



Fisheries and Oceans
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Pêches et Océans
Canada

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Programme de protection du poisson et de son habitat
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Your file *Votre référence*
2AM- MRY1325

Our file *Notre référence*
24-HCAA-01655

October 23, 2024

Nunavut Water Board (NWB)
P.O. Box 119
Gjoa Haven, NU
X0B 1J0

Subject: Fisheries and Oceans Canada's Technical Comments for the Licence Renewal for Baffinland Iron Mine Corporation's Mary River Mine Project Type A Water Licence No. 2AM-MRY1325

Dear Richard,

As requested by the Nunavut Water Board (NWB) in the "Public Notice of Renewal Application" dated September 23, 2024, the Fish and Fish Habitat Protection Program of Fisheries and Oceans Canada (DFO) has conducted a review of Baffinland Iron Mines Corporation's (BIM) Type "A" Water Licence renewal application in regard to DFO's mandate, i.e. the management, protection and conservation of fish and their habitats.

DFO provides two technical comments related to the potential impacts from: 1) watercourse crossings and 2) sedimentation and erosion. DFO is of the opinion that the concerns raised in this document should be discussed and addressed during the Water Licence renewal proceedings as they may be shared by other regulators (e.g., Environment and Climate Change Canada) and impacted communities and organizations.

With regard to BIM's response to the Qikiqtani Inuit Association comment (QIA-16), DFO notes that DFO's regulatory process, when a *Fisheries Act* Authorization is needed, has similar components as the NWB Water Licence process (i.e., similar information is requested and reviewed); however, both processes are distinct. Therefore, comments reported by Baffinland in BIM's "*Attachment 4 Freshwater Environment Engagement Comments 2014-2024*" may be used to inform DFO's *Fisheries Act* Authorization application review, but it remains DFO's duty to consult with communities directly. DFO is in the process of coordinating consultation with communities for the ongoing review of the two *Fisheries Act* Authorization applications for the construction of the railway and the Steensby Port. Additionally, if parties have concerns related to Fish and Fish Habitat and to Marine Mammals, DFO invites comments to be sent directly to us.

If you have any questions, please contact Paul Harper at (867) 444-0983, or by email paul.harper@dfo-mpo.gc.ca. Please refer to the file number referenced above.



Fisheries and Oceans
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Sincerely,

A handwritten signature in black ink, appearing to read "T. Leclerc-Beaulieu".

Tatiana Leclerc-Beaulieu
A/ Team Lead
Fish and Fish Habitat Protection Program
Fisheries and Oceans Canada
Arctic Region

cc. Paul Harper – DFO



DFO Mandate, Role, and Responsibilities

Fisheries and Oceans Canada (DFO) is a federal department responsible for safeguarding our waters and managing Canada's fisheries and oceans resources. DFO's Fish and Fish Habitat Protection Program (FFHPP) administers and ensures compliance for development projects taking place in and around fish habitat under the fish and fish habitat protection provisions of the *Fisheries Act* and relevant provisions of the *Species at Risk Act* (SARA).

The *Fisheries Act* and the *Species at Risk Act* provide a legal basis for conserving and protecting fish and fish habitat. The fish and fish habitat protection provisions of the *Fisheries Act* include:

- a prohibition against causing the death of fish, by means other than fishing (section 34.4);
- a prohibition against causing the harmful alteration, disruption or destruction of fish habitat (section 35);
- a framework of considerations to guide the Minister's decision-making functions (section 34.1); and
- ministerial powers to ensure the free passage of fish or the protection of fish or fish habitat with respect to existing obstructions (section 34.3).

The fish and fish habitat provisions of the *Fisheries Act* are applied in conjunction with other applicable federal laws and regulations related to aquatic ecosystems, including the *Species at Risk Act*, the *Oceans Act*, regulations respecting aquaculture, the Marine Mammal Regulations, and the Aquatic Invasive Species Regulations.

The fish and fish habitat protection provisions apply to all fish and fish habitat throughout Canada. Fish is defined in subsection 2(1) of the *Fisheries Act* as including (a) parts of fish, (b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (c) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals. Fish habitat is defined to include all waters frequented by fish and any other areas upon which fish depend directly or indirectly to carry out their life processes. The types of areas that can directly or indirectly support life processes include, but are not limited to: spawning grounds and nursery, rearing, food supply, and migration areas.

