Pêches et Océans Canada

Fish and Fish Habitat Protection Program Arctic Region 301 – 5204 50th Ave. (Franklin) Yellowknife, Northwest Territories X1A 1F2 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 14, 2025

Your file Votre référence 3AM-PANG1828

Subject: Hamlet of Pangnirtung, Water Licence (3AM-PANG1828)

To whom it may concern,

On January 14, 2025, the Nunavut Water Board invited parties to comment on the Hamlet of Pangnirtung Water Reservoir Operations and Maintenance Manual, Water Licence, file number: 3AM-PAN1828. The Fish and Fish Habitat Program of Fisheries and Oceans Canada (FFHPP) appreciates the opportunity to review the application and offers a comment below.

DFO Comment:

The Hamlet of Pangnirtung Water Reservoir Operations and Maintenance Manual (required under Water Licence 3AM-PAN1828) discusses the communities' water withdrawal from Duval Lake where fish presence confirmation studies have not been completed.

DFO attended the 2018 Public Hearing and recommended the inclusion of a license condition to conduct a hydrology study of the Duval River, for water withdrawal to occur during higher flow periods in July and August to minimize the requirements to withdraw water during low flow periods, and that a fish screen be installed on water intakes that meets DFO "Freshwater End-of Pipe Fish Screen Guideline" (1995).

Based on a phone call on Feb 20th 2018, it was communicated to DFO that the comment would be addressed. DFO recognizes that the water withdrawal activities (i.e. intake rate, duration, and a lack of end-of-pipe fish screens) have the potential to impact fish and fish habitat.

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. In addition, excessive amounts of water withdrawn from ice-covered waterbodies can impact fish through oxygen depletion, loss of overwintering habitat and/or reductions in littoral habitat.



Recommendation:

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 NU in-water works restricted activity timing windows (<u>Projects Near Water - Nunavut Restricted Activity Timing Windows for the Protection of Fish and Fish Habitat (dfo-mpo.gc.ca)</u> to protect fish during spawning and incubation periods when spawning fish, eggs and fry are vulnerable to disturbance or sediment.

The proponent should refer 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 and if the water intake flow is up to 0.150 m³/s, or 150 liters per second (L/s).

If proposal meets the criteria for a site specific review, as described on DFO's website (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-review-demande-d-examen-003-eng.html), the proponent 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 also 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 the destruction of fish habitat. Such notification should be directed to DFO.ARCEMTriage-TriageGEARC.MPO@dfo-mpo.gc.ca

Yours sincerely,

Anna-Maija LaFlamme Triage/RRU Biologist

Fish and Fish Habitat Protection Program

Fisheries and Oceans Canada

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