

Fish Habitat Management Suite 301, 5204-50th Avenue Yellowknife, Northwest Territories X1A 1F2 Pêches et Océans Canada

Gestion de l'Habitat du Poisson Suite 301 5204, 50e Avenue Yellowknife (Territoires du Nord-Ouest) X1A 1E2 Your file Votre réference EA0809-002

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August 26th, 2011

Chuck Hubert
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
PO Box 938
Yellowknife, NT X1A 2N7

Via E-mail to: chubert@reviewboard.ca

Dear Mr. Hubert:

RE: DFO Comments to the Mackenzie Valley Environmental Impact Review Board on Parks Canada's Request for Ruling for the Prairie Creek Mine Project

Fisheries and Oceans Canada (DFO) would like to provide the following comments to the Mackenzie Valley Environmental Impact Review Board (Review Board) on the request for ruling (RfR) submitted by Parks Canada on August 16th, 2011. The Review Board is seeking input specifically on item A in the RfR, which states "Require the proponent to provide an evaluation of potential impacts, significance of impacts and identification of mitigative or remedial measures for water storage pond options."

DFO reviewed the information provided by CZN on August 3rd, which included a report evaluating two additional water storage options as well as a vegetation and wildlife assessment for the proposed second water storage pond. Subsequently, CZN submitted a letter dated August 21st in response to the RfR from Parks Canada and included a short field report summarizing a one day site visit to investigate two small ponds and an ephemeral stream located within the footprint of the proposed second water storage pond option; the site visit was conducted at the request of DFO.

DFO reviewed the information to determine whether the water storage ponds were likely to result in impacts to fish and fish habitat. DFO is supportive of CZN's work, thus far, in exploring the benefit of additional water storage alternatives particularly if they contribute to achieving more stringent site specific water quality objectives. However, since these options have not been evaluated to the same degree as other components of the project during the environmental assessment process, DFO has concerns that impacts to fish and fish habitat have not been fully assessed. Based of the proximity of the two water storage options to Prairie Creek, the conceptual nature of the current designs, and the limited information available, there is a potential for impacts to fish and fish habitat.

The first option proposed by CZN is to raise the embankment of the current water storage pond by placing material on the inner slope of the structure and on top. This method, as described, would avoid the placement of materials on the outer slope of the embankment and therefore avoid encroaching on Prairie Creek. DFO does not have any significant concerns regarding this expanded water storage option, as described in the August 3rd and



the August 21st correspondence, provided that the proposed plans do not change and that appropriate mitigation measures are implemented to ensure that materials are not placed into Prairie Creek. Every precaution should be taken to ensure that the outer embankment is stable and will not erode or slump over time.

The second option proposed by CZN is to construct another water storage pond located on the east side of the Prairie Creek floodplain approximately one kilometre downstream from the main site. The new pond would be located in an area about 200-250 m wide between Prairie Creek and a steep slope and has a proposed configuration of 600m in length with a maximum width of 180m, narrowing to between 90m (east end) and 110m (west end). In CZN's letter dated August 21st, it also states that the pond "would be set back 30m from the normal high water mark of Prairie Creek to preserve the riparian zone". CZN provided a field report summarizing an assessment done on August 12th to determine if the two small ponds and an ephemeral stream located within the footprint of the proposed water storage pond are fish habitat. The field report concluded that based on lack of flow, connectivity and the area being previously disturbed that "significant impact to fish or fish habitat within the proposed second pond, is unlikely provided there is no further encroachment on the main stem of Prairie Creek to the south". The information provided regarding the area within the footprint of the storage pond provides some baseline, however it only assesses the habitat during low flow conditions. Ephemeral streams and seasonally flooded areas can be valuable fish habitat. Additional assessment of habitat in this area is needed to determine potential fish usage during high flow conditions to corroborate the August 12th assessment and to support the development of appropriate mitigation measures if required.

In addition, DFO has questions regarding the 30 m setback of the water storage pond from the normal high water mark. Prairie Creek is a dynamic stream with braided channels in the vicinity of the proposed water storage pond. Further clarification is required about where the "normal high water mark" of Prairie Creek is being measured and how the braided channels have been considered. This information will be needed in order to determine whether the second water storage pond is likely to result in impacts to fish and fish habitat. If impacts are likely, DFO will work with the proponent to examine mitigative and remedial measures that can be taken to reduce and avoid impacts to fish and fish habitat.

DFO therefore supports Parks Canada's RfR that adequate time be provided to parties in order to evaluate potential impacts, significance of impacts and identify mitigative or remedial measures for the proposed water storage pond options. DFO has outlined above the information required for our assessment of impacts to fish and fish habitat and is willing to work with the proponent to resolve these, in a timely manner. DFO hopes this response will assist the Review Board in making a ruling on how these water storage pond alternatives should be reviewed as part of this environmental assessment. If there are any questions or clarification needed on any of these matters, please contact Sarah Olivier at (867) 669-4919.



Regards,

Lisa Fowler on behalf of

Beverley Ross

Regional Manger, Environmental Assessment for Major Projects

Fisheries and Oceans Canada

cc. Lorraine Sawdon, Fisheries and Oceans Canada

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