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7 May 2020

Richard Dwyer
Manager of Licencing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU
X0B 1J0

Dear Mr. Dwyer,

Re. Response to Party Comments on Blue Star Gold Corp's Application for a Renewal and Amendment of Water Licence 2BM-ULU1520

On May 5, 2020, Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) provided comments on Blue Star Gold Corp.'s (Blue Star) application to renew and amend water licence 2BM-ULU1520 for the Ulu Gold Project located in the Kitikmeot Region of Nunavut. Blue Star is pleased to provide the attached documents in response.

Further, Blue Star wishes to reiterate its perspective on the matter of security allocation. On a principled engineering basis, Blue Star believes it is most suitable for one party to hold all security for a project; a land-water split in security amounts between the Kitikmeot Inuit Association (KIA) and CIRNAC is not logical on this basis. As all planned and reasonably foreseeable activities using water and generating waste in relation to exploration, progressive reclamation and camp operation occur on Inuit Owned Lands where Inuit are the water rights holders, it makes most sense to Blue Star that the KIA holds all security for the Ulu project.

Blue Star appreciates that security administration is complex and related discussions take time. In the interest of the licence renewal process underway and its related timelines, Blue Star supports continuance of the current allocation of security, with \$1,685, 542 held by the Minister (water amounts) and \$750,000 held by the KIA (land amounts). The additional security amounts listed in Blue Star's estimate totaling \$118,825 arise from the design of progressive reclamation aspects; Blue Star considers these to be land-related aspects and therefore this amount, in its opinion, should be held by the KIA.

Following licence issuance, Blue Star supports the continuation of discussions held to date among parties related to the allocation of security and commits to participate in whatever administrative process may arise, resulting in a reallocation of security amounts.



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Should you require any further input from Blue Star on this matter, don't hesitate to contact me.

Regards,

A handwritten signature in blue ink, appearing to read "Peter Kuhn", is written over a horizontal line.

Peter Kuhn
Interim CEO & General Manager
Blue Star Gold Corp.
Kjgold2010@gmail.com
604.347.6999

Encl.

cc. K. Kharatyan, Nunavut Water Board
D. Donald, Nunavut Water Board
B. Campbell, Crown-Indigenous Relations and Northern Affairs
W. Kuliktana, Kitikmeot Inuit Association

Table 1. Blue Star Gold Corp.'s response to party comments received in relation to 2BM-ULU1520 renewal and amendment, Ulu Gold Project (May 2020).

ID #	Subject	Party Comment	Party Recommendation	Proponent Response
CIRNAC R-01	ARD/ML	<p>The Borrow Pits and Quarry Management Plan and Appendix A of the Interim Closure and Reclamation Plan (ICRP) indicate that acid rock drainage and metal leaching (ARD/ML) could be produced at the Ulu Gold Project site, and that geochemical investigations will be carried out prior to quarry construction. CIRNAC supports Blue Star Gold's sampling program as ARD/ML can be accompanied by potentially toxic metals and can cause waters to become acidic if left untreated.</p> <p>Untreated ARD/ML can result in harmful effects on aquatic wildlife and can lead to noncompliance with water licence conditions pertaining to effluent. Details pertaining to the prevention of ARD/ML, and its treatment if encountered on site, have not been provided in the Spill Response Plan or the Borrow Pits and Quarry Management Plan. Further, the ICRP does not include sufficient details regarding how Blue Star Gold plans to manage ARD/ML at the project site at the time of closure to avoid long-term treatment.</p>	<p>CIRNAC recommends that details outlining management strategies for ARD/ML be included in the Spill Response Plan, the Borrow Pits and Quarry Management Plan, and the ICRP.</p>	<p>Blue Star considers the existing approved <i>Interim Water Management Plan</i> (March 2006) to be sufficient for management of runoff from existing ore and waste rock on site. In its application, Blue Star expressed its interest in having the existing approved <i>Interim Water Management Plan</i> continue to apply under a renewed and amended licence. This plan is publicly available on the NWB ftp site and is appended to this submission for ease of reference.</p> <p>Blue Star's proposed ML/ARD investigation is intended to address the current uncertainty around the risk that the existing waste rock and ore pose to the environment. Results will necessarily be reported publicly as a part of Blue Star's annual reporting and incorporated into future final closure planning.</p> <p>Regarding future waste rock and ore on site: Blue Star commits to developing a <i>Waste Rock and Ore Management Plan</i> prior to bringing any new rock to surface. Blue Star considers the existing licence conditions pertaining to future ML/ARD management in Part D Items 11 and 12 to be adequate in this regard.</p> <p>Prior to establishing quarries, ML/ARD testing will be undertaken, as outlined in the <i>Borrow and Quarry Management Plan</i>. Should these investigations indicate that the material has ML/ARD potential and therefore is not considered suitable for construction, it will not be used.</p> <p>Accordingly, Blue Star feels that updates to the <i>Spill Response Plan</i>, the <i>Borrow Pits and Quarry Management Plan</i>, and the <i>Interim Closure and Reclamation Plan</i> to address this matter are not necessary.</p>

