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 10, 2025

Your file Votre référence 3BM-ARC1924

Subject: Municipal of Arctic Bay, Water Licence Renewal & Amendment Application

To whom it may concern,

On January 20, 2025, the Nunavut Water Board invited parties to comment on the Municipal of Arctic Bay, Water Licence Renewal & Amendment Application, file number: 3BM-ARC1924. 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 Municipality of Arctic Bay, Water Licence (3BM-ARC1924) Renewal & Amendment Application discusses the projects proposed new water treatment plant construction for water withdrawal for the municipality which has the potential to impact fish and fish habitat.

Impacts to fish and fish habitat can occur during in-water construction activities through loss of riparian habitat during site clearing, channel alterations (e.g., culverts impeding fish migration), erosion and sedimentation, release of deleterious substances into aquatic environments, disturbance to fish and fish habitat during sensitive life stages, and water withdrawals, particularly during low water periods.

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 In addition, excessive amounts of water withdrawn from ice-covered waterbodies can impact fish through oxygen depletion, loss of overwintering habitat and/or reductions in littoral habitat.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

In addition, the proponent should follow the DFO Protocol for Winter Water Withdrawal in the NWT (2010) and not withdrawal more than 10% of under-ice water volumes (Microsoft Word - Water Withdrawal Protocol - Jan 05.doc)

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-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

Aun Maje Lafter

Triage/RRU Biologist

Fish and Fish Habitat Protection Program

Fisheries and Oceans Canada