



Fisheries and Oceans Canada Pêches et Océans Canada

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Programme de protection du poisson et de son habitat
301 – 5204 50th Ave. (Franklin)
Yellowknife, Territoires du Nord-Ouest
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May 27, 2022

Your file *Votre référence*
MV2021D0005-MV2021L2-0004

Our file *Notre référence*
15-HCAA-1626

Mackenzie Valley Land and Water Board
Attention: Andrew Wheeler
7th Floor, 4922 48th St.
PO Box 2130
Yellowknife, NT
X1A 2P6

Dear Andrew Wheeler:

Subject: CZN Prairie Creek Mine – Water Licence MV2021L2-0004 and Land Use Permit MV2021D0005 Application – DFO Revised Closing Arguments

Fisheries and Oceans Canada – Fish and Fish Habitat Protection Program (DFO) thanks the Mackenzie Valley Land and Water Board (MVLWB) and Canadian Zinc Corporation (CanZinc), and other parties for the opportunity to participate in the review of the above-mentioned CanZinc Water Licence and Land Use Permit Application.

DFO conducted a review of CanZinc's Water Licence and Land use permit application to the MVLWB. DFO submitted written interventions on October 8, 2021 and participated in the Public Hearing from December 13-16, 2021. In addition, DFO has submitted further comments on the DRAFT Water Licence (MV2021L2-0004) and Land Use Permit (MV2021D0005) on May 6, 2022 and closing arguments on May 18, 2022.

DFO is submitting the attached revised closing arguments as requested by the MVLWB. This revised version of the closing arguments on May 18, 2022 provides additional wording clarifications on comments submitted by DFO on the DRAFT Water Licence.

The purpose of the closing arguments are to clarify and/or reiterate DFO's comments presented in the intervention and/or during the Public Hearing, as well as provide clarity to the wording on comments submitted by DFO for the DRAFT Water Licence (MV2021L2-0004) on May 6, 2022. DFO's closing arguments are based on our departmental mandate under the *Fisheries Act*, specifically the management and protection of fish and their habitat in both the freshwater and marine environments.

If you have any questions, please contact Dana Harris at our Yellowknife office at (867) 669-4935, by fax at (867) 669-4940, or by email at Dana.Harris@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Alasdair Beattie
Team Lead
Arctic / Ontario and Prairies Regions
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FISHERIES AND OCEANS CANADA

Revised Closing Arguments

Canadian Zinc Corporation Prairie Creek Mine – Type A Water Licence and Land Use Permit Application

Submitted to: **Mackenzie Valley Land and Water Board**

May 27, 2022

DFO File No.: 15-HCAA-01626
MVLWB File No.: MV2021D0005-MV2021L2-0004

Canada 

Summary

The following are the revised Fisheries and Oceans Canada's (DFO) closing arguments regarding Canadian Zinc Corporation's (CanZinc) Water Licence and Land Use Permit Application to the Mackenzie Valley Land and Water Board (MVLWB). DFO submitted an intervention to the MVLWB on October 8, 2021, participated to the Public Hearing from December 13-16, 2021, and provided recommendations on the DRAFT Water Licence and Land Use Permit on May 6, 2022. DFO recommended that CanZinc undertake velocity modelling and impact analysis for fish passage; CanZinc agreed. Following discussions with the proponent, DFO considers all outstanding concerns resolved.

Introduction

CanZinc submitted an updated Water Licence and Land use permit application to the MVLWB in March 2021. DFO provided intervention comments from the technical session on October 8, 2021 and participated in the public hearing from December 13-16, 2021. In addition, DFO provided recommendations on the DRAFT Water Licence and Land Use Permits on May 6, 2022 and submitted closing arguments on May 18, 2022. This is a revised version of DFO's closing arguments, adding clarity to DFO's recommendations for the DRAFT Water Licence, submitted on May 6, 2022.

DFO identified concerns surrounding Bull Trout monitoring requirements, the impacts of timing of construction and the operation of the proposed exfiltration trench on fish and fish habitat within Prairie Creek. DFO has secured commitments to mitigate all outstanding concern, and consider them resolved (Table 1).