Table 1. Blue Star Gold Corp.’s response to party comments received in relation to 2BM-ULU1520 renewal and amendment, Ulu Gold Project (May 2020).

CIRNAC R-02	Spills	<p>The Spill Response Plan outlines measures that Blue Star Gold will undertake under most spill scenarios, as petroleum spills are the most likely type of spill and pose the highest risk to the environment. Blue Star Gold also plans to house lubricants and greases, salt, and drill additives. It is not clear what measures will be taken for other types of spills, for example spills containing drilling fluid or dry chemicals such as salt or drill additive powders.</p>	<p>CIRNAC recommends that the Spill Plan include a plan of action for spills of dry chemicals, drilling fluid, and/or drilling additives.</p>	<p>Blue Star commits to cleaning up any spills to the ground or ice of any dry chemicals or materials immediately with a shovel, loader or otherwise manually, as needed. Any recovered materials will be reused to the greatest extent possible, and where reuse is not possible, will be disposed of offsite at a suitable facility. Given open water drilling, and drilling and other activities in riparian areas, are neither planned nor approved, there is no expected incidence of spills of dry chemicals or materials to open water.</p> <p>Regarding drilling fluid: Section 4 of the <i>Environment and Heritage Resources Protection Plan</i> outlines management of drill water and waste in a manner protective of vegetation and aquatic life. To the greatest extent possible salt use is minimized and drill fluid, including cuttings, water and any additives, is captured at the drill and reused or disposed of in a sump. However, some cuttings and drill water do escape and are deposited to tundra in the vicinity of the drill. Should any recoverable amounts of cuttings be deposited to the tundra in the vicinity of the drill, it will be collected and deposited in the drill sump, to the extent possible without disturbing the tundra, and/or to the satisfaction of the Inspector.</p> <p>Blue Star commits to update its <i>Spill Response Plan</i> in this regard prior to the commencement of activities.</p>
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Table 1. Blue Star Gold Corp.'s response to party comments received in relation to 2BM-ULU1520 renewal and amendment, Ulu Gold Project (May 2020).

