

STAFF REPORT

REPORT FROM THE CHIEF ADMINISTRATIVE OFFICER

Re: Boiler Replacement - Wastewater Treatment Plant

RECOMMENDATION

That Council purchase a boiler system, utilizing the emergency method* of the procurement policy, in the approximate amount of \$415, 000 be authorized.

BACKGROUND

The boiler system is an integral part of the wastewater treatment process at the Esten Lake Wastewater Treatment Plant. Heat produced by the boilers is used to maintain a controlled environment in which organic material collected from the incoming wastewater is converted into an inert material. A constant temperature of approximately 32 C is optimum for this conversion to occur. The process heat is maintained by two boilers each alternating between service and standby mode.

Currently the wastewater treatment plant has only one operational boiler. The rationale of a two boiler system is a safeguard with respect to process control. Should one boiler fail, there is a back up to be called into service and preserve the integrity of the process. With only one functional boiler, the risk of losing the process is entirely dependent on its operation as there is no backup.

The boilers at the wastewater treatment plant were changed out in 2013. These boilers run close to 24 hours/day during the cooler months and do run occasionally on an intermittent basis during the warmer months of the year. The life expectancy of a boiler is approximately 10-15 years.

ANALYSIS

The risk of losing the process needs to be mitigated with the installation of a new boiler.

Associated costs are as follows;

- Purchase, delivery and start-up of new boiler \$206,655.00
- Installation costs (mechanical and electrical) \$150,000.00 this is a conservative estimate, for budgetary purposes, that was provided by the contractor who performed the last install. As delivery will be anywhere from 14-18 weeks there will be time to solicit more quotations.
- TSSA and ESA inspections \$18,285.00

• 10% Contingency - \$40,000

Total cost = approximately \$415,000.00

FINANCIAL IMPACT

This replacement was not budgeted for in the 2024 Water/Wastewater capital budget. Given the priority of this project it is recommended that the \$264,576 earmarked for the primary clarifier repair be allocated to this expenditure and that the remainder (\$150,364) be taken from the water/wastewater reserves.

LINKS TO STRATEGIC PLAN

This supports the City's commitment to continued investment into infrastructure.

SUMMARY

Supporting this project reinforces the Corporation's commitment to quality control that contributes to environmental stewardship.

*Emergency method may be implemented when there exists a threat to public health or for the maintenance of an essential service.