

בת היים וער שלהים האיריק השלה Department of Community and Government Services Nunalingni Kavamatkunnilu Pivikhaqautikkut Ministère des Services Communautaires et gouvernementaux

<u>Government of Nunavut – CGS Water Licence No. 3AM-GRA1624 Amendment Application</u>

Executive Summary

This application is being submitted to the Nunavut Water Board (NWB) by the Government of Nunavut, Department of Community and Government Services (CGS) for the Amendment of Water Licence No. 3AM-GRA1624 for changes to several conditions of the original licence. Changes from the previous licence include: the pump from Char River has been moved into Lower Landing Lake for pumping to Nipissar Lake during the open water season (approved in the summer of 2018 on an emergency basis), increasing the annual pumping volume from the source, removal of compliance point GRA-6 from the licence due to this action, the removal of current quarterly reporting that must be submitted to the Nunavut Water Board 4 times/year, and to discontinue submission of a water pumping adaptive management plan for the pumping of water to Nipissar Lake from Lower Landing Lake. CGS is seeking a 10-year renewal of the previous water licence, which would be valid to the end of 2031.

Lower Landing Lake feeds Char River which then flows into the Hudson Bay. The authorized Char River pumping location is at the beginning of Char River near Lower Landing Lake. The new intake location in Lower Landing Lake is approximately 200 m to the north-west of the current intake location in Char River. Both locations are within the Hamlet of Rankin Inlet municipal boundaries. The licensee is also requesting an amendment to the volume of water authorized for the transfer of water to Nipissar Lake, currently authorizing 3,485m³/day to be increased to 10,000 m³/day.

The same equipment is currently used for the seasonal transfer of water from Lower Landing Lake to Nipissar Lake as was used at the Char River location. The floating intake with fish screen is used along with the same pump and generator within the relocated sea can. An extension of approximately 200 m to the 4.05 km overland pipeline was installed to bring the pipeline from Char River to Lower Landing Lake.

The previous intake location at Char River is located on a previously disturbed area that was the location of the former bridge over the Char River (the bridge was removed well before the Nipissar Lake resupply project began). As such there is an existing road to the north of Char River that is used to access the new intake location on Lower Landing Lake.

Golder Associates prepared the "Nipissar Lake and Lower Landing Lake Water Balance Assessment" with "Char River Theoretical Rating Curve Based on Field Data" (February 2016) for GN-CGS. This report was done to address concerns that Char River was not a sustainable



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secondary water source for the Hamlet of Rankin Inlet. The water balance assessment of Lower Landing Lake outlines that this water source is able to provide sufficient supplementary water to Nipissar Lake, while still maintaining the in-stream flow objectives outlined in the licence for Char River.

Lower Landing Lake and Char River are part of the same watershed. Water quality has been annually monitored in both water bodies (GRA-6, GRA-7), along with Nipissar Lake (GRA-1), since 2014. The water chemistry for Nipissar Lake, Char River and Lower Landing Lake is very similar. No impacts on the water quality of Nipissar Lake have been apparent or are anticipated.

The Solid Waste Disposal Facility and Miscellaneous Waste Area that has historically been used for fire training, drum storage, sewage disposal, and bulky metal storage in the Hamlet of Rankin Inlet are authorized under a separate Water Licence held by the Hamlet of Rankin Inlet. Please refer to Water Licence No. 3BM-RAN1520 for more information.