CIRNAC R-03	Landfill	The Landfill Management Plan suggests that leachate could be produced if materials are not properly sorted and unauthorized materials are added to the landfill. If left untreated, leachate can have adverse impacts on the water and soil with which it comes into contact. To maintain an awareness of the presence of leachate, the Landfill Management Plan suggests that seepage contact water, if flowing, will be monitored for quality. Awareness of the landfill water quality is the first step in the dealing with leachate issues. An action plan regarding how leachate will be managed, if encountered, has not been provided in the Landfill Management Plan and its inclusion would better demonstrate Blue Star Gold's preparedness to respond to this potential situation.	CIRNAC recommends that Blue Star Gold include details in the Landfill Management Plan regarding the Ulu Project management strategy for leachate seepage.	As detailed in the <i>Landfill Management Plan</i> under Section 3, titled Water Management, seepage from the landfill while minimal, is expected to be generated as water ingress will occur. Management of seepage quality will occur through strict management and monitoring of waste deposited. Volume of seepage generated will be minimized through landfill design and grading, supported by qualified engineering oversight. Monitoring of seepage from the landfill is proposed to occur in accordance with the water licence monitoring program. Accordingly, Blue Star feels that updates to the <i>Landfill Management Plan</i> to address this matter are not necessary. It is noted that the numbering of this section in the <i>Landfill Management Plan</i> is incorrect. This will be corrected and submitted to the NWB with the next required update to the Plan or the Annual Report, whichever comes first.
CIRNAC R-04	Landfill	The Landfill Management Plan includes a section pertaining to Operation and Maintenance of the landfill infrastructure. It is important to outline Operation and Maintenance procedures to ensure proper use and maintenance of the infrastructure, such as procedures for product sorting and placement, troubleshooting issues, and monitoring performance to prevent the formation of leachate, leaks and spills, and other potential issues which can cause deleterious substances to be released to the environment. Operation and Maintenance Manuals are used to explicitly outline proper procedures for operators in a systematic and detailed fashion. A complete Operation and Maintenance Manual for the Landfill has not been submitted.	CIRNAC recommends that Blue Star Gold submit an Operation and Maintenance Manual for the Landfill to the NWB for review.	Blue Star believes that the <i>Landfill Management Plan</i> can adequately address all operations and management aspects associated with the landfill; having an Operations and Maintenance Manual in addition the <i>Landfill Management Plan</i> is redundant.

Table 1. Blue Star Gold Corp.'s response to party comments received in relation to 2BM-ULU1520 renewal and amendment, Ulu Gold Project (May 2020).

CIRNAC R-05	Landfill	<p>The Landfill Management Plan Design Memo, found in Appendix A of the Landfill Management Plan, indicates that the capacity for the landfill will be 30,000m3.</p> <p>It is important to maintain a landfill within its design limits for proper functioning of the waste disposal site. It is not clear what Blue Star Gold intends to do with remaining wastes if the landfill reaches capacity before all of the waste has been disposed.</p> <p>Further, closure of the landfill will require a cover to prevent debris from being blown out of the site, and to prevent water infiltration and erosion. It is not clear from the Landfill Management Plan whether esker sand will produce dust and, if so, how dust will be managed to prevent nearby surface water bodies from increased dust cover.</p>	<p>CIRNAC recommends that Blue Star Gold include details regarding dust management and waste disposal strategies when the landfill reaches its capacity in the Landfill Management Plan.</p>	<p>Blue Star wishes to reconfirm that the purpose of the landfill is to dispose of existing non-hazardous waste on site and will be closed following completion of progressive remediation. The volume of waste to be deposited is known and the design capacity of the landfill is considered sufficient and conservative. Blue Star does not plan to exceed the capacity of the landfill.</p> <p>New wastes generated at Ulu associated with exploration activities are managed in accordance with the <i>Waste Management Plan</i>.</p> <p>The landfill design includes measures for interim and final cover designed to prevent erosion, including wind and water, and wildlife interaction with waste. As outlined in Section 6.3.2 of its landfill design memorandum, Blue Star plans to undertake studies to determine the suitability of the locally available esker material as suitable cover material. Should it be unsuitable, rockfill be used. Observations of the esker stockpiles and the site indicate that the stockpiles remain stable year after year, dusting is not an issue, and the esker material is likely suitable for cover.</p> <p>Should dust become an issue during construction and operation, water will be applied. Should dusting become an issue over the long term adaptive management strategies will be employed, following discussion with the NWB and parties.</p> <p>Blue Star commits to update the <i>Landfill Management Plan</i> prior to construction to include the commitment in the last paragraph above.</p>
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Table 1. Blue Star Gold Corp.'s response to party comments received in relation to 2BM-ULU1520 renewal and amendment, Ulu Gold Project (May 2020).

