



Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1L0

Dear Richard,

The licensee is requesting that once the WWTF is constructed, the KIM-3 monitoring station will represent partially treated wastewater effluent leaving the lagoon and the KIM-5 monitoring station will represent fully treated wastewater effluent at the outlet of the WTA. The licensee is requesting that KIM-5 be established as the compliance point and that the treatment goals for the WWTF effluent quality limits applied at the KIM-5 be 100, 120 and 1.25 mg/L for carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS) and un-ionized ammonia as nitrogen respectively. These limits are based on a 7-year research project conducted in Nunavut completed by Centre for Water Resources Studies at Dalhousie University. The research demonstrated that these limits can be reliably achieved and protect the receiving environment and therefore have been adopted as the treatment goal for newly constructed lagoon WTA systems in Nunavut. The design consultant recommends removing fecal coliforms as an effluent criterion with a limit at KIM-5 since this is a public health parameter and not an environmental parameter. The receiving environment is zoned for waste disposal and not used by the public for fishing, harvesting, or recreation. Fecal coliforms are not included in the federal Wastewater Systems Effluent Regulations SOR/2012-139 Fisheries Act Registration 2012-06-29. Fecal coliforms are also no longer applied as an environmental parameter in the Northwest Territories where the Nunavut Water Board historically derives its effluent parameter decisions from. The licensee is therefore requesting to remove the fecal coliform limit from the WWTF compliance point. The current

license limit for fecal coliforms is  $10^4$  CFU/100 mL which is very stringent and would need a complex mechanical system to achieve which would be costly, difficult to operate, and unnecessary to preserve the health of the receiving environment.

The licensee is also requesting that KIM-3 be established as a monitoring station for the effluent discharged from the lagoon into the wetland-treatment-area, but KIM-3 should not act as a compliance point and no effluent limits should be applied to KIM-3 since it represents partially treated effluent.

Regards,

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