



INDEPENDENT ENVIRONMENTAL MONITORING AGENCY

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January 19, 2017

Violet Camsell-Blondin
Chair, Wek'eezhii Land and Water Board
#1-4905 48th St, Yellowknife, NT
X1A 3S3

Dear Ms. Camsell-Blondin,

Re: Waste Rock and Ore Management Plan Version 6.2 – Request for Extension

The Independent Environmental Monitoring Agency (Agency) has reviewed the Waste Rock and Ore Management Plan Version 6.2 (WROMP) that is currently out for review. The Agency is concerned with the proposed timeline for this review. Based on the rationale listed in the paragraphs below, the Agency is requesting that the Wek'eezhii Land and Water Board (WLWB) extend the due date for comments until January 31, 2017.

Rationale:

Current Timeline

Not enough time has been given to allow reviewers to make a fair assessment of the proposed raise and associated increased volume of schist (PAG) into the Misery Pile. Waste rock piles are permanent legacy structures and decisions to change the approved design should not be made quickly without an appropriate amount of diligence and review. The WROMP version 6.2 was sent for review on December 22, 2016. Most reviewers would not have seen the review until January 3 or 4, 2017 due to the holiday season. Since January 4, for the Ekati Mine, there have been a number of items requiring submission of reviewer comments:

- January 3, 2017 – Jay WL PH undertakings were circulated;
- January 5, 2017 - Ekati Watercourse Crossing – Type B WL Application comments due to WLWB;
- January 10, 2017 – Jay Air Quality Emission Management Monitoring Plan comments due to GNWT;
- January 13, 2017 – 2016 Environmental Impact Review final comments due to GNWT;
- January 13, 2017 – Wildlife Effects Monitoring Plan and the Caribou Roads Mitigation Plan comments due to GNWT;

- January 18, 2017 – Sable WL Amendment Application comments due to WLWB;
- January 18, 2017 – Environmental Agreement Implementation Agreement Meeting;
- January 19, 2017 – Draft Jay WL circulated for review with comments due February 2, 2017; and,
- WRSA Seepage Closure Ecological Risk Assessment is also out for review with a workshop on January 24, 2017.

Precedence

The rationale provided for the short timeline is based on operational urgency. While emergencies will occasionally arise, to require a short turnaround due to a lack of operational planning or diligence on behalf of the proponent sets a precedence. Reviewers are not responsible for the urgent nature of the request and therefore should not be limited in their ability to provide thoughtful and considered comments. The WLWB relies on comments to help make decisions. By limiting the review period and ultimately the amount and quality of the comments, the ability of the WLWB to make an informed decision is reduced.

Concerns with the Proposed Raise

- **History:** The Misery WRSA has a long history that requires time to review past discussions on this topic.
- **Thermal Modelling Uncertainty:** The Tetra Tech EBA thermal modelling predicts that the waste rock below the active layer will reach temperatures of approximately 0 degrees to -2.1 degrees by the year 2115. Given that the EBA thermal modeling report is currently being reviewed and the subject of next week’s technical workshop and the proximity of the predicted temperature range to the freezing point, there are uncertainties over whether the Misery WRSA, or at least parts of it, will remain unfrozen for many years to come.
- **Long Term Seepage Quality and Quantity Uncertainty:** As part of the Seepage Closure Ecological Risk Assessment, Golder and Associates state the greatest decreases in seepage concentrations are predicted to occur when the core freezes. The more PAG rock that is added and the greater the height of the WRSA, the longer it may take for permafrost to form within the core of the pile (e.g., through internal heat generation and reduction of convective cooling). This could result in the prolonging of seepage.
- **Closure and Financial Security Implications:** This proposal is likely to impact the closure plan as well as financial security.
- **Depth of Active Layer:** In the Misery WRSA thermal modelling reports indicate an active layer depth of approximately 15 m. The proposed cover design is for a 5 m cover. One of the purposes of a cover is to separate the PAG (schist) from the active layer to avoid the freezing and thawing cycles. How can this be accomplished with a 5 m cover?

WRSA Closure ERA Work Shop – January 24, 2017

The WLWB is hosting a workshop to discuss submissions on the WRSA Seepage Closure Ecological Risk Assessment, which is currently out for review. A number of concerns identified by the Agency and our consultant regarding the Assessment are directly relevant to the WROMP review, such as concerns regarding the thermal and seepage quality modelling, assumptions made, and the resulting conclusions. The Agency believes this workshop presents a timely opportunity to discuss some of the uncertainties raised through increasing the amount of PAG in the Misery WRSA and could help inform comments on the proposed WROMP changes.

Thank you for considering our request for extension based on the concerns raised. If you have any questions concerning these comments, the Agency is pleased to discuss them at your convenience.

Sincerely,



Jaida Ohokannoak
Chairperson

Cc: DDEC – April Hayward
Tlicho Government - Sjoerd van der Wielen
Yellowknife Dene First Nation – Alex Power
Lutsel K'e Dene First Nation – Lauren King
North Slave Metis Alliance – Shin Shiga
Kitikmeot Inuit Association – Jared Ottenhof
Government of the Northwest Territories – Laurie McGregor
Indigenous and Northern Affairs Canada – Jennifer O'Neil