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June 23, 2023

Brittany Hogaluk  
Environmental Administrator  
Nunavut Impact Review Board  
P.O. Box 1360  
Cambridge Bay, NU X0B 0C0

Sent by email to: [info@nirb.ca](mailto:info@nirb.ca)

**Subject: Health Canada's response to the Comment Request for Agnico Eagle Mines Limited's Doris North Gold Mine and Phase 2 Hope Bay Belt Project 2022 Annual Monitoring Report**

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Dear Brittany Hogaluk:

Thank you for your letter dated May 11, 2023, requesting comments on the Doris Bay/Phase 2 Hope Project 2022 Annual Monitoring Report provided by Agnico Eagle Mines Limited.

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*). HC makes available specialist or expert information or knowledge in its possession to review panels and responsible authorities, among others.

The objective and scope of HC's review is 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 2022 Annual Monitoring Report and has provided its comments in the attachment.

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,

David Kitchen  
Regional Manager, MB/SK/NU Region, EHP  
ROEB, Health Canada

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cc: Heather Jones-Otazo, A/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  
Ninon Lyrette, Senior Environmental Health Specialist, EACS, HECBS, Health Canada  
Wendy Wilson, Environmental Assessment Coordinator, EACS, HECSB, Health Canada

# Doris North Gold Mine and Phase 2 Hope Bay Belt Project 2022 Annual Monitoring Report

## Health Canada Comments

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| <b>Comment Number:</b> | HC-01   |
| <b>Subject/Topic:</b>  | Noise Abatement Monitoring Plan   |
| <b>References:</b>     | <p>Agnico Eagle Mines Limited Hope Bay Project 2022 Nunavut Impact Review Board Annual Report</p> <p>Wildlife Mitigation and Monitoring Plan (Agnico, 2021), NIRB ID No: 341588</p> <p>Hope Bay Health and Safety Management Plan (TMAC, 2017), NIRB ID No: 314716</p> <p>Nunavut Impact Review Board 2021-2022 Monitoring Report Doris North Gold Mine and Phase 2 Hope Bay Belt Projects</p>  |
| <b>Comment:</b>        | <p><b>HC encourages the development of a stand-alone Noise Abatement Monitoring Plan.</b></p> <p>Project Certificate Term and Condition No. 04 requires that, “The Proponent shall, in consultation with the Government of Nunavut-Department of Environment, Environment and Climate Change Canada, and Health Canada, maintain a Noise Abatement Monitoring Plan” (<i>Agnico 2022 Annual Monitoring Report</i> PDF pg. 6-52). Health Canada does not appear to have been consulted on maintaining a Noise Abatement Monitoring Plan (NAMP).</p> <p>In response to Term and Condition No. 04, the Proponent states in their 2022 Annual Report that noise monitoring information is currently found in the Wildlife Mitigation and Monitoring Plan (Agnico, 2021), and the Hope Bay Health and Safety Management Plan (TMAC, 2017).</p> <p>Development of a stand-alone document would improve access to relevant information on project-related noise, the noise abatement plan, and associated monitoring. Health Canada has published guidance that could support Agnico Eagle in developing and maintaining a NAMP (refer to Health Canada. 2017. <a href="#">Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise</a>. Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario).</p> |

