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Dear Ms. Abernethy-Gillis:

Project: Jericho Mine Development Project
Re: Comments on the NIRB Final Report

Transport Canada would like to offer the following comments and recommendations on the Terms and Conditions from NIRB Final Report on the Jericho Mine Development Project. We also would like to reiterate our concerns expressed earlier on the Environmental Assessment Guidelines and the proposed extension to the airstrip that will serve the Jericho mine development.

Our environmental specialist advice centres on the airstrip and its associated operations. However, we would also recommend incorporating the requirement for the development and establishment of an effective Environmental Management System (EMS) for the duration of the Jericho Mine Project. This would ensure all aspects of the mine's development, operations and decommissioning activities are encompassed in preventative care strategies developed in a environmental proactive fashion.

- The proponent should identify whether or not the aerodrome/airstrip will be a certified, non-certified, registered or a private facility. The critical aircraft for which the airstrip is being designed for should follow appropriate standards and practices. Should the facility be certified, and then this will dictate the regulatory requirements that will apply to its operations under the Aeronautics Act. Private airstrips and non-certified aerodromes do not have to meet these criteria; although the appropriate physical design and zoning standards should be applied to the construction of the airstrip.
- Following the premise of environmental preventative-care and environmental stewardship, an effective "Environmental Management System (EMS) should be developed for the airstrip. For due diligent purposes, the EMS should follow the principles and framework of ISO 14001 and it should encompass the entire Jericho Mine Development's operations. The EMS should also stipulate scheduled reporting to keep agencies aware of environmental status, where areas of concern may exist, to document environmental performance and where plan improvements are required.

Follow-up monitoring should also be a component of the EMS. This would include set environmental status reporting for the mine, its associated facilities and operations. The EMS should include components to address identified environmental areas of concern, its associated operations and eventual decommissioning. Considering this, the following environmental issues should be a included as a component within an encompassing EMS for the Jericho Mine Development:

- A "Water Quality Management Plan", should be developed for the site, which would include a follow-up monitoring program and its related reporting. A water management plan for the site should include minimal alteration of water directional flows and pathways to minimize effects on local ecology and biodiversity.
- A "Waste Management Plan" should be developed that would address how hazardous and non-hazardous waste will be handled as a result of the mine development.
- Wildlife has been identified as a concern; an encompassing "Bird and Wildlife Management Plan" should be an integral component included in an EMS. This will establish processes and reporting requirements for site wildlife management. A wild life management plan would be essential for the airstrip's operations to minimize the chances of an incursion.
- Air Quality has been identified as a concern in the mine's development and its operations. Air quality should be a component included in an encompassing EMS. The air quality standards that are to be achieved should be identified. As a minimum, Occupational Health and Labour Code Standards should be applied.
- A "Noise Abatement Program" is being recommended for the site and it should be a component of the site EMS. The program should stipulate the conditions of applying the program and expectations, noise levels and standards that will be applied and who will manage the noise component.
- Cumulative effects have been identified as a concern and having an effective EMS in place would assist in monitoring site operations that would contribute to cumulative effects.
- Environmental sensitive areas have been identified as a concern, which would include nesting areas and archeological areas. Species at risk should also be identified and the requirements of SARA should be applied within the context of a site EMS. A historical review should be conducted of areas that will be disturbed for mine development to determine if there are any archeological finds and these areas identified to appropriate authorities. These areas should be clearly marked and avoided by the proponent.
- Preservation of fish and fish habitat were identified as an environmental concern. An EMS developed by the mine should include monitory controls to address aquatic management. Procedures would also be set out for water crossings and stipulate regulatory requirements.
- Mine blasting has been identified as a areas of concern that may environmentally affect local wildlife. This area of concern should be identified as a component of the developed EMS and would stipulate the conditions for blasting.
- The handling, transport and storage of hazardous products have been identified as an environmental concern and should be included in an EMS. The plan would establish procedures for hazardous product management according to regulatory requirements and identify how fueling operations will be conducted at the site.
- The proponent should develop and establish an effective "Environmental Emergency Contingency Plan" for the mine and its associated operations. The plan should encompass formal emergency response for the airstrip due to aircraft related incidents. The plan

should also include responses to hazardous product spills. Spill kits should be made available at fueling, handling and storage areas. Fuel storage facilities should be located a safe distance from water bodies and lined to contain any spilled product. Appropriate personnel should be designated and trained on spill response. Local response agencies and authorities should also be provided with copies of the plan. As well, appropriate training should be provide to personnel working at the mine and airstrip.

