



**Mackenzie Valley Land and Water Board**  
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December 10, 2018

File: MV2015L2-0003

Mr. Todd M. Martin  
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Email: [cbeveridge@alvarezandmarsal.com](mailto:cbeveridge@alvarezandmarsal.com)

Dear Mr. Martin:

**Surveillance Network Program Changes – Approved**  
**North American Tungsten Corporation Ltd. – Mining and Milling, Tungsten, NT**

The Mackenzie Valley Land and Water Board (MVLWB or the Board) met on December 10, 2018 and reviewed your requested changes to the Surveillance Network Program (SNP) annexed to Water Licence MV2015L2-0003, which was submitted on September 5, 2017 in accordance with Part B, Condition 9 of the Licence.

The Board hereby approves the requested changes as follows:

- SNP Station S4-13 is reactivated as requested;
- SNP Station S5-2 has been added as requested;
- SNP Station S4-44 has been temporarily suspended as requested;
- SNP Station S4-27-16 was not removed as requested. Instead, sampling has been temporarily reduced to once-per-year;
- Sampling at SNP Stations 4-27-4, 4-27-7 to 4-27-15, and 4-27-17 has been reduced to once-per-year as requested. If exceedances are noted at any of the stations, sampling must increase to twice-per-year.

In addition to these decisions, it was noted during review of the requested changes that Acho Dene Koe First Nation is not included in the current version of NATCL's approved Engagement Plan. The Plan should be revised to include Acho Dene Koe First Nation as an affected party, and submitted for Board staff confirmation no later than January 31, 2019.

Detailed discussion of the Board's decisions and revised sampling requirements for the SNP are included in the attached Reasons for Decision document.

The Board met to consider another decision related to this Licence (Care & Maintenance Plan) on the same day as this decision. The Licence, with noted changes to the SNP monitoring requirements, is attached to that decision letter.

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If you have any questions or concerns, please contact Julian Morse at (867) 766-7453 or email [jmorse@mvlwb.com](mailto:jmorse@mvlwb.com).

Yours sincerely,



Mavis Cli-Michaud  
MVLWB, Chair

Copied to: Distribution List

Attached: Reasons for Decision



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### Reasons for Decision

Issued pursuant to section 72.25 of the *Mackenzie Valley Resource Management Act*

| Water Licence – SNP Change Request |  |
|------------------------------------|--|
| <b>Preliminary Screener</b>        | MVLWB                                    |
| <b>Reference/File Number</b>       | MV2015L2-0003                            |
| <b>Company</b>                     | North American Tungsten Corporation Ltd. |
| <b>Project</b>                     | Mining and Milling, Tungsten, NT         |
| <b>Date of Decision</b>            | December 10, 2018                        |

These Reasons for Decision set out the Mackenzie Valley Land and Water Board’s (the Board or MVLWB) decision on a submission requesting to adjust Surveillance Network Program monitoring requirements made by North American Tungsten Corporation Ltd. (NATCL) to the Board on September 5, 2017 for Water Licence (Licence) MV2015L2-0003.

#### 1.0 Background

The Cantung Mine has been in care and maintenance status since September 9, 2015, when NATCL was placed in receivership. The mine is currently managed by the Receiver – Alvarez & Marsal Canada Inc., which is backed by funding from Indigenous and Northern Affairs Canada (INAC), who are responsible for the lands associated with the mine site in accordance with the Northwest Territories Devolution Agreement.

Water Licence MV2015L2-0003 (renewal of MV2002L2-0019) was issued on January 28, 2016. Since issuance, NATCL has submitted several requests for deferral of submission dates for plans and reports associated with mining activities, and minor changes to the Surveillance Network Program (SNP) monitoring frequency. Part B, Condition 9 of the Licence states that “[t]he Schedules, the Surveillance Network Program, and any compliance dates specified in this Licence may be changed at the discretion of the Board”, granting the Board flexibility to make adjustments to the SNP when required.

#### Care & Maintenance Plan and Board Directives

This submission relates to several Directives issued by the Board regarding NATCL’s Care & Maintenance Plan (C&M Plan). On September 8, 2016, as part of a decision<sup>1</sup> on a previous version of the C&M Plan, the Board noted that several locations had been identified at the mine site where water was discharging that was not being captured by an active SNP station associated with the Licence. The Board directed NATCL to submit a formal request for changes to SNP stations to reflect the care & maintenance status of the mine.

