Notice of Alteration Form



Client File No. :	Environ	ment Act Licence No.: 3118 R
Legal name of the Licencee: City of Thompson		
Name of the development: City of Thompson Wastewater Treatment Plant		
Category and Type of development per Classes of Development Regulation:		
Waste Treatment and Storage		Wastewater treatment plants
Licencee Contact Person: Anthony Mailing address of the Licencee: 22 City: Thompson Phone Number: (204) 677-7951 F	Province	Road E Manitoba Postal Code: R8N 1S6
Name of proponent contact person for purposes of the environmental assessment (e.g. consultant): Saibal Basu - STANTEC		
Phone: (204) 488-5710 Fax: (204) 453-9012	Mailing a	address: 500-311 Portage Avenue, Winnipeg, MB
Email address: saibal.basu@stantec.com		
Short Description of Alteration (max 90 characters): A request for a minor Alteration to existing Environmental Act Licence (EAL) No. 3118 R		
Alteration fee attached: Yes: No: If No, please explain:		
Date: 2019-12-23	Signature:	J
	Printed name: Anthony McInnis	
A complete Notice of Alteration (NoA) consists of the following components: Cover letter Notice of Alteration Form had copies and 1 electronic copy of the NoA detailed report (see "Information Bulletin - Alteration to Developments with Environment Act Licences") \$500 Application fee, if applicable (Clipayable to the Minister of Finance) Note: Per Section 14(3) of the Environment		Submit the complete NoA to: Director Environmental Approvals Branch Manitoba Sustainable Development 1007 Century Street Winnipeg, Manitoba R3H 0W4 For more information: Phone: (204) 945-8321 Fax: (204) 945-5229 http://www.gov.mb.ca/sd/eal
submission of an Environment Act Proposal Form (see "Information Bulletin – Environment Act Proposal Report Guidelines")		



December 30, 2019

Attention: Ms. Tracey Braun, M.Sc., Director Manitoba Sustainable Development Environmental Stewardship Division Environmental Approvals Branch 1007 Century Street Winnipeg Manitoba R3H OW4

Dear Ms. Tracy Braun

Reference:

City of Thompson Wastewater Treatment Plant

Notice of Alteration - Environment Act Licence No. 3118 R

Please consider this letter as a request for a minor Alteration to existing Environment Act Licence (EAL) No. 3118 R for the for the Thompson Wastewater Treatment Plant (WWTP).

Project Status Update

Sewage was introduced into the new facility on June 14, 2019 by diverting all flow to the old WWTP. By July 23, 2019, 100% of the wastewater generated was diverted to the new facility once Cree Road LS was brought online fully, and sewage was diverted away from the existing lagoon.

The project is currently in the later stages of commissioning and acceptance testing. All systems have been started up and the onsite component of acceptance testing has been completed for the following key pieces of equipment:

- Multi Rake bar screen
- Grit removal system
- UV disinfection system
- Odour control biofilter
- Sludge dewatering system

For the above noted equipment, onsite testing has been completed and samples sent to the laboratory for analysis, however, we await the results from the General Contractor before concluding if the respected acceptance testing is complete.

The process remains in the development stage and not all effluent parameters in the licence are being met at this time. The General Contractor had introduced bacterial cultures for nitrification, and the process was showing signs of positive development until recently when a buildup of excess biomass caused an upset in the process. The buildup of biomass was due in part to scheduling issues that prevented the startup of the digested sludge dewatering equipment. The General Contractor was also not operating the aerobic digesters as intended, allowing sludge to recirculate back into the front end of the process.

To reestablish the appropriate biomass in each basin, the General Contractor is in the process of stabilizing the MLSS concentration through increased sludge wasting. The digested sludge dewatering system has been started up, and digested sludge is being dewatered and hauled to the City's landfill. Once the process has stabilized, the General Contractor intends to introduce bacterial cultures for nitrification. The General Contractor is in discussions with the supplier of the bacterial culture to determine the minimum recommended temperatures required for the bacterial cultures to survive. It may be possible that winter conditions will prevent the basins from reaching the appropriate minimum temperatures for the bacterial cultures until the spring of 2020. The process needs to fully establish before acceptance testing of the SBR systems can take place, therefore acceptance testing may not occur until late spring or early summer of 2020.

Based on the project status and the requirements of the contract documents, the City does not see any other practical means to influence or implement any alternative measures to fast track the project in the event that basin temperatures are too low for the addition of bacterial cultures. Therefore, the City is requesting an extension to July 31, 2020.

We trust this addresses your concerns and meets the requirements of the City's application for a minor Alteration. We will keep the Department updated as the project progresses. If you have any questions, please do not hesitate to contact me at amcinnis@thompson.ca (204-677-7951).