Transport Canada also has provided the following comments on areas of environmental concern from previous environmental reviews conducted of the mine's "Environmental Assessment's Guidelines" and the "Stand Alone Guidelines - Runway Extension Aspect". This information is contained in Attachments "A" and "B".

Inquiries on any of Transport Canada's comments and recommendations should be directed to the undersigned.

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Attachment "A"
Environmental Assessment Guidelines
for the
Jericho Diamond Mine Development.

The Nunavut Impact Review Board's (NIRB) Guidelines for Environmental Assessment of the Jericho Mine Development have been reviewed by Transport Canada to determine if they need to be modified, expanded or if the existing guidelines are encompassing to adequately environmentally assess the mine's airstrip extension.

It is assumed that the airstrip at the Jericho mine is a private facility; therefore does not require to be registered in the Canadian Flight Supplement. It is also not a certified aerodrome; therefore is not subject to the Transport Canada regulation or Physical Design Standards.-TP312.

It is unsure at this time what environmental assessment requirements, if any have been imposed for the mine's floatplane base and the ice strip. This review does not identify any environmental conditions for these facilities, as it is assumed they are existing and were previously environmentally approved by the NIRB.

The following comments will reference a specific section of the NIRB Guidelines, include suggested environmental requirements or provide recommendations to ensure the environmental assessment of the Jericho Mine airstrip extension is encompassing for environmental decision making purposes:

1. Section 4.10.1.8 - Airport Facilities: In addition to the NIRB requested information for this section, the following information would be necessary to adequately environmentally assess the Jericho Mine's airstrip extension.

A complete proposed project description must be provided, which must include a description of the airstrip's existing facilities and any associated infrastructure. The project description must identify if the airstrip will conduct night time operations and anticipated frequency. The proponent must detail and identify if construction will include the installation of any airstrip or parking ramp lighting.

A site plan should be provided showing existing and planned development of airstrip facilities and their location. As well, the basic airstrip design standards must be provided, which should include the type of aircraft the airstrip will be designed to accommodate. Information provided must include the planned stages of the project's development from design to implementation and include airstrip decommissioning plans. Planning information provided must include drawings showing existing and design elevations, the direction of drainage flow patterns, and any other planned infrastructure development. As well, affected permafrost areas should also be detailed and shown on
drawings.

1. Details of airstrip maintenance must be provided. Information provided should detail what and how hazardous products will be handled at the airstrip. In addition, it must also be identified if there will be any aircraft storage facilities on site.

2. Section 4.10.1.9 - Fuel and Explosives Storage Sites: The location of any hazardous products being stored at the airstrip should be detailed, including the type of product, design and capacity of facilities

and identify what emergency response plans will be in place to address any product spills, leaks or incidents.

3. Section 4.21.1.9 - Air and Ground Traffic: Air and ground traffic at the airstrip must be fully described, including types of aircraft, and their frequency. This description must include the originating departure location of flights, schedule of air traffic, the effect on local air traffic and an environmental impact assessment of airstrip operations.

4. Section 4.21.1.13 - Accidents and Malfunctions: How airstrip accidents/incidents or malfunctions will be addressed should be detailed in emergency response actions. Emergency response actions should include air and ground related incidents. Minimization of accidents and malfunctions should be addressed in the site EMP. Emergency response plans must address aviation related fuel spills and other hazardous products spills that are likely to occur at the airstrip.

5. Section 4.21.1.15 - Temporary Closure, and Reclamation Programs: The duration of the airstrip's life expectancy must be detailed how and when decommissioning plans will be implemented.

6. Section 4.21.2 - Physical and Biological Environmental Components: Impact assessment modeling should include the airstrip's extension construction activities. Modeling information provided will be the basis for environmental and must include impact analysis. Based on modeling, an environmental impact statement should be provided for all associated project activities and include the airstrip's extension construction and the airstrip's decommissioning plans.

7. It must be identified how the mine's airstrip will be environmentally managed during construction. This must include its day-to-day operations and it's decommissioning. Included must be a general description of how the airstrip's associated maintenance activities will be incorporated into the EMP. This description must include the types of monitoring that will be conducted at the airstrip, at what frequency, and how they will be reported.

8. The proponent must environmentally assess the area where the airstrip will be extended for vegetation assessment of rare, endangered or locally significant species. Impact analysis on wildlife must also be assessed.

