraph: “(...) The proponent should refer to the Health Canada guides to ensure (...) and the multiple contaminant exposure <del>routes</del><b>pathways</b>.”</p> <p>b) Section 9.2.1, 6<sup>th</sup> bullet: “identify other potential <del>routes</del><b>pathways</b> of exposure to contaminants;”</p> <p>c) Section 9.2.1, 7<sup>th</sup> bullet: “provide a detailed justification for every contaminant of potential concern (COPC) or exposure <del>route</del><b>pathway</b> that would be excluded and/or eliminated from the assessment of the human health risks;”</p> <p>d) Section 9.2.1, 8<sup>th</sup> bullet: “conduct a problem formulation exercise and/or preliminary model predictions to determine (...);</p> <ul style="list-style-type: none"> <li>○ project formulation consists of (...):</li> </ul>

<sup>9</sup> Health Canada. 2021. Federal Contaminated Site Risk Assessment in Canada: Guidance on Human Health Preliminary Quantitative Risk Assessment (PQRA) version 3.0. Available at: [https://publications.gc.ca/collections/collection\\_2021/sc-hc/H129-114-2021-eng.pdf](https://publications.gc.ca/collections/collection_2021/sc-hc/H129-114-2021-eng.pdf)

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			<ul style="list-style-type: none"> <li>▪ development of the conceptual site model illustrating the connections existing between the COPC, the receptors and the exposure routes/pathways;”</li> </ul>
HC-10	<p><b>9.1. Baseline conditions, pdf p.92</b></p> <p><b>10.1.1. Community profile, pdf p.99</b></p>	<p>The local populations within the Project’s social area of influence should be clarified. The DPD includes a map showing the populated areas in proximity to the Project site. Local population centers are not solely contained within the boundaries of the towns called Red Lake and Ear Falls. The names used for these population centers on the map correspond to those used by Statistics Canada for their 2021 Census<sup>10</sup>. This adjustment in terminology will ensure that populations residing in other places, such as Balmertown (located within the Municipality of Red Lake) are also recognized.</p>	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>a) Section 9.1, 3<sup>rd</sup> paragraph, 1<sup>st</sup> bullet: “develop community health profiles that reflect the overall health of each potentially affected Indigenous community and <b>the Indigenous populations of the Municipality of Red Lake and the Township of Ear Falls</b> <del>Indigenous population</del> in general,”</p> <p>b) Section 10.1.1, 1<sup>st</sup> paragraph: “To understand the community context, the Impact Statement must prepare community profiles for each Indigenous community and for the <b>Indigenous populations of the Municipality of Red Lake and the Township of Ear Falls</b> <del>Indigenous population</del> in general, and describe:”</p>
HC-11	<p><b>9.1 Baseline conditions, pdf p.92</b></p>	<p>The addition of “communicable diseases” is recommended because sexually transmitted infections are of particular concern regarding an influx of male workers and potential increase in sexual exploitation.</p>	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>a) Section 9.1, 3<sup>rd</sup> paragraph, 1<sup>st</sup> bullet, 1<sup>st</sup> sub-bullet:</p> <ul style="list-style-type: none"> <li>• “health outcomes of interest, such as chronic diseases, <b>communicable diseases (e.g., sexually transmitted</b></li> </ul>

<sup>10</sup> Statistics Canada. 2023. Census Profile, 2021 Census of Population. Available at: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>

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		<p>The factor “gender-based violence” is part of the social environment within social conditions, and should not be considered a health outcome. It has been moved to another bullet where it would fit better as an example of health determinants being considered for subgroup analyses.</p> <p>In view of providing standard guidelines for the community health profile, the purpose of the proposed change is to maintain consistent use of terminology that aligns with key concepts such as effect pathways (i.e., interconnections among factors). Gender-based violence is an intermediate factor that links project workers (a project factor), their families and/or community members to a health factor (i.e., mental well-being) and health outcomes (i.e., physical injury, and increased biological risk of allostatic load), toward the end of effect pathways.</p>	<p><b>infections), and mental health and addictions; rate of gender-based violence;”</b></p> <p>b) Section 9.1, 3<sup>rd</sup> paragraph, 5<sup>th</sup> bullet: “describe the determinants of health for subgroups within each community <b>(e.g., gender-based violence)</b>”</p>
HC-12	<b>9.1 Baseline conditions, pdf p.93</b>	<p>The expression “abovementioned factors” is ambiguous. Furthermore, interconnections may exist among economic, social/cultural and psychosocial factors as well as between the social determinants of health (SDOH) and health factors.</p> <p>A key task regarding baseline considerations is demonstrating a clear preliminary understanding of how a given project may be linked to health effects in order to support the selection of SDOH, as the intermediate factors, and establish their relevance.</p>	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>Section 9.1, 3<sup>rd</sup> paragraph, 6<sup>th</sup> bullet: “illustrate the interconnections <del>between the abovementioned factors, contributing positively or adversely to social/ community well-being,</del> <b>among project components and activities (e.g., project location, workforce recruitment and requirements), the relevant social determinants of health, and health factors (e.g., mental well-being and/or health-related behaviours, where applicable, or in general terms, health equity)</b> <del>related to mental</del></p>