NOTE: DFO's recommendations on the DRAFT Water Licence and Land Use Permits submitted on May 6, 2022 omitted the recommendation to update the wording of Schedule 6, condition 3a) concerning Bull Trout monitoring.

NOTE: Provided water withdrawal guidance is followed, timing windows do not apply to this activity.

These closing arguments are meant to reiterate, amend and/or clarify DFO's comments presented in the intervention, at the hearing, and as part of the DFO's recommendations on the DRAFT Water Licence and Land Use Permit.

Closing Arguments

DFO's recommendations and their resolution are summarized in Table 1. Wording clarification and updated recommendations with respect to DFO's comments on the DRAFT Water Licence are summarized in Table 2.

Table 1. Summary of DFO Recommendations and Resolutions.

| DFO Recommendation | | Resolution |
|-----------------------------------|--|---|
| Exfiltration Trench | | |
| Fish Passage | | |
| 1 | DFO recommended that CanZinc provide a velocity modelling and impacts analysis to confirm that the exfiltration trench is not a potential barrier to fish passage within the RFR. | Velocity modelling and impact analysis from the exfiltration trench operations to flow and fish passage were requested in the DRAFT Water Licence under Design and Construction Plan – Exfiltration Trench (Schedule 4, Condition 5 a). |
| Bull Trout Monitoring | | |
| 2 | DFO recommended that bull trout monitoring remain part of the AEMP until CanZinc can demonstrate that potential impacts to Bull Trout are fully avoided and/or mitigated. Field monitoring will be required to demonstrate that either a) the exfiltration trench does not prevent fish passage; or b) validation of model predictions that water velocities in and from the trench would not prevent fish passage. | Bull Trout Monitoring will remain a component of the AEMP and CanZinc agreed to complete field monitoring as recommended. |
| Construction Timing Window | | |
| 3 | DFO recommended that the construction activities related to the exfiltration trench occur outside the Restricted Activity Period (RAP). If construction cannot take place outside the RAP, then a Request for Review (RFR) for in-water works for this project is required by DFO. The RFR should include detailed rationale, avoidance/mitigation measures, and potential offsetting measures to account for any harmful alterations, disruption, or destruction of fish habitat. In addition, DFO recommended a condition in the Water Licence limiting exfiltration to a window outside the RAP be removed. | In a meeting between CanZinc and DFO held on October 6 th , CanZinc committed to providing this information in their RFR. |

Table 2. Summary of DFO wording clarifications from DRAFT Water Licence comments on May 6, 2022.

| Topic | Comment | Updated Recommendation |
|---|--|--|
| Schedule 6, 3a) (Bull Trout monitoring) | <p>The updated DRAFT Water Licence Schedule 6, 3a) wording should reflect DFO’s revised position; i.e. field monitoring will be required to demonstrate that either:</p> <ul style="list-style-type: none"> a) The exfiltration trench does not prevent fish passage; or b) Validation of model predictions that water velocities in and from the trench would not prevent fish passage. | The DRAFT Water Licence wording should be updated to reflect DFO’s revised position as discussed with CanZinc. |
| Part D: Water Use, conditions 1 and 2, Page 16 & 17 (Water Withdrawal within RAP) | <p>For comment #6 DFO would like to retract the following: “In addition, DFO recommends water withdrawal be avoided within the Restricted Activity Period for Zone 2 waterbodies (Aug 15 to July 15).” The proponent has been made aware of DFO's guidance on water withdrawal, and we believe this restriction should not be included in the updated DRAFT Water Licence.</p> <p>DFO’s guidelines for water withdrawal from riverine environments within the RAP require CanZinc to demonstrate that either a) Location of water withdrawal is not fish bearing; or b) Water withdrawal rate is <10% of actual (instantaneous) flow and do not result in flows <30% of mean annual discharge (MAD).</p> | The guidelines have discussed with CanZinc. Water withdrawal timing restriction should not be included in the updated DRAFT Water Licence. |

Conclusion

DFO will continue to work with the CanZinc, parties, and impacts communities to ensure impacts related to fish and fish habitat arising from proposed works at the Prairie Creek mine are effectively avoided, mitigated, monitored and offset, where required.