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June 1, 2022

Tim Shanks  
Director, Water and Waste  
City of Winnipeg  
1199 Pacific Avenue  
Winnipeg, MB R3E 3S8

Dear Mr. Shanks,

As Lake Winnipeg stakeholders and rightsholders, we are writing to express our concerns regarding insufficient progress in achieving phosphorus compliance at Winnipeg's North End Water Pollution Control Center (NEWPCC) – and to provide you with recommendations for the revised Upgrade Plan you will be submitting to the Province of Manitoba on June 30, 2022.

Together, we remain focused on accelerating NEWPCC phosphorus compliance for the protection of Lake Winnipeg. Five decades of peer-reviewed research by the IISD-Experimental Lakes Area has demonstrated conclusively that [phosphorus is the main driver of algal blooms in freshwater ecosystems](#). Algal blooms are a severe water-quality threat that have led jurisdictions around the world to limit phosphorus levels in sewage effluent. Continued inaction in our own city is contributing to more frequent and severe algal blooms on Lake Winnipeg, with detrimental impacts on tourism and recreation, human health, Indigenous and treaty rights, water infrastructure and ecosystem health.

Manitoba's Water Protection Act and the Environment Act licence for NEWPCC require that total phosphorus concentration in wastewater effluent not exceed 1.0 mg/L. This requirement was set in 2005, with the expectation it would be met by Dec. 31, 2014. This phosphorus limit is fully in line with municipal wastewater regulations across North America – some dating back as far as 1972 – and can be met using well-established, effective technology.

Given the repeated failure to address NEWPCC phosphorus levels, the Province of Manitoba has requested another multi-year plan, due on June 30, 2022. We note that the June 30 Upgrade Plan will be the 4<sup>th</sup> plan proposed since the extended NEWPCC licence-

compliance deadline of Dec. 31, 2019 was missed. The three previous plans ([Jan. 31, 2020](#); [Sept. 30, 2020](#); and [Feb. 15, 2022](#)) have each presented successively longer timelines to complete plant upgrades. Alarming, the latest of the three plans did not provide a timeline for achieving phosphorus compliance at the north end plant, as the Phase 3 Nutrient Removal Facilities project – the most expensive phase, estimated to cost \$828 million – remains unfunded.

However, [in this last plan](#), the City of Winnipeg acknowledges that, when combined with interim chemical phosphorus removal, “the new biosolids facility *maybe* able to meet 1 mg/L until the new Nutrient Removal (NR) facility is commissioned,” though the City only proposes to confirm this through “full scale testing... *once the new biosolids facility is operational*” (pages iii & 6, emphasis ours). Instead of assessing capacity to meet the phosphorus target only *after* biosolids construction is complete, we recommend that the City proactively plan and design the new facilities to meet this requirement.

To this end, the June 30 NEWPCC Upgrade Plan must:

1. **Explicitly acknowledge the 1 mg/L phosphorus limit as a primary requirement** – along with ammonia limits – as clearly articulated in Section 4.2(2) of Manitoba’s [Water Protection Act](#). Specific numerical limits for phosphorus and ammonia are listed in this provincial legislation, while other NEWPCC licence conditions are discretionary and must only be “met to the director’s satisfaction.”

Discretionary conditions include stipulations on use of biological and chemical technologies, and recovery and reuse of biosolids. These discretionary conditions should not be misrepresented in any NEWPCC Upgrade Plan as barriers to achieving the primary requirement of phosphorus and ammonia compliance. Nothing in the Water Protection Act prevents the achievement of phosphorus compliance through Phase 2 Biosolids Facilities upgrades.

2. **Design new biosolids facilities to achieve phosphorus compliance through Phase 2 of the NEWPCC Upgrade Plan, ensuring that protections for Lake Winnipeg are included within the scope of current tri-governmental funding arrangements.** The City of Winnipeg must set clear, updated specifications for the new biosolids facilities, such that interim chemical phosphorus reduction is fully integrated into the project’s procurement and detailed design stages, in order to ensure phosphorus compliance can be achieved through the Phase 2 Biosolids Project. This will also ensure that ongoing funding uncertainties do not create even further delays in the treatment plant’s capacity to meet phosphorus licence requirements.
3. **Complete construction and commissioning of Phase 2 Biosolids Facilities – including phosphorus compliance – by 2030.** In the first NEWPCC Upgrade Plan published in January 2020, new biosolids facilities were projected to be completed in Q1 2028.

In the third NEWPCC Upgrade Plan published in February 2022, new biosolids facilities were projected to be completed in Q4 2030. Almost three years of progress on NEWPCC upgrades have been lost since the City of Winnipeg failed to meet the extended NEWPCC licence deadline of Dec. 31, 2019. Though much energy and effort has been expended by both the Province and the City in that time, no progress has been made towards the protection of Lake Winnipeg and deadlines continue to be missed.

With federal funding approval and the procurement and detailed design of Phase 2 Biosolids Facilities anticipated in the very near future, it is imperative that the June 30, 2022 NEWPCC Upgrade Plan clearly communicate and confirm key steps identified above to ensure that phosphorus compliance will be achieved through Biosolids Facilities upgrades by 2030.

As stakeholders and rights holders, we continue to closely monitor all developments and to update our members and partners on progress towards phosphorus compliance at NEWPCC. Winnipeggers and Manitobans expect urgency, transparency and accountability on this very important file.

We look forward to meeting with you to discuss the recommendations above.

Sincerely,



Daniel Gladu Kanu  
Director  
LWIC



Dimple Roy  
Director, Water Management  
IISD



Alexis Kanu  
Executive Director  
LWF

cc: Councillor Brian Mayes  
Councillor Shawn Nason  
Councillor Ross Eadie  
Councillor Jason Schreyer  
Michael Jack, Chief Administrative Officer  
Moira Geer, Deputy Chief Administrative Officer  
Cynthia Wiebe, Water and Waste  
Michelle Paetkau, Water and Waste  
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