

Environmental Health Program (EHP)  
Regulatory Operations and Enforcement Branch (ROEB), Health Canada  
391 York Avenue  
Winnipeg, MB R3C 0P4

June 20, 2025

Keith Morrison  
Manager, Project Monitoring  
Nunavut Impact Review Board  
P.O. Box 1360  
Cambridge Bay, NU X0B 0C0

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 2024 Annual Monitoring Report**

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Dear Keith Morrison,

Thank you for your letter dated May 21, 2025, requesting comments on the Back River Project 2024 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 the potential health impacts of the project are properly identified and to support responsible authorities to prevent, reduce, and mitigate the potential health impacts of project activities.

HC has reviewed the 2024 Annual Monitoring Report with particular consideration to conditions in Project Certificate 007 that relate to monitoring and mitigation of potential Project-related impacts to human health. HC's comments are attached.



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

Sincerely,

A handwritten signature in black ink, appearing to be "D Kitchen", written over a horizontal line.

David Kitchen  
Regional Manager, MB/SK/NU Region  
Environmental Health Programs  
Regulatory Operations & Enforcement Branch  
Health Canada

cc: Heather Jones-Otazo, Manager, Environmental Assessment and Contaminated Sites (EACS) Division, Healthy Environments and Consumer Safety Branch (HECSB), Health Canada  
Cassidy Dutchak, Impact Assessment Specialist, EHP, ROEB, Health Canada  
Jérémie Allain, Impact Assessment Specialist, EHP, ROEB, Health Canada  
Wendy Wilson, Senior Environmental Health Specialist, EACS, HECSB, Health Canada  
Julie Anderson, Environmental Assessment Coordinator, EACS, HECSB, Health Canada

## Back River Project 2024 Annual Monitoring Report

### Health Canada Comments

<b>Comment Number:</b>	HC-01
<b>Subject/Topic:</b>	Comparison to health-based WHO Air Quality Guidelines
<b>References:</b>	Back River Project 2024 Annual Report, Project Certificate 007, Condition No. 2 Nunavut Impact Review Board 2023-2024 Annual Monitoring Report, Back River Project, pg. 30
<b>Comment:</b>	<p><b>Use World Health Organization guidelines for evaluating 24-h nitrogen dioxide concentrations.</b></p> <p>Comparisons of air quality criteria against relevant health-based guidelines are important for understanding potential risks to human receptors and are a requirement for compliance with Project Certificate Condition No.2.</p> <p>The revised Air Quality Monitoring and Management Plan (AQMMP) sets out standards and guidelines against which the air quality parameters will be screened. The NIRB's 2023 comments included direction to the Proponent to compare measured concentrations of air quality parameters to the relevant Canadian Ambient Air Quality Standards (CAAQS).</p> <p>As the CAAQS do not currently include a guideline for 24-h nitrogen dioxide (NO<sub>2</sub>), the World Health Organization Global Air Quality Guidelines (WHO AQG)<sup>1</sup> for 24-h NO<sub>2</sub> can be used to compare against measured concentrations. 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.</p> <p><sup>1</sup>World Health Organization (WHO), 2021. 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. 273 p. Available online at: <a href="https://apps.who.int/iris/handle/10665/345329">https://apps.who.int/iris/handle/10665/345329</a></p>
<b>Conclusion/Request:</b>	<p>HC recommends the following in future air quality monitoring reports:</p> <ol style="list-style-type: none"> <li>1. Compare measured NO<sub>2</sub> against the 24-h WHO AQG value when interpreting results from project monitoring and assessing the need for additional mitigations to protect human health.</li> </ol>