CIRNAC R-06	STF	<p>Section 3 of Appendix A of the Soil Treatment Facility Management Plan advises that a water storage pond will be built as part of the soil treatment facility (STF Pond), and that excess water within the soil treatment cells will be (pg 9) "...pumped to the water storage pond for testing, treatment (if needed) and discharge." This is important because contact water containing petroleum hydrocarbons (PHC) can have an adverse impact on the receiving environment if not treated. It is not clear from the provided description how the water will be treated.</p> <p>Further, Appendix B of the Soil Treatment Facility Management Plan contains details pertaining to the soil sampling methodology while few details have been provided regarding the sampling methodology for groundwater and for seepage water.</p> <p>Without these details, interveners cannot sufficiently evaluate the water and effluent management strategy in place to prevent the release of PHC to the receiving environment.</p>	<p>CIRNAC recommends that Blue Star Gold provide details on how the contact water in the STF Pond will be treated, how water will be conveyed prior to release to the environment, if applicable, and what the surface and groundwater monitoring program will entail.</p>	<p>Should the contact water in the Soil Treatment Facility Pond not meet discharge criteria, depending on the nature of the exceedance, it may be: filtered through a RainDrain™ or Spill Monkey™ (hydrocarbon filter) and discharged to tundra via pump and hose, should the filtrate meet criteria; transported offsite to a suitable waste receiver for disposal. Conveyance will occur via pump and hose to a suitable containment or storage vessel such as clean drum.</p> <p>As stated in section 4.1 of the <i>Soil Treatment Facility Management Plan</i>, surface water discharge will occur in the vicinity of existing seeps to reduce erosion. Existing seeps in the vicinity of the waste rock pad on which the soil treatment facility will be located is identified as ULU-7 in Schedule J of 2BM-ULU1520.</p> <p>As stated in section 4.2 of the <i>Soil Treatment Facility Management Plan</i>, groundwater monitoring is proposed to occur at least twice per year. Blue Star has proposed 3 new stations be added to the water licence, being ULU-14, -15 and -16, corresponding with each monitoring well. Proposed monitoring well locations are identified in Figure 3 of the <i>Soil Treatment Facility Management Plan</i>, and suggested analytical parameters are provided in Schedule J of the mark-up of the draft licence. Relevant conditions listed under Part J of 2BM-ULU1520 are expected to apply.</p>
CIRNAC R-07	STF		<p>CIRNAC recommends adding details of the groundwater and seepage water monitoring program to the Soil Treatment Facility Management Plan.</p>	<p>Blue Star feels that the <i>Soil Treatment Facility Management Plan</i> as written, considered in conjunction with the water licence, is sufficient. However, Blue Star supports whatever direction the NWB provides in this regard.</p>

Table 1. Blue Star Gold Corp.’s response to party comments received in relation to 2BM-ULU1520 renewal and amendment, Ulu Gold Project (May 2020).