<sup>1</sup> [September 8, 2016 Board Directive](#)

On May 5, 2017, NATCL submitted a request to change SNP monitoring under the Licence, however the request did not address the discharges noted in the Board's September 8 Directive. The Board responded with a June 7, 2017 Directive<sup>2</sup> which noted this deficiency and directed NATCL to revise and re-submit the request to address the September 8, 2016 Directive. The current submission before the Board was submitted in response to the two Directives on September 5, 2017 and requests a number of changes to the SNP to reflect the current status of the site.

## **2.0 Public Review**

NATCL's Request was distributed for public review by Board staff on September 15, 2017. By October 11, 2017, comments and recommendations on the Request were received from the following reviewers: Acho Dene Koe First Nation (ADKFN), Environment and Climate Change Canada (ECCC), and the Government of the Northwest Territories – Environment and Natural Resources (GNWT-ENR). NATCL responded on October 18, 2017. Reviewer comments and recommendations, NATCL's responses, and Board determinations are discussed in detail below.

## **3.0 Discussion & Board Decisions**

ADKFN did not submit specific comments on NATCL's Submission, however they did submit a comment stating they would like to be engaged on the project. NATCL responded that they would contact ADKFN to discuss the SNP change as requested. While NATCL's response was satisfactory, in reviewing the current version of NATCL's Engagement Plan, the Board has noted that ADKFN are not included as an affected party in the Plan. The Board therefore requires NATCL to update and resubmit the Plan accordingly. The Plan will be considered approved upon confirmation of this update by Board staff.

NATCL's submission detailed a number of requested changes to SNP sampling requirements to better reflect current conditions at the mine, which remains in care & maintenance status. The requested changes and Board determinations are summarized as follows:

### **1. Re-activate SNP Station S4-13 during care & maintenance:**

This station was active under a previous version of the Licence, and monitored discharge from the 3950 level main portal to the underground mine. The station was inactive due to the fact that during operations, the mine was pumped dry, and there was no discharge from this point. The mine has been allowed to flood during care & maintenance, and mine water has begun discharging from the portal again. The Board noted this in their September 8, 2016 Directive, and NATCL proposed re-instating this station during care & maintenance.

Both GNWT-ENR and ECCC concurred with NATCL's request, agreeing that monitoring of the discharge at this station would be beneficial. The Board therefore decided to re-activate SNP station S4-13. Sampling at this station must occur monthly until 3 months following the start of commercial operations.

### **2. Addition of SNP Station at S5-2:**

This station, which monitors outflow of the old lagoon is currently being monitored by NATCL as the final discharge point for the purposes of complying with the Metal Mining Effluent Regulations, but is not monitored under the Licence. In response to concerns raised during review of a previous version of the

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<sup>2</sup> [June 7, 2017 Board Directive](#)

Care and Maintenance Plan in 2016<sup>3</sup> NATCL proposed adding an SNP station here to ensure this station is monitored under the Licence as well. NATCL noted in their request that while sampling at this station appears to be meeting Effluent Quality Criteria (EQC) associated with SNP Station S4-43 (Wastewater Treatment Facility Discharge), applying those criteria to this new station, for which they were not specifically developed, may not be appropriate.

In their comments on the Request, ENR noted that they are supportive of requiring this new station, if included in the Licence by the Board, to meet the EQC for Station S4-43.

In the absence of EQC that have been developed for the current wastewater discharge volumes and locations on site, the Board determined that the EQC set for S4-43 would be more appropriate than the groundwater EQC as noted in the 2016 Care and Maintenance Plan Review; however, as these EQC are likely more conservative than necessary for the much lower volumes that are currently being discharged. The Board has determined that as SSWQOs are being met in the Flat River this is evidence that the current discharge water quality and volume is not posing new or increased risk to the Flat River, and as such, continuing to apply the MMER limits to the current discharge locations is the most appropriate course of action for the interim, and as such, did not attach EQC requirements to this new station. However, the Board suggests that a more thorough assessment of suitable EQC for these discharge locations should be presented following the conclusion of the Phase III ESA and HHERA as noted in NATC's response to GNWT-ENR's comment ID 4 in the attached Review Comment Table. An amendment process should be conducted at that time to revise both location and the EQC values for the wastewater discharges.

