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Mavis Cli-Michaud, Chair

Mackenzie Valley Land and Water Board
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CLOSING ARGUMENTS FROM PINE POINT MINING LTD. FOR MV2020L8-0012 AND LAND USE PERMIT MV2020C0017

1.0 INTRODUCTION

This letter provides Pine Point Mining Ltd. (PPML) response to closing arguments for water licence MV2020L8-0012 and land use permit MV2020C0017 for PPML's Confirmation and Exploration Program (CEP; the Project), provided through the interventions from the Government of the Northwest Territories (GNWT), Environment and Climate Change Canada (ECCC), Deninu Kué First Nation (DKFN) and Fort Resolution Métis Government (FRMG).

PPML provides below a summary of each intervener's recommendation and the PPML response, organized by intervener. Issues considered resolved by the interveners are not included. Please refer to each parties' intervention on the public registry for the full text of the recommendation and the supporting rationale.

2.0 RECOMMENDATIONS FROM THE GOVERNMENT OF THE NORTHWEST TERRITORIES

2.1 Submit Groundwater Management Plan for Approval

Recommendation GNWT#2:

The Water Management Plan be submitted for review and Board approval 60 days prior to commencing any hydrogeological investigations.

PPML Response:

PPML agrees with this recommendation, and plans to provide the Water Management Plan to the Mackenzie Valley Land and Water Board (MWLWB) soon after issuance of the Licence

2.2 Water Management Plan Uncertainties

Recommendation GNWT#3:

The GNWT maintains intervention recommendation #3 and recommends that the Water Management Plan be updated to clarify and resolve the uncertainties summarized here:

- Inclusion of pit chemocline influence on the compatibility assessment.
- Description of methodology for the development of the depth-average TDS concentration and specific conductivity–TDS relationship.
- Clarification on which guidelines are being referenced in Figure B1 of the April memorandum.
- Clarification on methodology for the calculation of the “upper bound”.
- The well to well and pit to well scenarios should consider an evaluation against appropriate guidelines that are protective of the receiving environment.
- The compatibility assessments should be made between samples collected prior to groundwater testing, and not in relation to the database presented in the April memorandum.

PPML Response:

As per previous responses, PPML agrees with this recommendation and will incorporate these points into the updated version of the Water Management Plan. In the response to GNWT#3 in the GNWT Intervention, PPML provided additional clarification on the following:

- how the two-step threshold approach will limit the amount of change in receiver water quality, and therefore, limit risk to aquatic life
- how chemoclines will be incorporated into the compatibility assessment
- methods to determine the specific conductivity-total dissolved solids (TDS) relationship and depth-averaged TDS concentration
- water quality guidelines (approved and interim Canadian Council of Ministers of the Environment Protection of Aquatic Life [CCME 1999], and British Columbia Ministry of Environment and Climate Change Strategy [BC ENV 2019] for sulphate) and use of guidelines in the compatibility

The two-step screening approach initially compares TDS concentrations between source and receiver waters. If compatible for TDS (i.e., within the 30% threshold), concentrations will be compared for parameters with guidelines. If these guideline parameters are compatible, source water is deemed acceptable to transfer. This approach minimizes the potential for change to the receiver water quality, and thereby also limits the potential for risk to aquatic life.

In the Public Hearing, accepted GNWT’s recommendation that the dataset used for the determination for compatibility for the source waters and receiving waters will be based solely on the monitoring data that are collected in advance of a water transfer taking place, and not include historical data where they are available. As clarified in the Public Hearing, since historical data will not be used in the calculation, the upper bound would represent the receiver pit parameter concentration plus 30%.

Additional details on the above will be provided in the updated Water Management Plan to be submitted to the MVLWB.

2.3 Fish Presence in Pits

GNWT Recommendation #4:

The GNWT recommends that the Water Licence include a condition that requires fish presence determinations in a pit prior to water being discharged into it.

