

District of Barriere
REPORT TO COUNCIL

Date: July 18, 2022	File: 530.20/Rpts
To: Council	From: B. Payette, CAO D. Underwood, TRUE Engineering
Re: **Resubmission** Waste Water Sanitary Sewer Upgrades – Discussion	

***This report, for continued discussion, is a resubmission of the June 6th Report to Council.*

Background: The District of Barriere has received multiple warning letters from the Ministry of Environment regarding the performance of the Solar Aquatics Wastewater Treatment System. In response, District staff have taken steps to improve the discharge quality produced by the wastewater treatment plant to the greatest extent possible. Noticeable improvement in discharge quality has been achieved, however additional steps must be taken to achieve the Class A effluent classification that is associated with the authorization to discharge. In order to achieve Class A effluent, a new wastewater treatment process located at the Septage Receiving site has been recommended by TRUE in its 2021 Wastewater Feasibility Study.

Discussion: Given the fact that the wastewater treatment plant is producing effluent that is not in compliance with the permit, an application was made to the Ministry of Environment in September 2021 to amend the waste discharge registration for this system. A request was made to reduce the target discharge quality from 10mg/L BOD5 and TSS to 45mg/L (Class A to Class C).

The Ministry of Environment reviewed the amendment application and subsequently met with the District and its Consultant to discuss. A virtual meeting was held on April 13, 2022. The meeting was attended by Leslie Berkes of the Ministry of Environment; Bob Payette, Dustin Doherty and Chris Matthews of the District of Barriere; and Dave Underwood and Rob Wall of TRUE Consulting.

The Ministry advised that the District can proceed in one of two ways:

Option A:

Maintain the existing discharge quality limits, but modify the treatment process. This approach would result in a simpler final application package which would include the standard forms plus a new Operating Plan and Design Drawings to reflect the process modifications.

Option B:

Reduce the discharge quality and remove the option to discharge reclaimed water for irrigation. The final application package would include the standard forms plus a new Operating Plan, new Environmental Impact Study, Notification and Engagement Report and Design Drawings to reflect the process modifications. A Best Achievable

Technology Assessment may be required to support new discharge infrastructure, as it is possible that the existing disposal field design and location may not be acceptable for a lesser quality discharge. The disposal field is also better suited to a Class A effluent than to Class C effluent, due to poor accessibility for maintenance. A review of the Environmental Monitoring Program may also be required. This option is more administratively burdensome and less technically robust. The application will include Indigenous Consultation, which could result in a review timeline of 8-12 months from the time the final application package is submitted.

During the meeting it was asked whether there would be benefit to the District proceeding with the construction of interim improvements at the wastewater treatment plant to improve discharge quality in the short term. The Ministry advised that temporary or interim improvements were not necessary. However, it is important that the District take steps in the short term to advance design details associated with wastewater treatment process modifications. The Ministry advised that detailed design of the process modifications should be advanced in the short term such that the District is “shelf ready” in the event that they are successful with its grant application.

Recommendation: THAT the District proceed with advancing the next step in the design process associated with Option A (maintain the existing discharge quality limits) as outlined in the report; and WHEREAS the next step in the design process comprises preliminary design of treatment process improvements, THAT a preliminary design budget of \$30,000 be allocated.

Prepared by: Dave Underwood, TRUE Engineering
Reviewed by: Bob Payette, CAO