



January 26, 2021

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020-17-08-11-00
020-17-08-11-0N

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

Attention: Kristal Harman, Acting Director

**RE: NOTICE OF ALTERATION – CITY OF WINNIPEG SOUTH END WATER POLLUTION
CONTROL CENTRE (SEWPCC) – ENVIRONMENT ACT LICENCE NO. 2716RR**

The City of Winnipeg submitted a Notice of Alteration on December 18, 2020 advising that the City of Winnipeg (City) SEWPCC Biological Nutrient Removal and Upgrade project will not be able to meet the total phosphorus limit of 1.0 mg/L in the effluent before December 31, 2020 as required by the Notice of Alteration approval letter dated January 8, 2018. This letter updates the questions from the Province dated January 19, 2021.

“Based on the review of your request and submitted documents, the alteration is approved in accordance with Section 14(2) of The Environment Act subject to the following condition: 1. The construction of the upgraded wastewater treatment plant shall be completed before December 31, 2020 such that the phosphorus limit of 1.0 mg/L will be met. All other conditions of the September 12, 2017 Notice of Alteration remain valid.”

Letter of September 12, 2017:

“3. The construction and commissioning of the upgraded wastewater treatment plant shall be completed before December 31, 2021 such that the effluent limits specified in Clause 28 will be met.”

As discussed with Manitoba Conservation and Climate at the virtual meeting of December 4, 2020, not meeting the above prescribed total phosphorus limit in the effluent by the due date would result in non-compliance with the Environment Act licence; therefore, the City of Winnipeg submitted a Notice of Alteration on December 18, 2021 to the Province for review prior to the December 31, 2020 deadline.

The project schedule has been impacted by the ongoing contractor performance and COVID-19 pandemic as follows; (effective March 2020):

- Contractor quality control:
 - Contractor quality control is not performed to the standard expected/required for the complexity of this project. The impact is deficiencies are identified during commissioning which results in rework and lost time in the schedule

- Mitigation: requested contractor to submit their Quality Assurance / Quality Control plan
- Development of additional check points to ensure quality plan being executed.
- Contractor productivity:
 - Due to COVID – 19 reduced workforces onsite and in confined working areas reduces productivity which results in lost time in the schedule
 - Mitigation: manage schedule and methods to maximize production and remain compliant with COVID – 19 restrictions
- Construction schedule:
 - The contractor's schedule indicates construction activities aligned with contractual dates, however, the schedule does not reflect current site delays. The impact is inefficient scheduling of critical path work activities which results in lost time in the schedule
 - Mitigation: rigorous schedule reviews have been ongoing and will continue
- Reduced engineering staff onsite to coordinate and oversee works:
 - Reduced project oversight and coordination of inspections, witness testing, progress reporting due to COVID – 19 site social distancing requirements. The impact is senior staff are working remotely and have less visibility onsite to direct work which results in inefficient work issue resolution and coordination which results in lost time in the schedule.
 - Mitigation: engineering and contract administration staff are using video conferencing technology to hold project meetings
- Pandemic travel regulations restricting some necessary engineering consultants, and suppliers from coming to site from outside the province:
 - Project oversight and coordination of inspections, witness testing, progress meeting, training and reporting due to COVID – 19 site social distancing requirements and travel recommendations. The impact is senior staff are working remotely from out of province and have less visibility onsite to direct work which results in inefficient work resolution and coordination and lost time in the schedule
 - Mitigation: local engineering resources have been engaged to facilitate onsite inspections and witness testing
- Reduced contract administration staff onsite to coordinate and oversee works:
 - Project oversight and scheduling of witness testing, monitoring of construction progress reporting due to COVID – 19 site social distancing requirements. The impact is less staff are working onsite and have less visibility onsite to direct work which results in inefficient work resolution and coordination and lost time in the schedule.

- Mitigation: additional construction site trailers have been brought to site to provide the required space for staff to return to site and comply with the COVID – 19 restrictions
- Operations staff training being conducted in a virtual online setting, to protect essential services by minimizing staff interactions with contractor and suppliers:
 - COVID – 19 safe work plans to safe guard the operation of the wastewater treatment plant has isolated operations staff from the contractor. The impact is staff training of the new equipment and demonstration of equipment maintenance can not be performed as per contract, which results in lost time in the schedule
 - Mitigation: virtual training has been implemented without hands-on equipment demonstration
- Workforce isolation of workers from virus exposures impacts productivity:
 - COVID – 19 positive cases in the contractor’s workforce have occurred onsite. The impact was a site shutdown in compliance with the contractor’s COVID – 19 safe work plan which results in lost time in the schedule
 - Mitigation: continue to ensure COVID – 19 safety protocols are being followed
- Supply chain disruptions:
 - COVID – 19 has impacted product supplier manufacturing processes. The impact is longer than normal supply of some components which results in lost time in the schedule
 - Mitigation: review alternate products or components availability

