



July 26, 2021

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Manitoba Conservation and Climate
Environmental Stewardship Division
Environmental Approvals Branch
1007 Century Street
Winnipeg, MB R3H 0W4

Attention: Laura Pyles, A/Director

**RE: INTERIM PHOSPHOROUS REMOVAL QUARTERLY REPORT FOR APRIL, MAY,
JUNE 2021**

The City of Winnipeg is submitting a Quarterly Report for the periods of April, May, June (second Quarter) of 2021 in accordance with the conditional approval of its Notice of Alteration for the North End Sewage Treatment Plant (NEWPCC).

April

In April the City's consultant, AECOM, reviewed and analyzed data and laboratory results collected during the spring to estimate the impacts of wet weather flow on interim phosphorous removal.

The City also initiated a project for the design and construction of Interim Phosphorous Removal equipment at the NEWPCC. This included identifying working group members from the City's operations, maintenance, and engineering staff.

On April 30, 2021 the City submitted a Notice of Alteration for NEWPCC Interim Phosphorous Removal to the Province, as requested by the Province.

May

In May AECOM submitted a draft report on maximum month flows for City review and comment.

The City also received conditional approval of its Notice of Alteration.

The City continued its work in developing procurement documents for the design and construction of Interim Phosphorous Removal.

June

In June the report on maximum month flows was finalized and submitted to the Province.

The City also started drafting a request for proposal (RFP) for the design and construction of Interim Phosphorous Removal.

Below is the schedule for Interim Phosphorous Removal, current to the end of June 2021.



Table 1. Schedule of Interim Phosphorous Removal

Deliverable	Description	Contractual Dates	% Previously Reported	% Currently Complete	Originally Projected Date	Revised or Completed Date	Work Remaining
Consultant RFP	Draft, review, post for tender	N/A		50%	July 2021		Project tender documents to be finalized prior to posting
	Evaluation, Admin Report, Approvals, Award	N/A		0%	Q3 – 2021		
Preliminary Design	PD plus reviews and approval by WWD	To be confirmed when contract awarded		0%	Q1 – 2022		
Detailed Design	DD plus reviews and approval by WWD	To be confirmed when contract awarded		0%	Q2 – 2022		
Construction Tender	Draft, review, post for tender	To be confirmed when contract awarded		0%	Q2 – 2022		
	Tender posting period			0%	Q2 – 2022		
	Award Recommendation, Admin Report, Approvals, Award			0%	Q2 – 2022		
Construction and Commissioning	Substantial Performance	To be confirmed when contract awarded		0%	Q2 – 2023		
	Total Performance			0%	Q3 – 2023		
	Warranty Period			0%	Q4 – 2024		
Full Scale Testing and Implementation	Process review, dosing estimates, trouble shooting, optimization	To be confirmed when contract awarded		0%	Q4 – 2024		
Closeout	Certificate of Acceptance	To be confirmed when contract awarded		0%	Q4 – 2024		

Phosphorous Optimization in Sequencing Batch Reactors

The NEWPCC Operators have begun to experiment with increased chemical dosing in the Sequencing Batch Reactors in May and June. Digester cleaning efforts, which had been postponed from 2020 due to COVID, have limited the amount of chemical that could be added to the system. Table 2 shows the results of the increased dosing so far. The Sequencing Batch Reactors continue to exceed phosphorous removal requirements specified in the NEWPCC licence.

Table 2. Results of increased ferric chloride dosing in Sequencing Batch Reactors

Year (May/June period)	2019	2020	2021
TP load (kg/d)	50.4	45.8	43.0
TP concentration (mg/L)	24.5	19.4	18.6

Should you have any questions on this report, please contact me at 204-986-5210 or by email at cwiebe@winnipeg.ca.

Sincerely,

Cynthia Wiebe, P. Eng., CAMP (original as signed)

CW/dr

- c: Eshetu Beshada, P. Eng., Manitoba Conservation and Climate (email)
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