

Township of South Stormont

ACTION REQUEST

Public Works Operations



To: Council
From: Ross Gellately, Director of Public Works
Date of Meeting: January 13, 2021
Subject: Long Sault Ingleside Water Treatment Plant – ZeeWeed Module Purchase

Recommendation:

That Council authorize the purchase of 192- ZW1000 ZeeWeed membrane modules for \$506,000 plus applicable taxes, with required funds being withdrawn from water reserves.

Executive Summary:

Long Sault–Ingleside Regional Water Treatment Plant was commissioned in June 2005. The plant utilizes Zenon (now Suez Water Technologies and Solutions) microfiltration as the primary filtration system. The system consists of 3 trains of 96 modules. The membranes currently due for replacement were installed in 2015.

Zenon originally described the lifecycle of their product as a very gradual reduction in production with a sudden decline at the end of the usable life of the cassettes. It was also stated that the sudden decline would occur in the winter months as the raw water’s viscosity increases as the temperature decreases. This again has proven to be accurate as the prescribed chlorine, acid and caustic soaks are becoming increasingly ineffective.

Water production requirements in winter are substantially less than summer months, though the plant requires three trains for optimum operation.

In 2020 one train of 96 modules was replaced, with the intention of two trains totaling 192 modules be replaced in the spring of 2021 prior to higher production requirements, hydrant flushing and the Ingleside Tower rehabilitation project.

Delivery is estimated at 10-20 weeks therefore staff are requesting pre-budget approval of the modules.

Background:

Suez Water Technologies and Solutions is the only supplier of the required membrane modules. These previously were originally manufactured in Canada by Zenon Water Technologies, current production has been relocated to Hungary, with delivery times now being 10 to 20 weeks after receipt of order.

This does not consider any potential delays as a result of the Covid 19 pandemic.

The Township's Procurement Policy Section 1.4.2 provides for Direct Award purchasing "if the goods or services can be supplied by a particular supplier and no reasonable alternative or substitute goods or services exist if the supply of goods or services is controlled by a supplier that is a statutory monopoly" .

Options:

1. That Council authorize the purchase of 192-ZW1000 membrane modules for \$506,000 plus applicable taxes, with the required funds being withdrawn from water reserves. This is the recommended option.
2. Other, as decided by Council.

Financial Impact:

In 2020 a single train (96 modules) was replaced at a cost of approximately \$256,672. The current pricing received is \$506,000 (\$253,000 per train). This amount will be included in the 2021 Capital Water Budget.

Risk Considerations:

Failure to replace the 192 modules could impact the ability to supply adequate quantities of potable drinking water at the Long Sault-Ingleside Regional Water Treatment Plant.

This item is proposed to be ordered prior to budget approval due to long lead time of 10-20 weeks; the Township's Asset Management Plan had scheduled the first modules be replaced in 2021, with the remainder scheduled for 2022. With the potential issues with production in the spring of 2021, the recommendation is to accelerate these purchases by one year.

Others Consulted:

CAO

Operations Staff- Caneau Water and Sewage Operations

Director of Finance/Treasurer