

**Nahæâ Dehé Dene Band**  
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September 10, 2015  
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[permits@mvlwb.com](mailto:permits@mvlwb.com)  
[jmorse@mvlwb.com](mailto:jmorse@mvlwb.com)

Attention: Mr. Julian Morse, Regulatory Officer

Re: MV2015L2-0003 Water License Renewal Information Requests 2 – Responses

Dear Mr. Morse,

The NahꞤa Dehé Dene Band (NDDB) is submitting responses to the second round of information requests for the water license renewal application

**IR1: Approach to Risk Assessment and Closure Planning for Flat River**

Background: As required under Water Licence MV2002L2-0019, NATCL submitted a Qualitative Risk Assessment for the Flat River Tailings to the MVLWB in 2009, and NATCL suggested that this submission also satisfied the requirement for a Quantitative Risk Assessment. This submission was circulated for review, but was not considered by the Board. Although closure options for the Flat River Tailings have been included in subsequent closure planning submissions and discussions, closure options for the Flat River Tailings have not been finalized.

During the January 17, 2015 Technical Session, NATCL suggested that the existing Water Licence requirements for Qualitative and Quantitative Ecological Risk Assessments for the Flat River Tailings could be incorporated into the Integrated Geochemical Load Balance and Risk Assessment Report for the site. The information gathered through this assessment would be used to develop and present closure options for the Flat River Tailings in the Interim Closure and Reclamation Plan (ICRP). NATCL proposed to conduct any additional research needed to support closure option decisions for the Flat River Tailings as reclamation research under the ICRP.

IR1 - Please indicate whether your organization supports NATCL's proposed approach to risk assessment and closure planning for the Flat River Tailings. Include rationale for your organization's position.

IR1 NDDB response

Background / rationale: To date, NATCL has not submitted an adequate comprehensive qualitative and quantitative risk analysis to the Flat River Tailings. NDDB further recognizes that NATCL has clarified that the integrated geochemical load balance and risk assessment

will not include an ecological risk assessment. Rather, “hydrological, biological and ecological data that has been collected over the years would be layered onto the geochemistry information. Any gaps would be identified and addressed through the ICRP process and research plans. Therefore the decisions within the ICRP would be based on layers of scientific information. The decision and supporting information will be part of the ICRP instead of a separate document.”

NDDB feels that a quantitative risk assessment produced to a high quality as an earlier requirement of the water license would have aided in informing ICRP conceptual design as well as the on-going design of the AEMP. Risk assessments in *advance* of further plans functions as an effective tool by which to consider alternatives and help to direct the focus and scope of further work. Layering existing ecological information onto geochemical information does not equate to a risk assessment. Rather, a well designed risk assessment would create the basis by which the adequacy of these layers could be evaluated. Without a risk assessment, it is not clear how gaps in information will be objectively identified.

Recommendation: NDDB would like to encourage the Board to lay out clear requirements and timelines (including scope) of required risk assessments. Ecological risk is ultimately of utmost importance to NDDB community members and so NDDB requests that NATCL clarify at which points sources of risk including probability and severity of potential impacts related to the Flat River Tailings will be researched and presented. The existing commitments do not adequately give confidence that the equivalent of a quantitative risk assessment will be completed.

## **IR2 Sub-lethal toxicity**

Background: Toxicity testing of site effluent or Flat River sampling stations is not currently included in the Surveillance Network Program. In its July 14, 2015 intervention, EC recommended that the SNP include sub-lethal toxicity testing at the Stinky Pond culvert (SNP Station 4-20). In its July 23, 2015 response to interventions, NATCL disagreed with including this testing in the SNP, stating that it completes sub-lethal toxicity testing in the Flat River above and below SNP 4-20 under the Metal Mining Effluent Regulations.

IR2 - Please indicate whether toxicity testing should be required at this site. If recommending that it be required, specify whether it should form part of the Surveillance Network Program (SNP) or be incorporated into the Aquatic Effects Monitoring Program. If toxicity testing requirements should be set out in the SNP, describe what specific toxicity testing should be required for this site, what the sampling location should be, and how often this testing should be conducted. Include rationale for your organization’s position.

## IR2 NDDB response

Background / rationale: NDDB agrees that toxicity testing of site effluent and Flat River sampling stations is necessary and should be included initially at higher frequency than the three year MMER would allow. However, with the adaptive management approach of the AEMP as well as the iterative and collaborative approach to AEMP design, further discussions about the appropriate type, location and frequency can be justifiably deferred to the AEMP.

Recommendation: NDDB recommends that the water license include reference to the need for toxicity testing at the Stinky Pond site with reference to details being specified within the AEMP.

**IR3 – license term**

IR3 - NATCL has requested a water licence term of 10 years. In its July 14, 2015 intervention, GNWT-ENR supported this proposal. Please make a recommendation regarding the term of the Water Licence. ... 5 years without justification

IR3 NDDB response

Background / rationale: NATCL has previously had a water license of five years. No justification has been given for a longer water license period. Maintaining the previous length of license helps to ensure that the license will remain consistent with updates in legislation, policy and best practice. If, at renewal, few changes have been made to best practice and if the terms of the water license are ensuring that environmental effects from the mine are minimal and/or mitigated, a renewal process will likely be short and efficient. Longer license terms tend to result in increasing requirements for new submissions and review, increasing the onus on both the proponent and the company once renewal occurs.

Recommendation: NDDB recommends that a license term of five years be retained.

Please contact me if you have any questions regarding NDDB's responses to the second round of IRs.

Respectfully,

Christine Wenman, B.Sc., MSc.  
NDDB, Regulatory Advisor