

March 14, 2024

Francis Emingak
Technical Advisor I
Nunavut Impact Review Board
P.O Box 1360
Cambridge Bay, NU X0B 0C0

Sent VIA Email: info@nirb.ca

Re: Notice of Screening for Bronzite Exploration Corp.'s (BEC) "Somerset Trough Project" project proposal


Dear Francis Emingak,

The Government of Nunavut (GN) would like to thank the Nunavut Impact Review Board (NIRB) for the opportunity to provide comments regarding the Bronzite Exploration Corp's "Somerset Trough" project proposal, NIRB File 24EN005.

The GN has reviewed the proposed project and related documents and has provided 3 comments, which are appended to this letter.

The GN appreciates participating in the screening of this project through the NIRB process. Should there be any concerns or need for follow-up, please do not hesitate to contact me at jbuller@gov.nu.ca.

Qujannamiik,


Justin Buller

Justin Buller
Interim Avatiliriniq Coordinator
Government of Nunavut

GN-01: ENVIRONMENTAL PROTECTION PLAN AND WILDLIFE PROTECTION PLAN

Department	Environment
Organization	Government of Nunavut
Subject/Topic	Environmental Protection and Wildlife Protection Plan
References	<ul style="list-style-type: none">• NIRB'S Notice of Screening for Bronzite Exploration Corp.'s (BEC) "Somerset Trough Project" Project Proposal• Bronzite Exploration Corp. – Environmental Protection Plan, Somerset Trough Project, Somerset Island (2023)• Bronzite Exploration Corp. – Wildlife Management Plan, Somerset Trough Project, Somerset Island (2023)

CONCERNS

Bronzite Exploration Corporation's (the Proponent) Environmental Protection Plan (EPP) and the Wildlife Management Plan (WMP) lack sufficient detail surrounding items like applicable legislation (territorial and federal) and monitoring and mitigation measures for wildlife. As such, the GN's assessment of potential ecosystemic impacts and the evaluation of the proposed actions and mitigation measures is impeded.

The Proponent's EPP and WMP do not list all applicable federal or territorial legislation. Additionally, the EPP and WMP do not contain clear statements of the Proponent's intent to comply with all applicable federal and territorial legislation.

The "Purpose" provided in section 1.0 of the Proponent's EPP states that the guidance provided therein "is based on current best practices in the mining industry, as well as applicable federal and territorial legislation" (Page 4). However, the EPP does not provide specific references to what these "best practices" are nor how they've been incorporated into the EPP.

Relatedly, the Proponent's WMP does not provide specific references to best practices or a general statement indicating that best practices informed the development of the document. For example, in section 4.2 of the WMP, the Proponent states "Bronzite will work with fixed-wing and helicopter pilots to follow best practices for minimizing

disturbance to local wildlife such as caribou, muskox, and polar bears” (Page 12). However, the GN notes the Proponent does not cite specific best practices pertaining to this topic throughout the WMP.

RECOMMENDATIONS

The GN recommends the following:

- The Proponent should revise the EPP and WMP to list all applicable federal and territorial legislation (e.g, *Wildlife Act*, S.Nu. 2003; *Environmental Protection Act*, R.S.N.W.T. 1988; *The Nunavut Land Claims Agreement*, Article 5, S.C. 1993) and provide clear statements of the Proponent’s intent to comply with all applicable federal and territorial legislation.
- The Proponent should revise the EPP and WMP to clearly indicate which best practices have informed their development. This would provide justification and additional information with respect to wildlife monitoring, mitigation, and management.
- The Proponent revise the applicable sections of the EPP and WMP concerning aircraft flights in the following ways:
 - Aircraft pilots should maintain a minimum altitude of 610 m above ground level (AGL). The GN’s recommendation for the general application of flights at or above 610 m AGL reduces impacts to wildlife and does not require pilots to visually locate animals on the ground or constantly refer to flight navigation systems or maps to avoid specific wildlife features at specific times. Simplifying the guidance simplifies compliance. The GN notes there may be some instances when flights at or above 610 m are not possible (e.g., take-offs, landings, external loads, weather, low cloud ceilings, or safety concerns). The 610m AGL guidance is considered a general best practice for straight and level flight.
 - Unless required for personal safety or in another type of emergency (e.g., spill), landing helicopters or fixed wing aircraft in areas where wildlife is present should be strictly prohibited.
 - Aircraft pilots shall undergo site orientation and wildlife awareness training. A training log should be maintained to identify pilots that have received training.
 - Travel routes should be planned to avoid sensitive wildlife areas and minimize the likelihood of encountering wildlife. Preferred travel routes should be mapped/delineated for use by aircraft pilots.

