City of Thompson Wastewater Treatment Plant Upgrades & Associated Works MWSB 1265

Existing Wastewater Treatment Facilities Total Phosphorus Report Licence No. 3118R

Prepared By:

Stantec Consulting Ltd. 500-311 Portage Ave. Winnipeg, MB R3B 2B9

111214442



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1 Introduction and Purpose

The City of Thompson's existing Wastewater Treatment Facilities (WWTFs), aerated lagoon and mechanical Wastewater Treatment Plant (WWTP), are being replaced by a new Wastewater Treatment Plant under Licence No. 3118R. Per Clause 13 d), The City of Thompson (The City) is to sample the existing WWTFs discharge for total phosphorus on a weekly basis beginning May 29, 2019 and under Clause 13 g) submit a report on total phosphorus discharge from each existing facility to the Director of the Environmental Approvals Branch.

This report has been prepared to satisfy Clause 13 g).

2 Existing Lagoon Total Phosphorus Discharge

The existing aerated lagoon received pumped wastewater from Cree Road Lift Station and Severn Lift Station, along with trucked wastewater from Thompson and surrounding area. On July 23, 2019 all pumped wastewater was diverted from the existing aerated lagoon to the new WWTP. The aerated lagoon continued to receive trucked waste until mid October, 2019 when the new WWTP's trucked waste receiving station was ready for use. The summary of the aerated lagoon total phosphorus discharge sample results up to the lagoon being taken out of service are summarized in **Table 2.1** below.

Table 2.1 – Existing Aerated Lagoon Total Phosphorus Discharge

Sample Date:	TP (mg/L)	Notes:
4-Jun-19	3.99	
12-Jun-19	4.19	
18-Jun-19	3.93	
25-Jun-19	4.7	
4-Jul-19	4.41	
19-Jul-19	5.15	
26-Jul-19	4.87	Lagoon receiving trucked waste only
2-Aug-19	4.93	Lagoon receiving trucked waste only
4-Sep-19	4.66	Lagoon receiving trucked waste only
12-Sep-19	4.66	Lagoon receiving trucked waste only
18-Sep-19	4.7	Lagoon receiving trucked waste only
16-Oct-19	4.67	Lagoon receiving trucked waste only
		Last sample after Trucked waste diverted to new
21-Nov-19	4.43	WWTP



3 Existing Wastewater Treatment Plant Total Phosphorus Discharge

The existing mechanical wastewater treatment plant received pumped wastewater from Riverside Lift Station and Nelson Road Lift Station. On June 14, 2019 the existing WWTP was taken out of service when wastewater from each lift station was diverted to the new WWTP. The summary of the existing WWTP total phosphorus discharge sample results up to the existing WWTP being taken out of service are summarized in **Table 3.1** below.

Table 3.1 – Existing Wastewater Treatment Plant Total Phosphorus Discharge

Sample Date:	TP (mg/L)	Notes:
4-Jun-19	4.24	
12-Jun-19	4.01	Last sample before existing WWTP taken off-line