The fish and fish habitat protection provisions provide an approach to conserving and protecting fish and fish habitat, supported by policies and programs that provide for the long-term sustainability of freshwater and marine resources. DFO adopts a risk-based approach to the application of the fish and fish habitat protection provisions subject to the sensitivity of the fish and fish habitat in question.



Comments

| Review Comment # | DFO-TRC-01 |
|-------------------|---|
| Subject / Topic | Watercourse crossings |
| References | Surface Water and Aquatic Ecosystem Management Plan – to be updated by BIM to include details on water crossings |
| Comment / Request | <p>In their response to the IRs, BIM indicated that the Surface Water, Aquatic Ecosystem Management Plan will be updated to include watercourse crossing information, but that they wish the review of this update be conducted separately from the NWB Water Licence Renewal Process.</p> <p>DFO visited the site in July 2024, and noted potential fish passage issues and sediment and erosion control concerns along the Tote Road at a number of watercourse crossings. This reflects some similar comments stated in BIM's <i>"Attachment 4 Freshwater Environment Engagement Comments 2014-2024"</i>.</p> <p>Although DFO is currently in discussions with the proponent to address concerns surrounding the Tote Road and the proposed remediation strategies, DFO is of the opinion that this issue should be discussed as part of the water license renewal process as impacts from watercourse crossings may overlap with one or more additional regulator's mandates, and concerned may be shared by impacted communities and organizations. Specifically, the plans should include measures to protect fish and fish habitat to preserve fish passage and to protect downstream fish habitat from impacts.</p> <p>DFO suggests BIM provide a summary table of all proposed watercourse crossings (i.e., road and rail culverts and bridges) to be presented at the Water Licence Technical Meeting, and to be added to the updated Surface Water and Aquatic Ecosystem Management Plan. This summary table is likely to be used by regulators to ensure that impacts to the aquatic environment are minimized. The information should include, but not be limited to:</p> <ul style="list-style-type: none">• locations where road infrastructure interacts with waterbodies and watercourses including seasonally wet drainages;• type of crossing - existing or proposed (bridges and culverts);• channel and wetted width;• fish species present (confirmed and suspected), and life stage;• Rationale on why crossings were considered unlikely to be non-fish bearing (i.e., downstream barrier to fish passage); and• whether there are fish bearing waterbodies downstream and/or upstream of the crossing and known important habitat. The seasonal channels between fish bearing waterbodies should be considered fish habitat. <p>Additionally, BIM should include in the updated plan a description of measures to protect fish and fish habitat to preserve fish passage and to protect downstream fish habitat from impacts.</p> |



| Review Comment # | DFO-TRC-02 |
|-------------------|--|
| Subject / Topic | Sediment and Erosion Control |
| References | Surface Water and Aquatic Ecosystem Management Plan |
| Comment / Request | <p>As noted in DFO-TRC-01, when DFO visited the site in July 2024, evidence of unsuitable sediment and erosion control was documented at multiple watercourse crossings along the Tote Road. DFO observed active sedimentation and erosion emerging from the Tote Road and appearing to result in sediment depositions downstream (e.g., visible plume, road bed materials observed in the channel). The existing Surface Water and Aquatic Ecosystem Management Plan is broad, does not apply to specific site conditions, and there is evidence that the mitigation measures it outlines have not been consistently applied throughout the site.</p> <p>DFO requests the Surface Water and Aquatic Ecosystem Management Plan be supplemented with a section that identifies areas of potential sediment and erosion concerns along the Tote Road, and provides site or condition specific measures that can be implemented along Roads/Rails to reduce the risk of erosion and control sedimentation and respond to sediment releases. These site and condition specific measures should take into account road bed slopes, types of fill materials, snow and ice movement, ditch gradient, and location of fish bearing waters. The section should also include:</p> <ul style="list-style-type: none">• examples of materials and techniques that BIM will employ to control sedimentation and erosion;• required training/certifications to be acquired by individuals and/or teams responsible for developing and implementing the erosion and sediment control plans; and• details on how this plan will proactively be put in place along proposed developments, including the rail. |