

May 28, 2026

Keith Morrison  
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Nunavut Impact Review Board  
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Sent by email to: [info@nirb.ca](mailto:info@nirb.ca); and, [kmorrison@nirb.ca](mailto:kmorrison@nirb.ca)

**Subject: Health Canada's Response to the Comment Request for B2Gold's Back River Project 2025 Annual Monitoring Report**

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Dear Keith Morrison:

Thank you for your letter dated April 13, 2026, requesting comments on the Back River Project 2025 Annual Monitoring Report provided by B2Gold.

Health Canada (HC) participates in environmental assessments as a federal authority under the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14 (*NuPPAA*). Upon request, HC makes available specialist or expert information or knowledge in its possession to review panels and responsible authorities.

The objective and scope of HC's review was to verify that potential health risks of the project are properly identified and to support Responsible Authorities prevent, reduce, and mitigate the potential health impacts of project activities.

HC has reviewed the 2025 Annual Report, and comments are provided in the tables below, as well as the attached worksheet.

Should you have any questions concerning HC's response, please contact the undersigned at [cassidy.dutchak@hc-sc.gc.ca](mailto:cassidy.dutchak@hc-sc.gc.ca).

Sincerely,

*Cassidy Dutchak*



Health Canada Santé  
Canada Canada

Cassidy Dutchak  
Impact Assessment Specialist  
Environmental Assessment Division (EAD)  
Healthy Environments and Consumer Safety Branch (HECSB)  
Health Canada

cc: Heather Jones-Otazo, Senior Manager, EAD, HECSB, Health Canada  
Julie Anderson, Senior Environmental Health Advisor / Team Lead, Ontario Region,  
EAD, HECSB, Health Canada  
Matthew Goncalves, Impact Assessment Coordinator, EAD, HECSB, Health Canada

## Back River Project 2025 Annual Monitoring Report

### Health Canada (HC) Comments

<b>Comment Number:</b>	HC-01
<b>Subject/Topic:</b>	Project Certificate Condition No. 2, Air Quality Emissions
<b>References:</b>	Goose Project 2025 Annual Report, B2Gold Nunavut <ul style="list-style-type: none"> <li>• 4.5.1 Air Quality (PC TCs 1 through 5), PDF pp. 64-93</li> <li>• Appendix E Air Quality Monitoring and Management Plan</li> </ul>
<b>Comment:</b>	<p><b>Exceedances of nitrogen dioxide (NO<sub>2</sub>), dustfall, and PM<sub>10</sub> merit further consideration to ensure potential health risks are adequately addressed.</b></p> <p>Both Condition 2 of the Project Certificate and the Air Quality Monitoring and Management Plan (AQMMP) require monitoring results to be compared to FEIS predictions and relevant guidelines. Where exceedances occur, additional analysis, monitoring, and mitigation are to be undertaken, as needed.</p> <p>In 2025, recorded NO<sub>2</sub> and dustfall levels exceeded the predictions in the FEIS, the Canadian Ambient Air Quality Standards (CAAQS), and the Government of Nunavut’s Environmental Guideline for Ambient Air Quality<sup>1</sup>. Concentrations of particulate matter (PM<sub>10</sub>) also exceeded FEIS predictions at Goose Camp (24-hour: 69 µg/m<sup>3</sup>), which the Annual Monitoring Report (AMR) attributed to a haul road constructed in 2025 and diesel generators not accounted for in the FEIS. HC notes the planned relocation of the Goose air quality station in 2026 and encourages selecting a location that remains representative of, and protective for, potentially exposed human receptors. Proactive monitoring at relevant locations can help address reported exceedances and uncertainty in the FEIS air quality modelling.</p> <p>Regarding the NO<sub>2</sub> exceedances, the AMR states (PDF p. 84): <i>“Since the only observed continuous NO<sub>2</sub> exceedances were related to CAAQS or a surrogate to CAAQS (i.e., WHO AQG), which is intended to be used for regional airshed management and not to assess project effects (CCME 2020), further investigation into the exceedances to evaluate the need for mitigation measures or additional monitoring was not warranted, and therefore not completed.”</i></p>

<sup>1</sup> Government of Nunavut. 2023. Environmental Guideline for Ambient Air Quality. <https://www.gov.nu.ca/sites/default/files/publications/2024-05/Ambient%20Air%20Quality%202023-03.pdf>