<ul style="list-style-type: none"> ○ Aircraft pilots are responsible for diverting around observed wildlife and wildlife congregations, where safe to do so.
ADDITIONAL COMMENTS
N/A

GN-02: WASTE MANAGEMENT PLAN	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Waste Management Plan
References	<ul style="list-style-type: none"> • NIRB'S Notice of Screening for Bronzite Exploration Corp.'s (BEC) "Somerset Trough Project" Project Proposal • Bronzite Exploration Corp. – Waste Management Plan, Somerset Trough Project, Somerset Island (2023) • Government of Nunavut, Department of Environment – Environmental Guideline for the General Management of Hazardous Waste (2010)
CONCERNS	
<p>The Waste Management Plan (WMP) lacks sufficient detail and information, which impedes the GN's fulsome assessment of potential impacts. The WMP should be updated with additional information, such as what waste will be generated (i.e., identity and volume) and how waste will be securely stored.</p> <p>Additionally, the GN notes the Proponent's clear and unambiguous commitment to the management of waste generated at the Project in accordance with applicable territorial and federal laws, regulations, guidelines, and project authorizations such as the land use permit and Nunavut Water Board Authorization (see WMP, 1.0 Introduction).</p>	

However, the WMP does not explicitly identify the acts, regulations, and guidelines that relate to waste management in Nunavut.

RECOMMENDATIONS

The GN recommends the following:

- The Proponent should revise the WMP to list all applicable federal territorial legislation and the steps taken within the WMP to manage waste accordingly.
- The Proponent should revise the WMP to incorporate a comprehensive definition of waste, including hazardous wastes, as defined by the GN's *Environmental Guideline for the General Management of Hazardous Waste*. To this end, the WMP should also recognize and address other wastes such as aerosol cans, batteries, bulbs, tires, rubber materials, electronics, and scrap metals/glass etc.
- Beyond staff using the incinerator, the WMP should be revised to state that site and job-specific training will be provided to all personnel who are required to handle waste materials.
- The WMP should clearly specify any design features to be utilized to prevent wildlife attractants and access to stored wastes, beyond the storage containers. Where applicable this should be cross-referenced with the Proponent's EPP and WMP.
- The WMP and Spill Containment Plan should be cross-referenced where waste handling is concerned, as spills generate waste that requires specific handling, and unintended effluent release from waste storage areas may require spill response and cleanup.
- The WMP's *Table 1. Project Waste Types* should include the total volume of waste generated and managed over the duration of the project. In other words, Table 1 should not only list daily volumes.
- The WMP's *Appendix A: Incinerator Model* notes that the incinerator has a "400 pound rated load capacity" (Page 14) and WMP's *Table 1. Project Waste Types* states that the incinerator will generate <5 kg/day of bottom ash or incinerator residue. However, how much waste will be incinerated on a daily basis is not indicated and this information should be provided in the WMP.