CIRNAC R-08	Licence Terms	<p>Blue Star Gold has provided a proposed licence (Appendix M of the Application Package) which contains suggested changes to licence conditions based on updated management strategies and physical changes on site since the change in property ownership. One condition which creates concerns for CIRNAC is Part I. Conditions Applying to Abandonment and Restoration or Temporary Closing, Item 12, found on page 23.</p> <p>The first concern is that the wording “as otherwise approved by the Board” creates uncertainty. Firstly, it does so in a substantive manner given that it suggests exceptions from the standard that provision creates, without providing guidance as to what will guide the NWB in granting such exceptions. Secondly, it creates uncertainty from a procedural perspective as it is unclear what process would be followed before an approval in writing is granted, and whether interveners will be given a chance to comment. In some instances, this may make it difficult for the Minister of Northern Affairs to know the exact nature of the licence he or she is asked to approve.</p>	<p>CIRNAC recommends that the condition under Part I, Item 12 of Water Licence 2BM-ULU1520 demonstrate the procedure by which the NWB can approve changes to the provision.</p>	-
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CIRNAC R-09	Licence Terms	<p>The second concern is that Blue Star Gold is suggesting to replace soil treatment objectives outlined in the Government of Nunavut's Environmental Guideline for Site Remediation (Government of Nunavut Department of Environment, 1999) with the objectives set out in the Soil Treatment Facility Management Plan, written by Blue Star Gold. As the details contained within management plans can be changed and altered without approval from the Minister of Northern Affairs, CIRNAC takes issue with replacing government guidelines with self-determined objectives in a NWB Water Licence. CIRNAC encourages the proponent to exceed the objectives outlined in the Government of Nunavut's Environmental Guideline for Contaminated Site Remediation (1999), but does not encourage the guideline's replacement in this proposed licence condition.</p>	<p>CIRNAC recommends that the soil treatment objectives outlined in the Government of Nunavut's Environmental Guideline for Contaminated Site Remediation (1999), which were updated in 2014, not be replaced by objectives set out in the Soil Treatment Facility Management Plan in the condition under Part I, Item 12 of Water Licence 2BM-ULU1520.</p> <p>As referenced in the Soil Treatment Facility Management Plan, Blue Star has proposed the use of federal government guidelines being the Canadian Council of Ministers of the Environment (2008, updated to 2018) Canada-Wide Standards for Petroleum Hydrocarbons in Soil, coarse grained soil for parkland use ecosoil contact, for fractions 1-4 as it believes these to be suitable, protective and current. These are the same guidelines referenced in the Government of Nunavut's Environmental Guideline for Contaminated Site Remediation for fractions F1-F4 in surface soil.</p> <p>Regarding subsoil: Blue Star is proposing to use the Canadian Council of Ministers of the Environment (2008, updated to 2018) Canada-Wide Standards for Petroleum Hydrocarbons in Soil, Technical Supplement. Should the GN EPD not intervene in this process, Blue Star commits to follow-up with them in accordance with the Government of Nunavut's Environmental Guideline for Contaminated Site Remediation, as the proposed subsoil criteria exceed the Tier 1 surface soil guidelines.</p> <p>Regarding PAHs (naphthalene and phenanthrene): Blue Star has proposed the use of the Canadian Environmental Quality Guidelines, environmental health guidelines value for agricultural land use as this is most suitable considering the potential exposure pathways.</p> <p>Accordingly, Blue Star is not considering replacing government guidelines with its own self-determined objectives.</p> <p>The proposed edits to the water licence were suggested for efficiency and to reduce potential redundancy and conflict between a management plan and the licence. Should the NWB so choose, Blue Star is not opposed to the inclusion of suitable objectives in the water licence.</p>
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Table 1. Blue Star Gold Corp.'s response to party comments received in relation to 2BM-ULU1520 renewal and amendment, Ulu Gold Project (May 2020).

