



June 21, 2018

WSP Project No: 151-12617-00

Tracy Braun, M.Sc.

Manitoba Sustainable Development
1007 Century Street
Winnipeg, MB
R3H 0W4

Dear Ms. Braun,

**RE: RM OF RITCHOT – ST. ADOLPHE LAGOON
NOTICE OF ALTERATION – LICENCE No: 2776 (REVISED)**

On behalf of our client, the RM of Ritchot, WSP Canada Inc. (WSP) is applying for an alternation to Environment Act Licence No. 2776R for the RM of Ritchot – St. Adolphe wastewater lagoon. This request is due to the need to divert domestic wastewater storage tank disposal from the Ste. Agathe wastewater lagoon to the St. Adolphe wastewater lagoon. This Notice of Alteration request is to address the need to construct a temporary access road and truck dump location at the St. Adolphe wastewater lagoon to facilitate receipt.

In 2015, the RM of Ritchot retained WSP to assess expansion options for the Ste. Agathe wastewater lagoon to accommodate projected growth in the area. This preliminary assessment included estimating the organic loading from industry, which indicated that Viterria Inc. (Viterria) was not in compliance with their Industrial Service Agreement with the RM of Ritchot.

In an effort to address their non-compliance, Viterria, is seeking internal onsite waste improvements and water reduction strategies, which are expected to reduce the organic loading to the Ste. Agathe lagoon. Viterria has indicated to the RM that these process improvements will take place later in the summer (August 2018) and they believe to be within compliance shortly thereafter. During their interim, WSP recommended that options be pursued to reduce the organic loading to the Ste. Agathe wastewater lagoon while Viterria implement their solutions to become compliant.



Details of Alteration

The St. Adolphe lagoon presents a viable location to accept the municipal wastewater holding tanks for the RM. The St. Adolphe lagoon has recently been re-configured to address increased population in the area. The current organic loading capacity of the St. Adolphe lagoon is 444 kg BOD₅/day and, at present, less than half of the organic loading capacity is being used (208 kg BOD₅/day).

The current number of wastewater holding tanks in the RM of Ritchot that would be diverted to the St. Adolphe lagoon would be 50 per 21-days, for a total daily BOD₅ contribution to the St. Adolphe wastewater lagoon of 8.1 kg BOD₅/day (8.1 kg BOD₅/day is based on a total annual loading from 50 storage tanks holding approximately 6820 L each, with a wastewater strength of 500 mg BOD₅/L, which are emptied approximately every 21-days). Although, there is sufficient capacity to divert holding tanks from the Ste. Agathe lagoon to the St. Adolphe lagoon, the St. Adolphe lagoon does not have a truck dump station.

On behalf of the RM of Ritchot, WSP is requesting the alteration to construct a temporary access road and truck dump location at the St. Adolphe lagoon to allow the RM to divert wastewater holding tanks to the St. Adolphe wastewater lagoon. The temporary access road would be constructed along the south dike of the secondary treatment cell to provide access to the primary cell. The truck dump pad would be constructed on the southwest corner of the primary cell (see Figure 1). Both the access road and dump pad would be constructed out of rip rap and gravel to ensure that the integrity of both the dike and lagoon liner are not compromised.

Constructing a temporary access road and truck dump pad will allow the RM of Ritchot to divert holding tanks to the St. Adolphe lagoon, alleviating some of the organic loading to the Ste. Agathe lagoon, while WSP re-evaluates the loading to the Ste. Agathe lagoon once Viterra completes their process improvements. This still may lead to an expansion of the Ste. Agathe lagoon.

If you have any questions, or require additional information, please feel free to contact me directly.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Charles Goss', written in a cursive style.

Charles Goss, M.Sc., C.I.T.
Water Specialist

cc: Mike Dumaine, Manager of Public Works, RM of Ritchot
Mr. Asit Dey, P.Eng., Environmental Engineer, Manitoba Sustainable Development

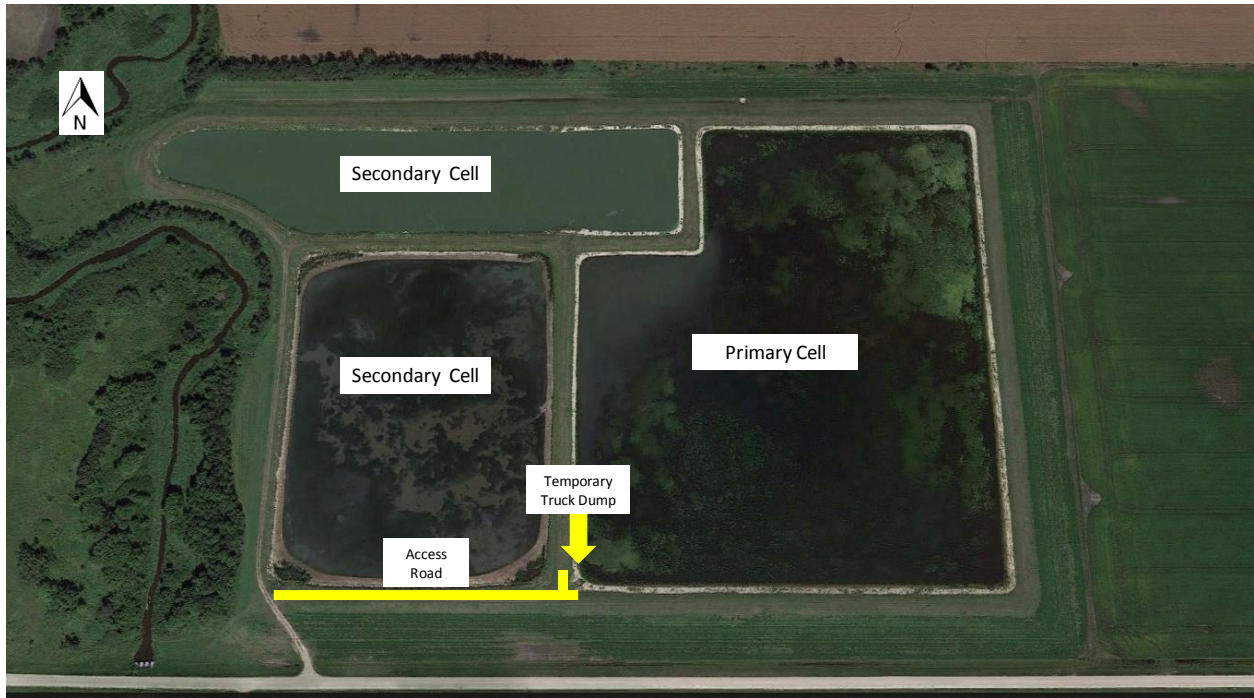


Figure 1: Proposed site for temporary access road and truck dump for St. Adolphe wastewater lagoon.