9. Dust emissions at the airstrip must be environmentally assessed and details provided on proposed dust suppression.

10. The proponent must provide assessment information on if there will be any disruptions to any wildlife movement corridors. If so what mitigation will be applied to minimize the incursions on air traffic and airstrip operations.

11. The proponent must provide environmental assessment information to determine if the runway expansion will significantly alter water drainage flow patterns and the potential environmental effects. Mitigated that will be applied must be specified.

12. Considering the runway extension may mean larger aircraft will be coming to the site. If so, will associated airstrip infrastructure have to be scaled up to meet the needs of larger aircraft?

13. The airstrips extension will potentially affect permafrost. The proponent should provide environmental assessment information on the potential effects on permafrost and how this will be mitigated.

14. Borrow sources for the airstrip extension must be identified and this information should include quantities and reclamation plans.

Attachment "B"
Comments on Stand Alone Guidelines - Runway Extension Aspect

- The guidelines already mention that all gravel and fill sources must be identified and described in detail and this should extend to the source(s) of fill to be used in the runway extension. Cumulative effect on the runway portion of the project.

- The guidelines talk about the effects of permafrost degradation, melting and stability, but not in the context of the runway and I think this should be extended to the runway. As any shifts in the permafrost under the runway will have a significant impact on operations and management of the site. The proponent should also explain what they will do if the permafrost was to destabilize under the runway, what is their 'potential' plan of action.

- Large spills of de-icing fluid should be part of their Emergency response plan. Their response plan should also cover large aviation fuel spills and how they will react to them.

- The guideline should also make them detail what additional infrastructure requirements will be needed with the runway extension. i.e. additional runway lights, wider taxi ways and apron

- Possibly a question during the community/public consultations is whether or not to leave the runway intact after the mine has closed down for general access to the area. Do the local residents, and government, want or need or think they will need this site in the future after the mine has closed down.

- Does a longer runway mean larger aircraft will be coming to the site? If so will all of the associated infrastructure have to be scaled up to meet the needs? An indirect result of the runway expansion.

- Will the runway expansion significantly alter surface and subsurface water drainage and flow patterns through the area? If so can the problems be mitigated or will there be an impact as a result. Will an altered drainage pattern result in problems with the runway or cause increased maintenance of the site?

- The guidelines do not specify that the proponent assess the area where the runway will be expanded for vegetation assessment for rare, endangered or locally significant species. This should be considered. Also the impact to the surrounding area of the planned runway expansion. Is there vegetation that may attract wildlife and become a hazard to aircraft?

- The guidelines do not mention anything about dust suppression at the airstrip. Do they use dust suppression at the airstrip and if so will a longer runway have any significant impacts on this activity?

- Should the guidelines consider the decommissioning of the airport as a cumulative effect? Will it have a residual effect at the site?

- Should the guidelines require the proponent to determine if the general area is a migratory route or frequent flyway for local birds? If so how would this impact the development of the airstrip?

- The guidelines talk about noise concerns at the site, should the proponent have to determine how much of an increase in noise the longer runway will create as a result of allowing larger and possibly more frequent flights to the site. The proponent should also determine how much of an issue the extra noise will be on the local wildlife, and is this is a temporal and to a lesser extent spatial issue. i.e. during Caribou caving season will the increased noise cause undue hardship to the animals.

- The guidelines mention air emissions at the site but not specifically to aircraft, should this be changed as a result of cumulative effects? Will air emissions increase with an increase in the number of flights or the size of the aircraft used? What about Green House Gas emissions?

- Should the runway extension design include features for potential changes in the climate as the guidelines make reference to in several sections?

- An indirect effect of the runway extension is increased fuel storage capacity at the site. Should this be considered as part of the proponents overall fuel management plan or separately?

- Will the approach and take-off pathway(s) over fly sensitive habitat for wildlife? The proponent should map this out and determine if there might be any impacts.

- The guidelines talk about fencing off parts of the site including the runway, but does not go into any specifics. Should the proponent have to examine this option and report back on its conclusions?

- An indirect impact of the runway extension might be the requirement for additional infrastructure to service and maintain the aircraft.

- Will the runway extension block or disrupt any wildlife movement corridors? If so how can this be mitigated?

- How will severe weather events impact the airstrip and how can these impacts be mitigated? Does this need to be considered in the guidelines?