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| <b>Conclusion/Request:</b> | HC recommends that future annual reports provide the NAMP as a stand-alone document, as suggested by the NIRB in the <i>Nunavut Impact Review Board 2021-2022 Monitoring Report</i> . |
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| <b>Comment Number:</b> | HC-02   |
| <b>Subject/Topic:</b>  | Noise Complaint Resolution Process  |
| <b>References:</b>     | <p>Nunavut Impact Review Board 2021-2022 Monitoring Report Doris North Gold Mine and Phase 2 Hope Bay Belt Projects Agnico Eagle Mines Limited</p> <p>Agnico Eagle Hope Bay Project 2022 Nunavut Impact Review Board Annual Report Appendix D-3: Wildlife Mitigation and Monitoring Program Compliance Report</p> <p>Hope Bay Health and Safety Management Plan (TMAC, 2017), NIRB ID No: 314716</p> <p>TMAC Resources Madrid-Boston Project Final Environmental Impact Statement Annex V8-5. Hope Bay Project Community Involvement Plan</p>   |
| <b>Comment:</b>        | <p><b>HC recommends the implementation of a communications plan and noise complaint resolution process as part of the Noise Abatement and Monitoring Plan to minimize impacts on traditional land users and on-site, off-duty workers.</b></p> <p>The Proponent has provided information regarding noise monitoring results and noise impacts from blasting activities in the <i>Wildlife Mitigation and Monitoring Plan</i> (Agnico, 2022), and <i>Hope Bay Health and Safety Management Plan</i> (TMAC, 2017). HC acknowledges the Proponent's Community Involvement Plan, but notes that development of a noise-specific complaint resolution process including a formalised means of receiving and responding to complaints in a timely fashion as part of the Noise Abatement Monitoring Plan would be effective mitigation measures that are easily implemented.</p> <p>In addition, it is recommended that the Proponent inform all people (Indigenous and non-Indigenous) who may be affected by Project-related noise in advance of any notable changes in sound levels (e.g., blasting). This type of communication may help identify and mitigate many concerns related to noise. Multiple methods of communication (e.g., telephone, mail, signage, websites) can support effective and efficient communication between the Proponent and land users.</p> |

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|                            | Existing and future human receptors impacted by Project-related noise may include members of the public carrying out traditional land use activities, and off-duty workers who are on-site. Despite the absence of traditional land use activities currently in the area, a precautionary approach could consist of a noise communications plan, and complaint resolution process to reduce the impact of noise on the potential land users, and on-site off-duty workers. |
| <b>Conclusion/Request:</b> | HC recommends the implementation of a communications plan to notify the public prior to any excessively noisy activities or an accident or malfunction that results in unforeseen changes to the acoustic environment, and a complaint resolution process to address noise-related complaints in a timely manner.  |

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| <b>Comment Number:</b>     | HC-03  |
| <b>Subject/Topic:</b>      | Human Health and Ecological Risk Assessment – Assessment of Risks from Consumption of Fish from Marine/Freshwater Aquatic Environment  |
| <b>References:</b>         | Agnico Eagle Mines Limited Hope Bay Project 2022 Nunavut Impact Review Board Annual Report   |
| <b>Comment:</b>            | <p><b>HC supports continued monitoring of freshwater and marine aquatic fish species for assessment of potential risks to human consumers.</b></p> <p>In the <i>2022 Annual Report</i> (PDF pg. 6-99), the Proponent reported that metals had been measured in marine and freshwater environments in fulfillment of Project Certificate Condition No. 51. To date, there have been no Project-related exceedances of relevant CCME guidelines. HC notes that the Environmental Effects Monitoring program in Roberts Bay, which is currently under development, will continue to monitor metals in the marine environment and inform assessments of potential risks from consumption of fish (PDF pg. 6-99).</p> |
| <b>Conclusion/Request:</b> | HC encourages ongoing monitoring of contaminants in freshwater and marine fish, and communication with local consumers to confirm local consumption patterns.  |

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| <b>Comment Number:</b> | HC-04   |
| <b>Subject/Topic:</b>  | Exceedances of Criteria Air Contaminants                      |
| <b>References:</b>     | Phase 2 Hope Bay Belt Project NIRB Project Certificate No.:09 |