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		<p>In addition, starting the examination of interconnections with the identification of pertinent project components/activities would help ensure that the main SDOH have been identified and the necessary baseline information has been gathered. The addition of examples would bring further clarity to the terms being used.</p> <p>The health factor “health equity” would apply in instances where the link between a project-relevant SDOH and a combination of health factors can only be inferred, such as the link between housing and health status. This consideration concerns GBAPLUS, in particular. The last part of the text can be deleted as it has become redundant.</p>	<p><del>and physical wellbeing, to identify potential interactions of effects;”</del></p>
HC-13	<p><b>9.3. Mitigation and enhancement measures, pdf pp.98 to 99</b></p>	<p>One of the main purposes of assessing project effects is to inform ways to improve project outcomes. The proposed mitigation approaches address issues common to mining projects.</p> <p>A mining project's workforce requirements, resulting in working conditions that include rotational shift work, are known to be associated with a decline in mental well-being and a related increase in substance use, which may signal unhealthy coping with daily on-the-job stressors. Temporary construction work is another source of stress in terms of job insecurity.</p>	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>a) Section 9.3, 1<sup>st</sup> paragraph, 4<sup>th</sup> bullet: “identify any measures that would reduce negative effects <b>or enhance positive effects on the project workers’ state of mental health and help cultivate personal resilience, for example</b> <del>(e.g.,</del> shuttle services for safe and restful commuting, rest breaks for recovery on the job, life-skills training <del>such as</del> <b>(e.g.,</b> financial management and <b>adaptive</b> coping strategies), <del>including</del> <b>and food literacy education for healthy eating, along with offers of palatable, nutritious meal options in the workplace cafeteria to enable healthy food choices;</b></p> <p>o if applicable, identify any measures to minimize any potential exacerbation of the opioid crisis currently being experienced in</p>

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		<p>Mitigation strategies should include preventative, positively-oriented resilience building initiatives for the off-duty workforce (including Indigenous workers). Broad mitigation measures directed toward off-duty project workers will include, as a side-benefit, a greater potential for reducing the risk of stress-related adverse effects on family dynamics and community safety, for the local population including the nearby Indigenous communities.</p>	<p>northern Ontario, and measures for preventing substance use on and off the worksite (<b>e.g., stress management training</b>);</p> <p>b) Section 9.3, insert a new sub-bullet under 4<sup>th</sup> bullet: “<b>identify measures to provide a healthy camp life environment (e.g., recreation, entertainment and communication services, access to culturally-appropriate supports)</b>;”</p>
HC-14	<p><b>10.1.1. Community profile, pdf p.100</b></p> <p><b>9.1 Baseline conditions, pdf p.92</b></p>	<p>The factors “lifestyle” and “rates of sexually transmitted infections” belong under the community health profile (Section 9.1), instead of under the community profile, since they represent health-related behaviours and health outcomes, respectively.</p> <p>If mention of alcohol and drug use is preferred in the social condition section as well as in the health condition section (where this already exists), then it would be better to include instead “access to alcohol and drugs” (i.e., collectively referred to as substances). This represents the intermediate factor that links project factors to the health-related behaviour, “alcohol and drug use.” This distinction is important to make since mitigation measures should focus on access rather than the behaviour itself.</p> <p>In addition, the term “lifestyle” implies a choice. In the context of impact assessments, the term</p>	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>a) Section 10.1.1, 1<sup>st</sup> bullet: “influences on community well-being (e.g. disposable income, cost of living, <del>lifestyle</del>, language, <del>rates of access to</del> alcohol and <del>drugs</del> <del>substance use</del>, and <del>rates of</del> illegal activities and violence; <del>rates of sexually transmitted infections</del>, and gender-based violence), including indicators proposed by Indigenous communities;”</p> <p>b) Section 9.1, 3<sup>rd</sup> paragraph, 1<sup>st</sup> sub-bullet: “health outcomes of interest, such as chronic diseases, <b>communicable diseases (e.g., sexually transmitted infections)</b> and mental health and addictions;”.</p>

