



De Beers Gahcho Kue Mine - March 2018 Amendment Applications

Presentation to the Mackenzie Valley Land and Water Board

Final Hearing

Yellowknife NT

July 25-26, 2018



Overview of Presentation

1. **Fisheries and Oceans Canada (DFO) – Fisheries Protection Program (FPP)**
 - Mandate, Legislation and Policy
2. Technical Comments and Recommendations
3. Conclusions
4. Questions and Comments



DFO - Fisheries Protection Program Mandate

- The **mandate** of the Fisheries Protection Program is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries.





Fisheries Protection Program – Legislation

- ***Fisheries Act***
 - Section 35
 - States that no person shall carry on any work, undertaking or activity that results in serious harm to fish that are a part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery
 - Allows for authorization of impacts with conditions and the requirement of an offsetting plan
 - Sections 20, 21
 - Pertains to the provision of sufficient water and unimpeded fish passage



Fisheries Protection Program – Policy

- **Fisheries Protection Policy Statement** (2013)
 - Guidance on implementing the fisheries protection provisions of *Fisheries Act*
- **Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting** (2013)
 - Guidance on measures to offset serious harm to fish



Technical Comments & Recommendations

Fisheries and Oceans Canada's comments are focused on the following areas:

- **Fisheries Offsetting Plan**
- **Freshwater Environment**
 - Stream diversion, water usage





Offsetting - Issue

- The proposed increase in pit size will reduce the area in Kennady lake available as fish habitat at closure (compared to area under the current approved plan). These changes will impact the existing *Fisheries Act* authorization and associated accounting of serious harm to fish that required offsetting.





Offsetting - Recommendation

- DFO recommends that De Beers continue to work with DFO-FPP to update their offsetting plan to account for any additional serious harm resulting from the proposed mine changes.



Stream Diversion - Issue

- The D watershed cannot be reconnected at closure through the existing flow paths to Kennady Lake (i.e., Lake and Stream D1). The restoration of flows to Lake D1 and Stream D1 are a condition of the existing *Fisheries Act* authorization.





Stream Diversion - Issue

- A stream diversion channel has been proposed to reconnect the D watershed to Kennady lake at closure, however, detailed engineering designs for the proposed diversion channel have not yet been provided.



Stream Diversion - Recommendation

- DFO recommends that De Beers continue to work with DFO-FPP in regard to the proposed stream diversion.



Water Usage - Issue

- Increased water usage from Area 8 may:
 - have negative impacts to Arctic grayling in the areas downstream of Area 8 due to insufficient flows. This may result in unauthorized *serious harm to fish*.
 - Negatively impact the required flow augmentation as part of the 'Downstream Flow Mitigation Plan'



Photo courtesy of Paul Vescei



Water Usage – Recommendation 1/2

- DFO-FPP recommends that De Beers conduct an assessment to determine the efficacy of the downstream flow mitigation plan and whether the current flow augmentation is adequate. The assessment should include but not be limited to updated water volumes for Area 8, anticipated changes to flow volume and velocity with additional water usage, consideration of reduced input to Area 8 from Lake N11 due to increased water withdrawal from Lake N11 and a robust contingency plan in the event the arctic grayling are again absent in the 2018 year.



Water Usage – Recommendation 2/2

- DFO-FPP recommends that De Beers continue to work with DFO to resolve the downstream flow and arctic grayling presence issue and ensure appropriate mitigation is enacted.
- Should the downstream flow mitigation plan no longer be a viable option, DFO-FPP also recommends that De Beers recognize the potential need to submit a new ‘Application for a *Fisheries Act* authorization’ to account for previously unanticipated losses to the area downstream of Area 8 or the KLM watershed.



Conclusion

- Fisheries and Oceans Canada will continue to work with the Proponent to ensure:
 - That the proponent continue to work with Fisheries and Oceans Canada to finalize the Offsetting Plan;
 - Appropriate development of the proposed D1 stream diversion plan and updates to associated closure plans;
 - Appropriate mitigation measures, follow-up and monitoring programs are implemented.



Thank You
Mahsi

Questions?