Délı̨nę Got'ı̨nę Government
Our People. Our Future. Our Délı̨nę.

Simon Toogood
Senior Environmental Assessment Advisor
Mackenzie Valley Environmental Impact Review Board
Box 938, #200 Scotia Centre 5102-50th Ave
Yellowknife, NT X1A 2N7
stoogood@reviewboard.ca

April 30th, 2025 **Via Email**

Náhkale;

RE: Délı̨nę ʔehdzo Got'ı̨nę's Intervention for Line 490 Replacement Project (EA2425-01)

On September 24, 2024 the Sahtú Secretariat Incorporated referred the Line 490 Replacement (the Project) applications to the Mackenzie Valley Environmental Impact Review Board (Review Board) for an environmental assessment (EA), under s. 126(2) of the Mackenzie Valley Resource Management Act.

Délı̨nę ʔehdzo Got'ı̨nę (DRRC) is recognized through the Sahtú Dene/Metis Comprehensive Land Claim Agreement (1993). As described in Section 1 as well as Chapter 13 of the Land Claim Agreement, Délı̨nę ʔehdzo Got'ı̨nę' is the representative organization of the Délı̨nę Got'ı̨nę and their rights in all forums and in all matters impacting wildlife harvesting and management on Délı̨nę District lands and across the Sahtú settlement area in conjunction with the four additional ʔehdzo Got'ı̨nę and the ʔehdzo Got'ı̨nę Gots'ę́ Nákedı (SRRB).

The DRRC has reviewed the information available on the public registry for this EA in accordance with its mandate and is of the opinion that there are still outstanding wildlife and fish related concerns that need to be addressed.

Máhsı

Original Signed

Edward Reeves, Manager
Délı̨nę ʔehdzo Got'ı̨nę

Monitoring and Mitigation to ensure the protection of fish and fish habitat.

Rationale for Concern

One of the primary goals of this Environmental Assessment is to determine if the Project likely to have significant adverse environmental impacts or cause public concern. DRRC considers any potential impacts to water quality and fish heath of significant public and cultural. These concerns are compounded when combined with community concerns about to the continued changes to depth, flowrate and erosion observed in the Dehcho (Mackenzie River).

Despite fish health concerns being expressed by a number of interveners, Imperial states that these effects are not predicted and has not proposed Project specific monitoring (apart from turbidity) or mitigation are required, despite the absence of appropriate supporting evidence (i.e. data, assessments or modeling). Given the lack of additional information provided during the IR stage, DRRC will ask the board for two measures to require monitoring, and mitigations are appropriate to protect fish health.

Changes in Water Quality

In response to CIRNAC and SRRB Imperial has committed to turbidity monitoring and highlighted their commitment to submit a turbidity monitoring plan to the SLWB, without providing any detail as to what this plan may contain. While the commitment is appreciated, the commitment to monitor turbidity indicates that vibrations from drilling activity could be sufficient to increase total suspended solids concentrations. There are a variety of mechanisms by which changes in TSS can adversely impact aquatic ecosystems, both directly or indirectly.

The relationship between increased TSS, water quality and the associated impacts on aquatic ecosystems are well described in scientific literature, widely accepted and commonly understood. Increases in TSS can result in the reduction of water clarity, reduced dissolved oxygen concentration and increased temperature, all of which can adversely impact the downstream aquatic community particularly for the most sensitive species. In addition to changing physical properties of the water, increased TSS can cause increased metal concentrations, which can pose a risk to human health and aquatic life.

Sediment disturbance can impact benthic community assemblages, both at sites of disturbance and deposition, as changes to substrate composition and or particle size can change habitat suitability. Additionally, increased deposition can have significant impacts, particularly on less mobile species which could be buried in some instances. These effects can in turn, change the abundance, distribution and availability of important food sources for fish species, particularly bottom feeding fish species (e.g. broad whitefish or suckers). Finally, increased TSS can directly impact the abundance and distribution of fish species, in particular species sensitive to TSS concentrations may relocate to avoid areas with reduced water quality.

Sound and Vibration:

It has been observed that vibration from drilling under a river can be harmful to fish, underwater noise and vibrations, generated during activities like drilling and blasting, can disrupt fish behavior, communication, or even cause physical damage. Given that it is reasonable to expect that drilling activities may produce vibrations strong enough to disturb sediments, DRRC finds it of equal concerns that the noise and vibrations from drill under the Dehcho will impact fish health. The potential for noise and vibrations to harm fish are regulated by DFO using timing windows that are acceptable for work and limiting vibration intensity and overpressure. Given that DRRC has not found any information on expected or predicted levels of vibration or noise that will be generated by drilling, we believe that monitoring is required to demonstrate that any vibrations or noise produced by the Project are below acceptable limits for the protection of fish.

Recommended Measures:

1) *Imperial to include in the following requirements as a component of the turbidity monitoring program:*
    a. *The sampling of TSS in combination with turbidity. Unless Imperial can demonstrate to the satisfaction of the SLWB, they have developed a stable site specific TSS/Turbidity correlation.*
    b. *Turbidity and TSS low medium and high action levels that if exceeded will trigger management action by the company.*
    c. *A list of potential mitigations they may choose to implement in response to action level exceedance*
2) *Imperial to submit a vibration monitoring plan for review and approval by the SWLB. The monitoring should continue until such time as Imperial can demonstrate that vibration levels produced by drilling do not represent a risk to fish health or unless otherwise approved by the SLWB.*

Conclusion

The DRRC finds that generally Imperial has implemented many best practices to limit the potential impacts of the Project on terrestrial wildlife, such as limiting additional disturbances, mitigating potential for erosion in disturbed areas and using the existing right of way to limit habitat fragmentation. That said, there are still outstanding concerns related to fish health that have not been adequately addressed or mitigated. However, DRRC believes that appropriate measures should reduce both the likelihood and duration of any potential impacts to fish health and habitat.