### 3. Suspension of SNP Station S4-44:

Station S4-44 was established to monitor the effluent mixing zone emanating from the Wastewater Treatment Facility (WWTF) at the site. With operations being suspended at site, the WWTF is not currently operating. NATCL therefore requested that sampling be suspended until the WWTF is recommissioned. Both ECCC and GNWT-ENR expressed support for this request, as the WWTF is not operating. As no concerns were identified, the Board decided to suspend the requirement for monthly sampling at this station until three months prior to discharge of effluent from the WWTF, as requested.

### 4. Removal of SNP Station S4-27-16:

This groundwater monitoring station was established to monitor historic tailings which were deposited directly into the Flat River early in the mine's life. This station has posed problems for NATCL due to a requirement in the Licence (Part G, Condition 41) that the Groundwater Pumping Contingency Plan be implemented in the event of any exceedances at this and a number of other stations. NATCL has reported exceedances at S4-27-16 but has provided evidence which shows that the exceedance is due to the sampling method rather than exceedances actually occurring in-situ<sup>4</sup>. The Inspector has concurred with this assessment and determined the Groundwater Pumping Contingency Plan does not need to be implemented as a result of the noted exceedances<sup>5</sup>. For these reasons, NATCL proposed removing this station from the SNP.

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<sup>3</sup> [September 8, 2016 Board Directive](#)

<sup>4</sup> [September 23, 2016 email from NATCL](#)

<sup>5</sup> [September 30, 2016 email from AANDC Inspector](#)

Both ECCC and GNWT-ENR expressed reservations about removing this station from the SNP. ECCC stated they would prefer NATCL work to determine what is causing the exceedances with the goal of preventing them (it is noted that NATCL provided this information in their memo to the Board<sup>4</sup>). GNWT-ENR noted that as the station is collecting more information than just Total Suspended Solids (TSS), which is the parameter causing exceedances, it was their preference that the station remain. In response to these concerns, NATCL revised their request from removal of the station to reducing sampling to once per year, similar to their request (discussed below) to similarly reduce sampling at other groundwater monitoring stations. Considering the care & maintenance status of the site, the Board considers this is an acceptable interim solution. However, NATC will need to continue to rely on the Inspector to determine whether future TSS exceedances warrant implementation of the Plan. The Board decided to reduce sampling at this station to once per year during care & maintenance, similar to other groundwater monitoring stations at the site. The Board noted that this may not solve the specific issue at this station. NATCL should consider GNWT-ENR's suggestion to request removal of TSS in a future amendment to the Licence.

5. Reduction of sampling frequency for remaining groundwater wells (4-27-4, 4-27-7 to 4-27-15, and 4-27-17):

NATCL requested a reduction in sampling frequency of groundwater wells to once-per-year during care & maintenance. NATCL noted that none of these stations have shown an EQC exceedance (with the exception of S4-27-16, discussed above) since sampling commenced at these stations in 2009. Neither ECCC or GNWT-ENR raised specific concern with granting NATCL's request, however GNWT-ENR suggested that if exceedances occur at any station, sampling should be increased to twice per year for that station. NATCL agreed with that recommendation. Considering the historical data set for these stations, and the current status of the site, the Board decided to reduce sampling frequency for the above-noted groundwater monitoring stations as requested by NATCL while the mine remains in care & maintenance. The sampling frequency must be increased to twice per year if EQC exceedances are observed. Sampling frequency must resume on the first ice-off season following the re-commencement of commercial operations.

#### **4.0 Conclusion**

Water Licence MV2015L2-0003 contains provisions that the Board deems necessary to ensure and monitor compliance with the MVRMA and the Regulations made thereunder, and to provide appropriate safeguards in respect of Company's use of the waters and/or deposit of waste. The Board will provide additional referenced material or documents if requested in writing to do so.

SIGNATURE

Mackenzie Valley Land and Water Board



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Mavis Cli-Michaud, Chair

December 10, 2018

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Date