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		<p>“health-related behaviours” is more appropriate because such behaviours by the populations within a project’s social area of influence are likely to be affected by changes to economic and social conditions, beyond their ability to make the best choices for themselves.</p>	
HC-15	<p><b>10.2.1. Effects to community well-being, pdf p.101</b></p>	<p>A major health effect pathway starts with the recruitment of non-local workers linked to economic and social factors that are in turn linked to the propagation of sexually transmitted infections (STIs). Focus should be placed on the intermediate factor of sexual exploitation (along with gender-based violence) rather than the health outcome of STIs at the very end of health effect pathways.</p> <p>Although an increased rate of STIs could provide a proxy indication of a rise in sexual exploitation, effect analyses could be based on a qualitative effect assessment for the purpose of identifying mitigation measures.</p>	<p>Health Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>Section 10.2.1, 1<sup>st</sup> paragraph, 7<sup>th</sup> bullet: “describe <b>qualitatively the potential effects of an influx of in-migrant workers on local populations, especially the overall well-being of Indigenous women and girls, through</b> <del>related to greater propagation of sexually transmitted infections</del> <b>sexual exploitation</b> and gender-based violence (e.g. harassment or human trafficking);”.</p>
PHAC-01	<p><b>9.1. Baseline conditions, pdf p.93</b></p> <p><b>9.2.2. Social determinants of health, pdf p.97</b></p>	<p>“Infrastructure and services” is a critical category of SDOH, especially in regards to mining projects that involve an influx of in-migrant workers and their families. These services and the infrastructure that supports them should be considered collectively rather than on a separate basis. The term “characterize” appears in strikethrough since in the context of this requirement, there would not be any distinction between this term and the term</p>	<p>Public Health Agency of Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>a) Section 9.1., 3<sup>rd</sup> paragraph, 7<sup>th</sup> bullet: “describe <del>and characterize</del> the existing <b>infrastructure and available health and social services (including related and programs), and public safety services (i.e., fire protection, police protection, and emergency medical service), currently being offered to</b></p>

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		“describe”.	<p><b>potentially affected populations, including health care as well as the level of provider capacity for these services;”</b></p> <p>b) Section 9.2.2., 1<sup>st</sup> paragraph, 6<sup>th</sup> bullet: “describe potential effects on access to <del>social and</del> health, <b>public safety and social</b> services, including the increased use of <del>health services and related social</del> <b>these</b> services in the relevant communities and the region;”</p>
PHAC-02	<b>Section 9.2.2 Social determinants of health, pdf p.98</b>	The potential impact of project activities on Indigenous Peoples’ health as a result of changes in their relationship with the land is not adequately captured by “potential avoidance”. Relationships with the land may change in ways that do not necessarily result in avoidance per say, but could still result in effects on Indigenous Peoples’ cultural continuity (e.g., spiritual disconnection, disruption of intergenerational teachings), with major effects on their mental well-being (through solastalgia due to their losses) and physical well-being (through dietary changes as well) <sup>11</sup> .	<p>Public Health Agency of Canada recommends the following deletions and additions to the Guidelines in strikethrough and bold:</p> <p>Section 9.2.2., 1<sup>st</sup> paragraph, 8<sup>th</sup> bullet: “describe <del>how</del> <b>Indigenous Peoples’</b> potential avoidance of <del>land near</del> <b>areas of project-related disturbances, or any potential changes to their relationship with the land, air, and water, components by Indigenous Peoples due to <b>real or</b> perceived changes in <del>to</del> environmental quality and tranquility, <b>and how this</b> was considered in assessing potential effects on the diet and <b>mental well-being health</b> of Indigenous <del>P</del>peoples;”</b></p>

<sup>11</sup> First Nations Health Authority. 2024. First Nations Perspective on Health and Wellness. Available at: <https://www.fnha.ca/wellness/wellness-for-first-nations/first-nations-perspective-on-health-and-wellness>

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		The term “relationships” is more broadly inclusive and reflects the emphasis on relationship with the land as per suggested guidance <sup>12</sup> .	
PHAC/HC-01	<b>Section 9.2.2 Social Determinants of Health pdf p.97</b>	The potential effects of temporary work camps extend beyond the safety of Indigenous women and girls in nearby communities. Broadening the scope of potential effects regarding temporary work camps and working conditions to include effects on Indigenous employees (including but not limited to concerns regarding safety in the workplace) and the families of Indigenous workers is a more comprehensive approach that captures the unique dynamics of work requirements and their potential effects on overall well-being that are not otherwise captured in Section 9.2.2.	Public Health Agency of Canada and Health Canada recommend the following additions to the Guidelines in bold:  a) Section 9.2.2, 1 <sup>st</sup> paragraph, 5 <sup>th</sup> bullet: “describe the effects that temporary work camps <b>may</b> have on the safety of <b>nearby communities, and in particular, the safety of the Indigenous women and girls, and any contributing factors to these effects;</b>  b) Section 9.2.2, 1 <sup>st</sup> paragraph, insert a new 6 <sup>th</sup> bullet and its sub-bullet: “ <b>describe the effects that challenging working conditions, work camp accommodations, and other contributing factors may have on the mental well-being of Indigenous project workers, their coping abilities, and their family life, as well as any additional health effects for these workers and family members:</b> <ul style="list-style-type: none"><li>○ <b>Give particular consideration to rotational shiftwork, exposures to workplace violence and/or harassment, and social isolation;</b>”</li></ul>

*Insert as many rows as applicable*

<sup>12</sup> Lewis et al. 2021. Intangible Impacts - More-than-mental health: Indigenous identity, culture, community and relationship with land are integral to Indigenous wellbeing (training manual). Western University. Available at: <https://www.canada.ca/content/dam/iaac-acei/documents/research/More-than-mental-health.pdf>