

REASONS FOR DECISION

WATER USE APPLICATION MS08-275
(amend. #1 to licence MS02-203)
Icy Waters Ltd.
Whitehorse, Yukon

The Yukon Water Board (“the Board”) has concluded deliberations pertaining to Water Use Application MS08-275 to amend Type B Licence MS02-203 for a miscellaneous undertaking.

Icy Waters Ltd. (“IWL”) proposed several amendments to conditions within licence MS02-203, which are addressed in detail further in these reasons.

Notice of this application was provided in accordance with the requirements of the *Waters Act*. In response, the Board received one intervention from Government of Yukon, Environmental Affairs (“GY”).

The Board did not receive a request for a public hearing. IWL provided a response to the intervention.

In making licensing decisions pertaining to this application, the Board took into account the *Waters Act*, *Waters Regulation*, water use register MS08-275, which included a copy of licence MS02-203 and the reasons for decision, recommendations from the intervener, the Board's standard licence requirements, the YESAA Decision Document, Chapter 14 of the Umbrella Final Agreement (“UFA”) and Board policies.

Environmental Assessment

This application required an environmental assessment under the *Yukon Environmental and Socio-economic Assessment Act* (“YESAA”).

Prior to making licensing decisions, the Board reviewed the YESAA Decision Document that is included in the water use register. As per section 86 of YESAA, the Board is also satisfied that the issuance of licence MS08-275 is not contrary to the terms and conditions included in the YESAA Decision Document.

Annual Reports and Studies

The Board encourages IWL to work cooperatively with Government of Yukon and continue to conduct ongoing nutrient studies. The Board recognizes that IWL will be coming forward with an application to renew their licence in the near future and it would be beneficial for the upcoming renewal process to have the results of ongoing nutrient studies. Clause 7, which pertains to annual report requirements, has been amended to require that the results of any ongoing nutrient studies be included in the annual report (Clause 7d). In addition, Clause 7e was inserted to require that any mitigation measures be reported that are undertaken at the site for sediment control and to minimize discharges of nutrients off site.

Effluent Limits

The Board recognized that IWL fulfilled the requirement to undertake the studies outlined in Clause 24 of the licence in accordance with the *Canadian Water Quality Guidelines for the Protection of Aquatic Life. Phosphorus: Canadian Guidance Framework for the Management of Freshwater Systems*, developed by the Canadian Council of Ministers of the Environment. The Board approved withdrawal of Clause 24 in Amendment 1, as it is no longer relevant.

GY accepted IWL's proposed change to the effluent quality standard for Total Phosphorus in Clause 23 to 0.12 mg/L. GY did not comment specifically on IWL's proposed retaining of the wording for Total Phosphorus in Clause 23, "above background as measured at stations PS-1 and PS-3". In the additional information provided by Government of Yukon as part of their intervention, GY recognized and used values measured above background at PS-1 and PS-3 in their assessment of compliance with the proposed Total Phosphorus. In the Decision Document, the Government of Yukon clearly left the discretion of determining the appropriate limit for Total Phosphorus to the Board. The Board agreed with the proposed change to Clause 23 and approved amending the maximum concentration in a grab sample for Total Phosphorus to 0.12 mg/L above background as measured at stations PS-1 and PS-3, respectively.

Monitoring Station – PS-8

As part of GY's intervention, GY proposed an alternative location for the proposed monitoring location in Pumphouse Pond from that proposed by the proponent. The Board determined that the location proposed by GY, in the deepest part of Pumphouse Pond, would provide water quality data that would better represent the overall conditions in Pumphouse Pond. The Board acknowledges IWL's response to this proposed sample location and IWL's preference to have the sampling site at an already established GY sampling location, but the Board is satisfied that Pumphouse Pond is accessible and that samples can be obtained using a small watercraft, such as a canoe, during the open water season and by foot over ice during frozen conditions. The amended Schedule B highlights that samples collected from station PS-8 must be taken at varying depths to provide for sufficient samples to adequately characterize the water quality in Pumphouse Pond. Although the actual depths are not specified, to allow IWL flexibility, the samples should be collected from depths representing the full range of the water column (i.e. near surface, mid-depth and near bottom).

As part of IWL's response to GY's intervention, IWL suggested using GY's automatic sampler. At present there is no agreement in place between IWL and the Government of Yukon for this use. Should the GY and IWL come to an agreement for the use of this site and its appropriateness to provide representative samples of Pumphouse Pond, then IWL can present it to the Board as part of their application for renewal.