As a result, the critical project milestone of Biological Nutrient Removal seeding in the fall of 2020 was missed. The contractor schedule was showing a BNR seeding completion in 2020. Currently we are in the midst of the second wave of the COVID-19 pandemic with strict restrictions in-place to reduce the community transmission of this virus. At this time there is no forecast as to when and if construction delivery and methods will return to pre COVID-19 state, and as a result, it is not possible to define a total project completion date at this time. The safety and well being of all Manitobans are at a critical juncture.

In this Notice of Alteration request the City is requesting a one-year extension to the above project regulator date, as shown in bold:

the total phosphorus limit of 1.0 mg/L in the effluent before December 31, 2020 as required by the Notice of Alteration approval letter dated January 8, 2018.

“Based on the review of your request and submitted documents, the alteration is approved in accordance with Section 14(2) of The Environment Act subject to the following condition: 1. The construction of the upgraded wastewater treatment plant shall

be completed before **December 31, 2021** such that the phosphorus limit of 1.0 mg/L will be met. All other conditions of the September 12, 2017 Notice of Alteration remain valid.”

Letter of September 12, 2017:

“3. The construction and commissioning of the upgraded wastewater treatment plant shall be completed before **to be determined**,

It is proposed to advise Manitoba Conservation and Climate of a new construction completion date in late September 2021 as this will confirm successful BNR commissioning in 2021.

Upon successful BNR commissioning, biological removal of total nitrogen, ammonia and partial removal of phosphorus will be achieved. Supplemental chemical trimming will be utilized to meet phosphorus licence requirement until the full biological system is in operation.

Going forward the City will:


- Continue to provide the quarterly progress reports as submitted to the Standing Policy Committee on Finance, City of Winnipeg
- Continue the current practice of meetings with the Province
- Develop and submit a monthly short form email report to summarize:
 - milestones achieved and setbacks experienced
 - the current status
 - the proposed activities for the next month
 - first report to be submitted March 31, 2021
- Confirm final completion date in late September 2021.

The North End Sewage Treatment Plant (NEWPCC) project activities are not impacted by the SEWPCC project.

The Notice of Alteration form is attached and the associated application fee will be paid by credit card.

Should you have any questions on this letter, please contact me at 204-986-4480 or by email at ciavra@winnipeg.ca.

Sincerely,


Colin Javra, P. Eng.,



Project Director, Winnipeg Sewage Treatment Program

Attachment

DEG/dr

c: Siobhan Burland Ross, M. Eng., P. Eng., Manitoba Conservation and Climate (email)
Shannon Kohler, Manitoba Conservation and Climate (email)
Yvonne Hawryliuk, MSc, Manitoba Conservation and Climate (email)
Asit Dey, P. Eng., Manitoba Conservation and Climate (email)
Julie Froese, Manitoba Conservation and Climate (email)
M. L. Geer, CPA, CA, Water and Waste Department (email)
G.K. Patton, P. Eng., Water and Waste Department (email)
R. Grosselle, Water and Waste Department (email)
C. Carroll, MBA, P. Eng., Wastewater Services (email)
D. E. Griffin, P. Eng., Water and Waste Department (email)
M. Paetkau, P. Eng., Water and Waste Department (email)

SEWPCC Contract 4 Schedule Milestone Dates*:

Monthly reporting in March 2021 will present percent completions and any potential revised dates.

1. Secondary Clarifiers 1 & 2, March 20, 2019
2. Grit and Screenings Building, Demonstration Tests by August 18, 2019
3. Secondary Clarifiers 4 and 5, Demonstration Tests by July 30, 2019
4. High Rate Clarification system, Demonstration Test by April 6, 2020
5. Chemical Building, Demonstration Test by April 6, 2020
6. Biological Nutrient Removal, Demonstration Test using chemical addition for phosphorus removal complete by August 10, 2020.
7. Raw Sewage Pump #2, Demonstration Test by March 20, 2021
8. HPO Tanks conversion to Fermenters and Biofilter, Demonstration Test with biological nutrient removal system without chemical addition for phosphorus removal complete by July 18, 2021.
9. Substantial Performance Date:
 - a. Original August 9, 2021
 - b. Revised August 29, 2021

*Contract Change Notice: S0976-15 PD - CCO - 0001 dated April 10, 2018.