Pêches et Océans Canada

Fish and Fish Habitat Protection Program Arctic Region 301 – 5204 50th Ave. (Franklin) Yellowknife, Northwest Territories X1A 1E2 Programme de protection du poisson et de son habitat Région de l'Arctique 301 – 5204 50th Ave. (Franklin) Yellowknife, Territoires du Nord-Ouest X1A 1E2

February 28, 2025

Your file Votre référence 24YN049

Our file Notre référence 24-HCAA-02338

Subject: General Water Licence Application: West Kitikmeot Resources Corp. Grays Bay Road and Port Project, Field Research Program

To whom it may concern,

On February 18, 2025, the Nunavut Water Board invited parties to comment on the **General Water Licence Application: West Kitikmeot Resources Corp. Grays Bay Road and Port Project, Field Research Program**. The Fish and Fish Habitat Program (FFHPP) of Fisheries and Oceans Canada (DFO) has reviewed the document in accordance with DFO's mandate and provides the following comments.

Comment DFO #1 – Winter Water Withdrawal:

Water withdrawal for the Project is required for geotechnical drilling, ice pad construction, and ice strip maintenance during ice-over season. Excessive amounts of water withdrawn from ice-covered waterbodies can impact fish through oxygen depletion, loss of overwintering habitat and/or reductions in littoral habitat. The water license application specifies a maximum of 299 m³/day to be withdrawn daily, with withdrawal not exceeding 10% of the available capacity per waterbody or watercourse. For water withdrawal from lakes, DFO recommends the proponent conforms with DFO's Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut (2010). For water withdrawal from watercourses, DFO recommends the proponent follow the Framework for Assessing the Ecological Flow Requirements to Support Fisheries In Canada (https://waves-vagues.dfo-mpo.gc.ca/Library/348881.pdf) and demonstrates that water withdrawal rate remains <10% of actual (instantaneous) flow and does not result in flows <30% of mean annual discharge (MAD).

Comment DFO #2 – Fish Impingement and Entrainment:

The method of extraction for water withdrawal is described to include pumps with screened intakes. No information on intake flow rates is provided. Direct fish mortality can occur during water withdrawal activities through entrainment/impingement. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when a



fish is held in contact with the intake screen and is unable to free itself. DFO recommends adhering to DFO's Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater available at https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html when using fish screens, if water intake flow rate is up to 0.150 m3/s, or 150 litres per second (L/s).

Comment DFO #3 – General Impacts to Fish and Fish Habitat:

In order to comply with the *Fisheries Act*, it is recommended that the Proponent follow DFO's protective measures for fish and fish habitat and standard codes of practice which can be found on DFO's website (https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html) and https://www.dfo-mpo.gc.ca/pnw-ppe/practice-practique-eng.html).

Proponents are also asked to respect the Nunavut in-water works restricted activity timing windows https://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/nu-eng.html). By doing so, works, undertakings or activities with potential impacts to fish and fish habitat can be avoided by protecting fish during spawning and incubation periods when spawning fish, eggs and fry are vulnerable to disturbance.

If the proposal meets the criteria for a site specific review, as described on DFO's website (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-003-eng.html), Proponents should complete and submit the request for review form available on the website (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-004-eng.html).

It is the proponent's *Duty to Notify* DFO if they have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to DFO.ARCEMTriage-TriageGEARC.MPO@dfo-mpo.gc.ca.

Regards,

William Richmond

Biologist

Fish and Fish Habitat Protection Program

Fisheries and Oceans Canada