|                 | <p>NIRB, 2022. Nunavut Impact Review Board 2021-2022 Monitoring Report Doris North Gold Mine and Phase 2 Hope Bay Belt Projects Agnico Eagle Mines Limited NIRB File No. 05MN047 and 12MN001</p> <p>Agnico Eagle Mines Limited Hope Bay Project 2022 Nunavut Impact Review Board Annual Report, Appendix D1</p> <p>Health Canada Final Written Submission 2018 Technical Review Comments to the NIRB, TMAC Resources Inc. Phase 2 Hope Bay Belt Project</p>  |   |            |              |    |  |   |    |   |   |
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| <b>Comment:</b> | <p><b>HC acknowledges the Proponent’s plan to monitor nitrogen dioxide (NO<sub>2</sub>) and confirms to the Board that Commitments 63 and 65 reflect HC’s advice on potential mitigations provided during the environmental assessment review for the Hope Bay Phase 2 Project.</b></p> <p>The NIRB requested information from the Proponent and HC on Commitments 63 &amp; 65 in the Board’s 2021-2022 Monitoring Report (NIRB, 2022) (Appendix B, Phase 2 Commitments Table, PDF pg. 115),</p> <table><tr><th>Commitment No.</th><th>Commitment</th><th>Status/Notes</th></tr><tr><td>63</td><td>NO<sub>2</sub> mitigation: Wind power generation may be pursued, which would be expected to reduce NO<sub>x</sub> emissions due to reduced power plant operation</td><td>Not Active Yet and Not Applicable in 2021 and 2022.<br/><br/>The Proponent indicated that this is not a commitment.</td></tr><tr><td>65</td><td>NO<sub>2</sub> mitigation: Consideration for additional NO<sub>x</sub> emissions reductions during detailed Project design. These may include energy efficiency methodologies</td><td>Active and In Compliance<br/><br/>In its <i>2021 Annual Report</i>, Agnico Eagle reported “noted”.</td></tr></table> <p>These commitments appear to be based on recommendations from HC’s Final Written Submission (HC-4.1.4 a &amp; c), but a lack of specific information on the Project’s consideration of NO<sub>2</sub> and the efforts to reduce emissions in the annual report made it unclear if</p> | Commitment No.  | Commitment | Status/Notes | 63 | NO <sub>2</sub> mitigation: Wind power generation may be pursued, which would be expected to reduce NO <sub>x</sub> emissions due to reduced power plant operation | Not Active Yet and Not Applicable in 2021 and 2022.<br><br>The Proponent indicated that this is not a commitment. | 65 | NO <sub>2</sub> mitigation: Consideration for additional NO <sub>x</sub> emissions reductions during detailed Project design. These may include energy efficiency methodologies | Active and In Compliance<br><br>In its <i>2021 Annual Report</i> , Agnico Eagle reported “noted”. |
| Commitment No.  | Commitment   | Status/Notes  |            |              |    |  |   |    |   |   |
| 63              | NO <sub>2</sub> mitigation: Wind power generation may be pursued, which would be expected to reduce NO <sub>x</sub> emissions due to reduced power plant operation   | Not Active Yet and Not Applicable in 2021 and 2022.<br><br>The Proponent indicated that this is not a commitment. |            |              |    |  |   |    |   |   |
| 65              | NO <sub>2</sub> mitigation: Consideration for additional NO <sub>x</sub> emissions reductions during detailed Project design. These may include energy efficiency methodologies  | Active and In Compliance<br><br>In its <i>2021 Annual Report</i> , Agnico Eagle reported “noted”.                 |            |              |    |  |   |    |   |   |

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|                            | these commitments were met. HC acknowledges that the Proponent installed a new air quality monitoring station at the Hope Bay mine site in 2021 to measure NO <sub>2</sub> levels (as described in the Agnico Eagle 2022 Annual Monitoring Report, Appendix D1).   |
| <b>Conclusion/Request:</b> | <p>In response to the NIRB's request for information from HC:</p> <ol style="list-style-type: none"> <li>1. Commitments 63 and 65 appear to be based on HC's recommendation 4.1.4 a &amp; c, made during the Hope Bay Phase 2 environmental assessment review to reduce project related NO<sub>2</sub> emissions and improve air quality.</li> <li>2. Results following the installation of a new NO<sub>2</sub> monitoring station at the Hope Bay mine site could help the Proponent meet Commitments 63 and 65. Specifically, NO<sub>2</sub> monitoring results could be used to evaluate the effectiveness of the current mitigation operations in relation to the CAAQS, and inform decisions related to project emissions and efforts to continuously improve air quality.</li> <li>3. The inclusion of NO<sub>2</sub> monitoring in the Project's annual reporting will help demonstrate how these commitments have been met. In particular, sharing information on measures taken to manage and reduce emissions will address HC's recommendations.</li> </ol> |