



February 23, 2024

Dr. Kathy Racher
Executive Director
Mackenzie Valley Land and Water Board
4922 - 48th Street
Yellowknife NT X1A 2P6

Dear Dr. Racher:

Cantung Mine – Care and Maintenance – Water Licence Application (MV2023L2-0001)– Information Request

On March 14, 2023, the Mackenzie Valley Land and Water Board (MVLWB) received the Application for type B Water Licence (Licence) MV2023L2-0001 for Care and Maintenance activities at the Cantung Mine site from North American Tungsten Corporation Ltd. (NATCL). The Application was sent for public review on the MVLWB's Online Review System on March 24, 2023. Comments and recommendations on the Application were received on May 19, 2023, with responses from NATCL received on June 6, 2023.

On November 20, 2023, the Government of the Northwest Territories – Department of Environment and Climate Change (GNWT-ECC) received an information request (IR) as a result of the comments submitted by GNWT-ECC, NATCL and Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) about the interpretation of legislation in respect of the type of Licence. GNWT-ECC responds to the IR directed to it as follows:

IR #3 to GNWT-ECC:

Please provide your organization's views on questions (a) and (b) below. In your response, include:

- **fully reasoned and thoroughly explained rationale based on the Mackenzie Valley Resource Management Act (MVRMA) and regulations (and other authorities as required); and**
- **reference to any environmental, operational, or practical considerations; applicable case law; and precedent LWB decisions, as required.**

a) Does a LWB have the jurisdiction to issue a type B licence that would replace a type A licence in situations when the activities associated with an appurtenant undertaking only exceed type B licensing criteria under the regulations, and will no longer exceed type A licensing criteria?

GNWT-ECC is of the view that it is not possible to meaningfully answer such a broad and far reaching question. Attempting to answer this question would not meaningfully assist MVLWB in deciding whether to issue a type A or B licence in this process. The analysis will necessarily always be highly context-specific when there is disagreement as to whether a type B renewed or amended licence can be issued for an undertaking previously authorized by a type A licence. However, an IR analogous to b) should be asked in every such case to help inform MVLWB's decision.

b) Based on your response to question (a), does the MVLWB have the jurisdiction to issue a type B licence to NATCL in response to its Application?

There is no legal authority to issue a type B licence to NATCL in response to its Application. A type A licence continues to be required. The Application is for care and maintenance of a mining and milling undertaking at which waste continues to be deposited to receiving waters and stored that was generated under a type A licence during active mining and milling. A type A licence for mining and milling continues to be required because a type A licence:

1. aligns with the provisions of the *Mackenzie Valley Federal Areas Waters Regulations* (MVFAWR);
2. is conceptually logical; and
3. avoids absurd consequences.

On October 24, 2023, GNWT-ECC provided the following response to the following general review item question posed by MVLWB on a LWB Reference Bulletin (bold added for emphasis):

The LWBs currently categorize both mineral exploration and abandoned mine remediation projects as miscellaneous projects for the purposes of licensing. Based on the project categories set out in Schedule B and Schedule II of the Waters Regulations and the MVFAWR, respectively:

(b) What is the most appropriate licensing category for abandoned mine remediation projects?

“(b) The GNWT also agrees that an abandoned mine remediation project is appropriately classified as a miscellaneous undertaking. When a mine is abandoned, a government will be responsible for the remediation of that mine. That government never produced minerals from that mine. It is therefore inappropriate to treat mine remediation as being analogous for the purpose of classifying the undertaking to activities carried out by an operator as part of the closure stage of a mine.

The GNWT does, however, note an important point in relation to mining and milling operations: Any operator regardless of whether their licence has expired or they purchased the property and are newly operating it, including a receiver or monitor under a bankruptcy or insolvency proceeding if there is any potential to seek a new

operator, would require the original class of licence issued for the undertaking for any care and maintenance, reclamation or closure activities.”

As CIRNAC has not ruled out seeking a new operator of Cantung Mine and NATCL, through the court-appointed monitor, continues to be the operator, this undertaking remains a mining and milling undertaking. The care and maintenance of Cantung Mine should therefore be assessed in the same way for licencing purposes as the care and maintenance of any mine that has the potential to resume active mining and milling. The second paragraph of GNWT-ECC’s response to the general review item, above, applies.

To further elaborate on the rationale for why a type A licence for mining and milling continues to be required, GNWT-ECC offers the following:

1. Continuing to require a type A Licence aligns with the Provisions of the MVFAWR

The threshold for a type A licence for a mining and milling undertaking on the basis of use of water and deposit of waste correspond in Schedule V of the *MVFAWR*, being use of water for and deposit of waste from milling at a rate of 100 or more tonnes of ore per day (or use of water for production leaching). The rate at which milling occurs or occurred is therefore the determining factor of whether a type A licence is required.

S. 6(2)(f) of the *MVFAWR* sets out the information that an application for a water licence for an undertaking involving the deposit of waste must include. Deposit of waste to receiving waters and/or storage of waste could persist beyond the term of the licence issued.