Flow Monitoring

In Schedule B of the current Licence (MS02-203), monitoring for flow was required for all stations. As part of this amendment, IWL requested to only monitor flow at stations PS-2b and PS-5a. As part of their intervention, GY recommended that the Board also require flow to be monitored at PS-3 and PS-6. The Board agreed with this recommendation presented by GY and the amended licence will require flow monitoring at a total of four stations: PS-2b, PS-3, PS-5a and PS-6. The rationale for retaining these four flow monitoring stations was to provide valuable flow information that can be used for the ongoing assessment of the impacts of discharges from IWL on the downstream receiving environment and provide additional information to support the upcoming renewal application.

UFA-Chapter 14

Regarding the Board's responsibilities under Chapter 14 of the UFA, the Board reviewed the decision that was made for water use licence MS02-203, as follows:

“The project lies within the traditional territory of Ta'an Kwäch'än Council and Kwanlin Dun First Nation, and the board provided notice of application to both First Nations. In their intervention, Ta'an Kwäch'än Council advised that a 4.3 hectare parcel of settlement land, identified as C-17B, borders McIntyre Creek downstream of the facility. The First Nation described the geographic location of this settlement land as being near the Kopper King development along the Alaska Highway.

With regard to the quantity of water, Icy Waters has requested a 66% increase to the maximum water use quantity from Porter Creek headwaters to reflect the total use of flow from the various springs that form Porter Creek, and a 63% increase to the maximum water use quantity from Fish Creek to accurately reflect the water that is required to operate the facility at its present capacity. All water that is obtained by Icy Waters enters the property, is routed to various structures within the facility, and then discharged back into the Porter Creek and Fish Creek/McIntyre Creek systems. Aside from evaporation, infiltration through the ground or unforeseen leaks within the structures, there should be no significant loss or impact to the quantity of water routed through the Icy Waters facility before the water re-enters the Porter Creek and Fish Creek/McIntyre Creek systems.

With regard to the quality of water, the screening determined that the nutrient phosphorus which has been recorded at monitoring points upstream and downstream of the Icy Waters facility can accumulate in a system if not assimilated by the aquatic system and can result in the appearance of algal blooms. Icy Waters utilizes fish food that contains phosphorus and any food not utilized by the fish will remain in the water system or be added to the system through fish excrement. The Screening report indicates that the algal blooms that occur in Pumphouse Pond and Hidden Lake will likely be evidenced for an unknown period of time until the accumulated phosphorus has been assimilated. The Screening report determined that the aesthetics of algae blooms is not significant in respect to water quality, based on adequate fish and oxygen levels in both Hidden Lake and Pumphouse Pond.

With regard to the rate of flow of water in the Fish Creek/McIntyre Creek system, there may be a temporary reduction in rate of flow as water is directed through the facility. The rate of water flow will return to a natural rate upon discharge from the facility. Due to the constant flow of water through the facility, the temporary reduction in the rate of flow is not considered to be a significant impact to the rate of flow.

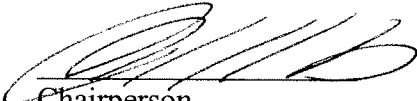
Therefore, it can be concluded that this project will not substantially alter the quantity, quality or rate of flow of water flowing on, through or adjacent to settlement land, including seasonal rate of flow.”

The following is the Board’s determination, as it relates to amendment #1 of water use licence MS02-203:

Since the application is pertaining to the Total Phosphorus discharged by IWL, the Board has determined that the conclusion reached by the Board for licence MS02-203 has not changed. Particularly since the rationale included by GY in the Decision Document indicates, “Our study information indicates that the amount of phosphorus permitted in effluent discharge ultimately determines the value of recreational experience for water users (notably recreational fishers) during the principal use period of June to August.” There is no evidence within the Decision Document or the intervention provided by GY to suggest that the IWL discharge will have any impact on downstream Settlement Land.

Conclusion

The Board has relied on the representations, warranties and undertakings provided by the Licensee in the material filed in application MS08-275 (amend. #1 to MS02-203). The Board has approved the issuance of amendment #1 to licence MS02-203.


Chairperson
Yukon Water Board

April 29, 2010
Date