	<p>HC considers NO<sub>2</sub> a non-threshold contaminant for human health effects; therefore, any increase in exposure can result in an incremental population health risk. As such, the CAAQS are not “pollute-up” to levels, as health effects can occur at concentrations below the CAAQS, and HC recommends consideration of the best available and economically achievable technology and techniques to keep NO<sub>2</sub> and other air pollutants as low as reasonably achievable.</p> <p>HC acknowledges that World Health Organization (WHO) guidelines were considered in the 2025 AMR and supports this approach in addition to the CAAQS. HC encourages continued efforts to reduce emissions to levels that do not exceed applicable guidelines.</p>
<b>Conclusion/Request:</b>	<ol style="list-style-type: none"> <li>1. HC suggests that updating the air quality portion of the health risk assessment using observed concentrations and/or revised modeling would ensure that the AQMMP reflects current conditions and better aligns mitigation and monitoring with assessed risks.</li> <li>2. Given the documented exceedances of NO<sub>2</sub>, dustfall, and PM<sub>10</sub> relative to predictions and relevant guidelines, HC recommends considering additional mitigation measures to reduce emissions.             <ol style="list-style-type: none"> <li>a. Apply both CAAQS and WHO guidelines as benchmarks for continuous air quality improvement, acknowledging that health effects can occur below CAAQS levels and that these standards are not intended as “pollute-up” to thresholds.</li> </ol> </li> </ol>

<b>Comment Number:</b>	HC-02
<b>Subject/Topic:</b>	Project Certificate Conditions 9&10, Noise Abatement
<b>References:</b>	<p>Goose Project 2025 Annual Report, B2Gold Nunavut</p> <ul style="list-style-type: none"> <li>• 4.5.3 Noise and Vibration (PC TCs 9 through 10), pp. 112-120</li> </ul> <p>260413-12MN036-2025 Annual Report Comment Req Worksheet</p>
<b>Comment:</b>	<p><b>There is uncertainty regarding whether the Noise Abatement Monitoring Plan (NAMMP) is sufficient to prevent potential noise-related annoyance and sleep impacts in off-duty workers.</b></p>

	<p>As described in the AMR (PDF pp. 112-117), noise monitoring was conducted according to the NAMP in fulfillment of Conditions 9 and 10, which require implementation of noise-reduction measures and mitigation strategies to protect the health of humans and wildlife.</p> <p>The 2025 Annual Report Comment Worksheet summary (TC 9) reported that: “<i>Personal noise monitoring completed in 2025 across multiple departments and SEGs [Similar Exposure Groups] indicates that occupational noise remains a significant exposure agent on the Goose Project.</i>” Elevated noise levels were reported across several monitoring locations (as reflected in Tables TC9-2 and TC9-3), but the worker’s camp was not explicitly listed or assessed as a receptor. It is unclear whether any of the personal or area noise monitoring locations would be reflective of noise exposure experienced by off-duty workers.</p> <p>The presence of human receptors at the Goose workers camp who reside on-site while off duty, as well as the potential presence of traditional land users, may warrant additional consideration of possible health impacts related to noise. Noise can adversely affect off-duty workers including via noise annoyance or sleep disruption. Off-duty workers spend time at the camp for meals, recreation, and sleeping, so it is important to assess the potential health impacts of project-related noise on this population, particularly if results indicate that exposure levels at many receptor locations exceed guidelines or target levels identified in the NAMP.</p>
<p><b>Conclusion/Request:</b></p>	<ol style="list-style-type: none"> <li>1. HC supports the intention to continue noise monitoring in 2026 to evaluate the effectiveness of mitigation measures.</li> <li>2. HC recommends updating the current NAMP to include off-duty workers as potentially impacted human receptors to ensure that noise levels do not adversely affect off-duty workers residing at the camp.             <ol style="list-style-type: none"> <li>a. Monitor noise exposure for off-duty workers as part of NAMP monitoring.</li> <li>b. If necessary, based on monitoring results, consider enhanced noise-reduction measures for off-duty workers.</li> </ol> </li> </ol>

<p><b>Comment Number:</b></p>	<p>HC-03</p>
<p><b>Subject/Topic:</b></p>	<p>Project Certificate Condition 96, Harvest Study</p>
<p><b>References:</b></p>	<p>Goose Project 2025 Annual Report, B2Gold Nunavut</p>

	<ul style="list-style-type: none"> <li>• Project Certificate Condition 96, PDF pg. 271</li> <li>• Table 2.2, 2025 Community Feedback, PDF pg. 44</li> </ul>
<b>Comment:</b>	<p><b>Commencement of Five-Year Harvest Study data collection</b></p> <p>Term and Condition 96 (TC 96) introduces a new requirement for B2Gold to conduct a five-year harvest study, scheduled to begin in 2026. HC acknowledges the harvest study will commence this year and notes it could be a means by which to address concerns, including those around country food safety and confidence in consuming those species. Table 2.2 of the AMR notes community interest in harvesting and the study. The Proponent could consider these aspects when developing monitoring plans and engaging with communities.</p>
<b>Conclusion/Request:</b>	<ol style="list-style-type: none"> <li>1. HC remains available to review study plans or results upon request. The following guidance may be useful to consider when designing a harvesting study that includes country food safety: Guidance for Evaluating Country Foods (Health Canada, 2023), available at the link below.  <a href="https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-5-2023-eng.pdf">https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-5-2023-eng.pdf</a> </li> </ol>