Taking the trigger for a type A licence for mining and milling and the required information for a licence application for an undertaking involving a deposit of waste into account, it is apparent that all of that required information remains relevant beyond the term of a licence for mining and milling in which that waste was first generated, including until it is remediated. This indicates that if waste generated during the term of a type A licence for mining and milling continues to be deposited to receiving waters to any extent or there continues to be storage or treatment of any such waste beyond that type A licence’s term, a type A licence for mining and milling continues to be required until the closure criteria for that mine are met.

This interpretation aligns with the wording of s.8(2) of the *Mackenzie Valley Federal Areas Waters Regulations*. That section gives no indication that the criterion for a type A licence on the basis of deposit of waste is limited to only the deposit of waste that occurs during the term of the licence.

2. Continuing to require a Type A Licence is conceptually logical

Continuing to require a type A licence is conceptually logical. A mining and milling undertaking requiring a type A licence will typically have created substantial liabilities after decades of operation, particularly if no progressive reclamation has occurred. The more rigorous requirements under a type A licence for mining and milling during care and maintenance are

conceptually appropriate given that the risk to the environment from those liabilities is not reduced during the period of care and maintenance. Further, care and maintenance is actually part of closure and reclamation plans, not a separate phase of closure or operations.

3. Continuing to require a Type A Licence avoids absurd Consequences

This interpretation avoids absurd consequences. If a type B licence could be issued during care and maintenance of a mining and milling undertaking, the applicable land and water board would be able to authorize a deposit of stored waste (i.e. exfiltration of tailings water) that would exceed what was authorized under the type A licence issued during active operation of the mine without:

- a call for a public hearing under s. 72.15(2) of the *Mackenzie Valley Resource Management Act*; or
- approval of the Minister under s. 72.13 of the *MVRMA*.

GNWT-ECC notes that it is not possible to avoid ongoing deposit of waste to receiving waters and storage of waste from the past active operation of Cantung Mine during care and maintenance.

GNWT-ECC disagrees with CIRNAC that the current project will not be depositing waste, as indicated in the type B licence application. In this case, there will be both ongoing deposit of waste to receiving waters and storage of waste from the active operation of the mine, when a type A licence for mining and milling was required, during care and maintenance. The respects in which this will or could occur are as follows :

- Documented [historical issues](#) of aluminium and fluoride levels that have been noted to be not a result of natural conditions that haven't been addressed or remediated. Additionally, [2020 Environmental Effects Monitoring \(EEM\) reports](#) have recorded CCME Protection of Aquatic Life (PAL) water quality guideline exceedances for total aluminum, total iron, and total phosphorus in the Flat River that are a result of care and maintenance activities at the site.
- The impact of windblown tailings that have been stockpiled (i.e., on the surface of TSF3) into local waters.
- The impact of weathering of Flat River tailings entering local waters (including the potential for Acid Rock Drainage/Metal Leaching (ARD/ML)).
- [Tetra Tech](#) identified hydrocarbon-contaminated soil excavated from various locations at the mine, which is stockpiled on the southeast portion of Tailings Containment Area 3. It has recommended water quality monitoring for this waste source.
- Potential for hazardous wastes (e.g. waste oil and chemicals, asbestos in buildings, etc.) releasing to the local environment during care and maintenance activities. The [Phase III Environmental Site Assessment \(ESA\)](#) submitted by CIRNAC notes that the surrounding soil at the site still contains petroleum hydrocarbons (PHCs).
- There is an existing associated risk posed by the liquefaction potential of the ground below Tailings Storage Facility 4 (TSF4), which has been calculated in the security

estimate by the Board to cost \$9M to remediate. These tailings have a risk of entering the local environment that could impact local waters until tailings are either covered or placed underground.

- As noted in the Phase III ESA, there are substantial non-point sources of contamination of metals within fill and mining-generated materials at the surface. These fill materials “have been extensively reworked and redistributed around the Site so that metals contamination in fill, either originating from mining-generated materials or derived from native soils, has been effectively disseminated around the Site in roads, pads, berms and fill for building foundations.
- The potential (low) of ARD/ML from the underground mine entering the environment, including releases to the groundwater.

While CIRNAC has concluded that due to the dilution of the Flat River, effects on the general receiving environment remain low, this does not mean there is no direct or indirect deposit of waste. Regardless of the Flat River's dilution potential and the risk to the aquatic environment, there are still ongoing waste deposits at the site until the mine is completely remediated.

Further, allowing a type B water licence for care and maintenance and then requiring an application for a type A water licence application and process for closure and reclamation or resumption of active mining and milling isn't practical. This could delay remediation efforts even further (adding to uncertainty and potential for environmental consequences). Issuing a type B licence could render the site even more unattractive to a potential purchaser as the purchaser would then require an immediate type A water licence application to start mining and milling (including remining tailings) or begin active remediation while exploring in the area to continue operations.

Again, Points #1-3, above, are therefore fully applicable and a type A licence remains required.

If you require further information, please contact Bill Pain, Environmental Scientist, Regulatory and Permitting, at Bill.Pain@gov.nt.ca.

Sincerely,



Rick Walbourne
Director
Regulatory and Permitting Division
Environment and Climate Change