PPML Response:

As indicated in previous responses, PPML has agreed to conduct fish presence surveys in pits prior to conducting water transfers. PPML will also include a determination of whether fish are present in the pits in the compatibility decision trees that will be included in the Water Management Plan to be submitted to the MVLWB for approval. PPML has also agreed that where fish presence is determined in the receiver pit, acute toxicity tests will be conducted on the source pit water that has been passed the two-step screening process prior to any transfer. This requirement was included in Schedule 4 of the Draft Water Licence.

2.4 Surveillance Network Program

Recommendation GNWT#16:

The GNWT's revised recommendation #16 is as follows:

- a) GNWT recommends that each individual water source [for the groundwater testing program] be designated as an SNP station during reporting so that the quantity of water used from each individual water source can be measured and reported.
- b) GNWT recommends that each source and receiving waterbody involved in the hydrogeological testing be assigned its own SNP station ID during reporting.

PPML Response:

PPML committed to providing the location of the source water and receiving water in all Surveillance Network Program (SNP) reporting related to the groundwater testing and will provide a unique identifier for each source and receiver location. All monitoring data will be reported based on the unique identifier.

PPML is concerned that the request for separate SNP stations for each groundwater test may add confusion, as the number of groundwater testing sites has not yet been finalized, and therefore, the MVLWB cannot know how many SNP sites are required. As such, it may be simpler for the MVLWB to include the location of source water and receiving water as a sampling parameter within SNP Stations 2 and 3. PPML defers to the MVLWB for a final decision on how this recommendation should be addressed.

2.5 Reclamation Security

Recommendation GNWT#17:

The GNWT modified recommendation #17 for reclamation security to match the estimate provided by PPML. The GNWT maintains the recommendation made at the Public Hearing that the security estimate be set at \$1,060,755 with a land and water liability split set at \$743,457 and \$317,298 respectively.

PPML Response:

PPML agrees with this recommendation.

3.0 RECOMMENDATIONS FROM ENVIRONMENT AND CLIMATE CHANGE CANADA

3.1 Whooping Cranes and their Habitat

Recommendation ECCC#6:

ECCC recommended that a specific management plan be developed for whooping cranes, in consultation with ECCC, to further assess potential residual impacts and to implement specific measures to minimize risks associated with all project activities.

As stated in our comments on the draft permit conditions, ECCC disagrees that information specific to whooping cranes, protected under the federal *Migratory Birds Convention Act* and *Species at Risk Act*, should reside within the WMMP. There remains uncertainty with the scope and location of project activities and how they may interact with whooping cranes at and/or near the project site. It is also unclear how whooping crane potential nesting habitat (including that identified in Olson and Olson, 2003) will be avoided. ECCC reiterates that Olson and Olson (2003) remains the best available source of information to predict the current and future habitat requirements of the species and is a crucial planning tool in meeting the whooping crane population and distribution objectives identified in the Recovery Strategy (ECCC 2007).

ECCC is of the opinion that our request to consider whooping cranes in a separate plan is reasonable, given the species' endangered status, limited habitat availability, outstanding concerns and uncertainty related to interactions with the project activities, as well as ECCC's legislative authority for the species under the federal *Migratory Birds Convention Act* and *Species at Risk Act* (i.e. does not fall within GNWT-ENR's mandate under the territorial *Wildlife Act*). ECCC considers ECCC-6 outstanding.

PPML Response:

PPML will continue to work with ECCC to address the concerns related to whooping crane and implement mitigation to protect whooping cranes and their habitat. With respect to the minimum requirements described by ECCC, PPML believes that these are already included in the Wildlife Management and Monitoring Plan (WMMP) and will continue to work with ECCC to confirm this or make the required changes.