ADDITIONAL COMMENTS

N/A

GN-03: SPILL CONTINGENCY PLAN	
Department	Environment
Organization	Government of Nunavut
Subject/Topic	Spill Contingency Plan
References	<ul style="list-style-type: none"> • NIRB'S Notice of Screening for Bronzite Exploration Corp.'s (BEC) "Somerset Trough Project" Project Proposal • Bronzite Exploration Corp. – Spill Contingency Plan, Somerset Trough Project, Somerset Island (2023) • Spill Contingency Planning and Reporting Regulations, R-068-93 • Government of Nunavut, Department of Environment – Contingency Planning and Spill Reporting in Nunavut – A Guide to The Regulations https://www.gov.nu.ca/sites/default/files/publications/2022-01/spill_planning_and_reporting_guide_0.pdf • Northwest Territories and Nunavut – Spill Report: Oil, Gasoline, Chemicals and Other Hazardous Materials https://www.gov.nu.ca/en/forms/305-nt-nu-spill-report
CONCERNS	
<p>The Spill Contingency Plan (SCP) lacks sufficient detail and information, which impedes the GN's complete assessment of potential impacts. The SCP should be updated with additional information, such as that related to spill response capability, fuel containment and transportation, and eventual disposal.</p> <p>The Proponent's SCP does not list all applicable federal or territorial legislation related to this topic. Additionally, the SCP does not contain clear statements of the Proponent's intent to comply with all applicable federal and territorial legislation.</p>	
RECOMMENDATIONS	
<p>The GN recommends the following:</p> <ul style="list-style-type: none"> • The Proponent should revise the SCP to list all applicable federal and territorial legislation and to provide a clear statement of the Proponent's intent to comply 	

with all applicable federal and territorial legislation (e.g., *Environmental Protection Act, R.S.N.W.T. 1988*; *Spill Contingency Planning and Reporting Regulations, R-068-93*).

- The Proponent's WMP indicates "Bottom ash from the incinerator will be emptied in accordance with manufacturer recommendations and placed into sealed, labelled 205L metal drums or lined mega bags for eventual shipment and disposal off site at authorized and accredited disposal facilities" (page 10). This material is absent from the SCP. This material and spill response should be discussed in the SCP.
- Per The GN's *Contingency Planning and Spill Reporting in Nunavut – A Guide to The Regulations* the SCP should identify a credible worst-case scenario and describe how a spill would be managed. For example, the transport of materials by helicopter sling loads and the potential for the loss/breakage of bundles of containers.
- SCP *Table 1. Project Spill Materials Inventory* indicates that Safety Data Sheets (SDS) will be provided for Liquid Nitrogen (page 9). However, the GN recommends that SDS should be kept on file for all materials listed in this Table 1 or others identified subsequently. Additionally, the GN recommends that SDS be appended to the SCP.
- SCP *Table 1. Project Spill Materials Inventory* indicates the use of secondary containment structures; however, the volume of the secondary containment structures is absent from the SCP and should be provided.
- The SCP indicated the use of mega bags (or similar) for the storage of contaminated soils (page 10). However, the volume of these bags is absent, and this information should be added to the SCP.
- The SCP should be revised to clearly indicate that the Proponent commits to the timely replacement of any utilized spills kits and equipment.
- The *Spill Contingency Planning and Reporting Regulations* includes the requirement for a spill contingency plan (subject to Schedule A) to be prepared in accordance with Sections 3 and 4 and subsequently filed with the Chief Environmental Protection Officer before making use of a facility (section 5). The Proponent should ensure these regulatory requirements are followed and that the total estimated volume of materials to be stored on site at any given time and in total is identified in the SCP.
- The *Spill Contingency Planning and Reporting Regulations* make specific reference to information required for any reportable spill in section 11 (1). The Proponent's SPC should make explicit references to these requirements by expanding section 3.0 Response Plan of the SCP. Relatedly, it is recommended

that the *NWT-Nu Spill Report – Oil, Gasoline, Chemicals and Other Hazardous Materials* be appended to the plan.

- The SCP should be revised to provide additional details on the type and timing of staff training. All employees and contractors should receive training in emergency response and spill response. Additionally, a training log should be included in the SPC.
- The WMP and SCP should cross-reference each other where waste handling is concerned, as spills generate waste that requires specific handling, and unintended effluent release from waste storage areas may require spill response and cleanup.

ADDITIONAL COMMENTS

N/A