Best Regards,

Anthony McInnis, PhD. City Manager

CC. Harkamaljeet Gill & Surinder Bajwa; Assets & Infrastructure, City of Thompson Brad DeGrave; Manitoba Water Services Board

Saibal Basu & Rob De Koninick; Stantec



January 14, 2020

Director of Environmental Approvals Branch Manitoba Sustainable Development Environmental Stewardship Division Environmental Approvals Branch 1007 Century Street Winnipeg Manitoba R3H OW4

Dear Sir/Madame,

Reference: City of Thompson Wastewater Treatment Plant

Notice of Alteration - Environment Act Licence No. 3118 R

Please consider this letter as a request for a minor Alteration to existing Environment Act Licence (EAL) No. 3118 R for the for the Thompson Wastewater Treatment Plant (WWTP) as follows:

- Clause 13 b): requesting revision of the completion date for construction and commissioning of the wastewater treatment plant from August 30, 2019 to July 31, 2020.
- Clause 13 g): requesting revision for the due date of the report on total phosphorus discharge from the existing wastewater treatment facilities from September 30, 2019 to January 31, 2020.

Project Status Update

Sewage was introduced into the new facility on June 14, 2019 by diverting all flow to the old WWTP. By July 23, 2019, 100% of the wastewater generated was diverted to the new facility once Cree Road LS was brought online fully, and sewage was diverted away from the existing lagoon.

The project is currently in the later stages of commissioning and acceptance testing. All systems have been started up and the onsite component of acceptance testing has been completed for the following key pieces of equipment:

- Multi Rake bar screen
- Grit removal system
- UV disinfection system
- Odour control biofilter
- Sludge dewatering system

For the above noted equipment, onsite testing has been completed and samples sent to the laboratory for analysis, however, we await the results from the General Contractor before concluding if the respected acceptance testing is complete.

The process remains in the development stage and not all effluent parameters in the licence are being met at this time. The General Contractor had introduced bacterial cultures for nitrification, and the process was showing signs of positive development until recently when a buildup of excess biomass caused an upset in the process.

The buildup of biomass was due in part to scheduling issues that prevented the startup of the digested sludge dewatering equipment. The General Contractor was also not operating the aerobic digesters as intended, allowing sludge to recirculate back into the front end of the process.

Clause 13 b) - Extension of Completion Date

To reestablish the appropriate biomass in each basin, the General Contractor is in the process of stabilizing the MLSS concentration through increased sludge wasting. The digested sludge dewatering system has been started up, and digested sludge is being dewatered and hauled to the City's landfill. As of the end of December 2019 the process has shown signs of stabilizing and daily testing has shown that most effluent parameters are now meeting the requirements of the Licence with the exception of Ammonia. Bacterial cultures have been ordered and the Contractor is in the process of seeding both SBR basins with the bacterial cultures in an effort to reestablish the nitrification process. Bacterial cultures will be added over a 10-day period ending in mid-January 2020. With the addition of nitrifying bacteria ending in mid-January it is anticipated that the nitrification process will show signs of reestablishing by the end of January provided the effluent temperatures remain relatively consistent in the 9-10°C range. Acceptance testing of the SBR process and Aerobic Digesters are contingent on the process demonstrating that all effluent quality parameters of the licence are being met and may not occur until spring of 2020.

Based on the project status and the requirements of the contract documents, the City does not see any other practical means to influence or implement any alternative measures to fast track the project in the event that basin temperatures are too low for the bacterial cultures to survive and reestablish nitrification. If effluent temperatures become too cold for the nitrification process to establish, the Contractor will need to wait until the warmer spring weather before introducing bacterial cultures once more. Therefore, the City is requesting an extension to July 31, 2020 to account for this possibility.

<u>Clause 13 g) – Extension of Due Date for Existing Wastewater Treatment Facilities Total</u> <u>Phosphorus Report</u>

The existing wastewater treatment plant has been idle since June 14, 2019 when the forcemains from Riverside LS and Nelson Road LS were diverted to the new wastewater treatment plant. The existing wastewater treatment lagoon has been idle since July 23, 2019 when the last flows going to the lagoon from Severn LS was diverted to the new Cree Road LS and pumped to the new wastewater treatment plant. The City was gathering samples for testing of Total Phosphorus up to the time when each facility was taken offline, and some data sets were submitted to MB Sustainable Development. Stantec Consulting Ltd. is preparing the report on behalf of the City of Thompson and is in the process of gathering and assembling the information. Stantec indicates the report will be ready for submission by January 31, 2020.

Therefore, the City is requesting an extension to January 31, 2020 for the submittal of the existing wastewater treatment lagoon and existing WWTP total phosphorus discharge report.

We trust this addresses your concerns and meets the requirements of the City's application for a minor Alteration to Clauses 13 b) and 13 g). We will keep the Department updated as the project progresses. If you have any questions, please do not hesitate to contact me at amcinnis@thompson.ca (204-677-7951).

Best Regards

Anthony McInnis, PhD.

City Manager (CAO)