ECCC is correct that the WMMP is approved by GNWT-Environment and Natural Resources (ENR) under the *Wildlife Act*, and that the *Migratory Birds Convention Act* and *Species at Risk Act* do not fall under GNWT mandate. However, this does not mean that the WMMP applies only to the *Wildlife Act* or other NWT legislation (such as the *Species at Risk [NWT] Act*). The WMMP must show how PPML will also adhere to the federal *Species at Risk Act*, the *Migratory Birds Convention Act*, and the *Mackenzie Valley Resource Management Act* (refer to Table 1 and Appendix B of the WMMP). It is not unusual for a single management plan to respond to multiple pieces of legislation, both federal and territorial. For example, the Waste Management Plan describes PPML's responsibilities under the NWT *Environmental Protection Act* and *Waters Act*, and the federal *Transportation of Dangerous Goods Act* and *Mackenzie Valley Resource Management Act* (among others).

Much of the mitigation and management measures apply to many wildlife species in the WMMP, so introducing a new plan will add unnecessary duplication. As such, PPML is confident that ECCC's concerns and compliance with the *Migratory Birds Convention Act* and *Species at Risk Act* can be addressed within the WMMP.

4.0 RECOMMENDATIONS FROM THE FORT RESOLUTION MÉTIS GOVERNMENT

4.1 Chemoclines

FRMG Recommendation #8:

FRMG recommends that PPML ensures that pumping methodology accounts for the existence of any chemoclines (in respect of TDS or metal concentrations used for the compatibility criteria) that may affect the expected water quality transferred to a receiving pit

PPML Response:

The characterization of any chemoclines within pits will be a requirement of the Water Management Plan, as per

by Schedule 4 Item 1(d) of the Draft Water Licence. Also see the response to GNWT#3 in Section 2.2. As such, PPML considers this issue to be resolved.

4.2 Pre-clearing Surveys

FRMG Recommendation #19:

FRMG recommends that PPML provide clear methodology on the pre-clearing survey, including a maximum time between surveys and clear activities is established, sign definition, and threshold for sign age. FRMG knowledge holders are experts on the wildlife in this area. FRMG and other Indigenous monitors should be contracted to conduct any pre-clearing monitoring.

PPML Response:

The requested information is provided in the WMMP, Version 1.1 Appendix C. PPML has committed to involving FRMG representatives in the pre-clearing surveys.

5.0 RECOMMENDATIONS FROM THE DENINU KUÉ FIRST NATION

5.1 Water

PPML recognizes the existing and traditional use of the Pine Point area and will continue to collaborate with the DKFN during the implementation of the Project in a way that is respectful of the environment and traditional use of the area.

5.2 Caribou

PPML agrees that the Pine Point boreal caribou population should be protected, and PPML has worked closely with the GNWT-ENR and DKFN to build a WMMP that provides this protection by avoiding caribou, minimizing impacts to caribou habitat, and documenting any new disturbances. PPML recognizes that actions to reclaim boreal habitat must be completed cooperatively, as it is also important to respect existing land users, recreational use of the Pine Point area, and other developers with interests in the Pine Point area. PPML looks forward to working with the DKFN and other interested parties on the implementation of the approved WMMP for the Project, and through the on-going process to develop the Southern NWT Boreal Caribou Range Plan.

5.3 Traditional Land Use

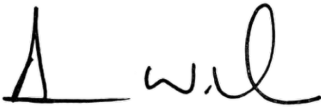
Ongoing land use of the Pine Point area provides an important connection to the land, and PPML plans to undertake exploration operations with minimal impact to traditional and non-traditional land use. The goal of protecting land users is included, for example, in the Land Use Permit condition that requires PPML to avoid cabins, and in the Engagement Plan requirement that PPML inform DKFN and other parties prior to initiating operations each season. It is also important that DKFN work collaboratively with PPML to identify and avoid conflicting land use in the Pine Point area, for example by sharing the location of any cabins or traditional use areas at Pine Point that should be avoided. PPML looks forward to ongoing discussions with DKFN on these topics.

6.0 CLOSURE

PPML wishes to thank all the intervener parties for their helpful contributions to this water licence process. We look forward a decision from the MVLWB. Should you have any questions or need any additional information, please feel free to contact the undersigned at 416-209-2056 or acwilliams@live.ca.

Regards,

Pine Point Mining Limited.



Andrew Williams

Environment Manager

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