CIRNAC R-10	Closure	<p>Section 5.2 of the Interim Closure and Reclamation Plan (ICRP) provides a summary the design criteria for the Landfill Cover (Section 5.2.1), the Soil Treatment Facility (Section 5.2.2), and the Soil Quality Remediation Objectives for Petroleum Hydrocarbons (Section 5.2.3). Further details are provided in the design memos associated with respective management plans.</p> <p>CIRNAC is seeking details on a number of items in the ICRP which are important for evaluating reclamation costs, and recommends that Blue Star Gold provide these details or provide direction to CIRNAC regarding where these details can be found.</p>	<p>CIRNAC recommends that the following details be provided by Blue Star Gold.</p> <p>Section 5.2.1:</p> <p>a. The expected tolerances in the grading of the final surface;</p> <p>b. Any specific surface treatment;</p> <p>c. The outlet of the effluent;</p> <p>d. The conveyance and management of the water runoff within and adjacent to the landfilled area; and</p> <p>Section 5.2.2</p> <p>e. Any emergency overflow criteria that were considered.</p>	<p><u>Regarding Section 5.2.1, Landfill Cover Criteria:</u></p> <p>a. Detailed design for the grading of the final surface is set at 4H:1V. The construction team is expected to adhere to this criteria.</p> <p>b. As per paragraph 6.3.2 in the landfill design memo, final cover surface treatments include filling any surface depressions with dry cover material and grading to prevent ponding.</p> <p>c. As outlined in the <i>Landfill Management Plan</i>, Section 4, some seepage may occur. Landfill siting and design is such that the facility and area surrounding will be graded to promote drainage around and away from the landfill. Accordingly, any seepage from the landfill is expected to follow the existing drainage patterns away from the site.</p> <p>d. Refer to the response to item c above. There is no effluent outlet associated with the landfill.</p> <p><u>Regarding Section 5.2.2, Soil Treatment Facility:</u></p> <p>e. See above response to CIRNAC R-06 for Soil Treatment Facility water management.</p> <p>As stated in the <i>Soil Treatment Facility Management Plan</i>, Blue Star plans to be actively managing the facility on site during the summer months over its life, being approximately 5 years. Inspection, including post-precipitation inspection, as detailed in the Management Plan will occur throughout operations and is considered adequate to mitigate an emergency overflow.</p> <p>As outlined in the <i>Interim Closure and Reclamation Plan</i>, should the site enter interim closure during facility operation, at a minimum, annual inspections and water management activities will occur.</p> <p>While on site, Blue Star commits to maintain water in the water containment cell at a level that is below freeboard at 0.5 m.</p>
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				Should these measures still prove to be inadequate and the facility overflows, it will be treated as a spill and the Spill Response Plan will be activated.
CIRNAC R-11	Security	Certain rates used by Blue Star Gold in the reclamation cost estimate appear to be low compared to industry practice. This difference could be attributed to whether labour and equipment costs have been included in these rates. To assist in a better evaluation of the suggested closure costs, CIRNAC requests that clarification on these items be provided.	<p>CIRNAC recommends that Blue Star Gold clarify the following points:</p> <p>a. Verify the unit rate of \$1.69/m3 for the grading work that involves a dozer and whether this rate is inclusive of operator, equipment and other indirect costs;</p> <p>b. Verify the unit rate of \$15.96/m3 for the foundation and berm construction tasks;</p> <p>c. Confirm whether compaction work will be required and, if so, provide a task in the cost break down to address this component of the project;</p> <p>d. Confirm that the liner removal unit cost also covers disposal of the liner; and</p> <p>e. Provide a breakdown of costs for components pertaining to the land-water split.</p>	<p>a. The rate excludes equipment rental or capital costs as the equipment is already on site and owned by Blue Star, so rental is not necessary. The rate includes operator, fuel and mechanical support costs. Large component costs are accounted for in equipment contingencies.</p> <p>b. The rate construction consists of a CAT 311 excavator, two CAT 769C dump trucks (due to proximity of rock to the facility it is unlikely 2 will be required therefore considered conservative) and 20% supervisor involvement for during execution; individual rates \$138.00, \$154.00 and \$160.00 respectively. Productivity was calculated to be 30 bulk cubic meters for per hour and generated based on the Caterpillar Performance Handbook.</p> <p>c. Compaction occurring through the equipment placing material within the facilities (i.e. by bucket pressure) is considered sufficient due to the small size of the material being placed. Where additional compaction is required (i.e. waste placement within landfill) it is stated in the Task Unit Costs.</p> <p>d. Yes it does.</p> <p>e. Blue Star understands the current allocation of security to be split by land and water, with \$1,685, 542 held by the Minister (water amounts) and \$750,000 held by the KIA (land amounts). The additional security amounts listed in Blue Star's estimate totaling \$118,825 arise from design of progressive reclamation aspects; Blue Star considers these to be land related and therefore this amount, in its opinion, should be held by the KIA.</p>

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CIRNAC R-12	Security	<p>In the Application Form (Section 21, pg. 13) submitted to the NWB on March 13, 2020, Blue Star Gold has requested that:</p> <p>...the total amount of security held currently remain unchanged under a renewed and amended licence as the contingencies considered in the estimate are very conservative and actual liabilities, especially those associated with large equipment repairs, will be better understood after the upcoming work season on site.</p> <p>The purpose of Financial Security is to ensure that funds are secured in place with the responsible landowner for use in the case that the licensee is unable to reclaim the site. It is common for a security estimate to be conservative and estimates are based on current information and best predictions. CIRNAC is of the opinion that no new infrastructure should be built on site until sufficient security is posted.</p>	<p>CIRNAC recommends that Blue Star Gold post security to the designated responsible landowner prior to constructing new infrastructure.</p>	<p>Blue Star agrees.</p>
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