

North Eastern Ontario Hub

Ontario Clean Water Agency Northeastern Ontario Hub P.O. Box 513 1 Browning Street Haileybury, ON POJ 1K0

Tel: 705-672-5549 Fax: 705-672-2534

December 2 2019

Town of Temagami P.O. Box 220, 7 Lakeshore Drive Temagami, ON P0H 2H0

Attention: Craig Davidson, C.A.O.

Dear Craig,

As per the current Fixed Price Agreement with the Ontario Clean Water Agency, we are giving notice of possible capital expenditures for 2020. They were arrived at through consultation with operations staff. They require your careful consideration and approval before they will be incurred. OCWA would be pleased to quote on any of this work or the supply of the identified repair or component.

Many of these items are a carryover from previous years and require careful consideration. A proactive approach to repair and renewal in the long run, saves the municipality costs that can be incurred when work has to proceed on an emergency basis.

I would be happy to attend a council meeting and discuss and prioritize the issues identified in this letter.

The estimated capital expenditures for 2020 are as follows:

Temagami North Water Plants

Proposed Expenditure	Estimated Cost	Rational
The clear wells should be inspected and if required cleaned	\$6,000.00	This should occur on a five year cycle.
A submersible pump is required to supply water pressure and flow to the plant in order for it to operate when the high lift pumps are unavailable	\$5,500.00	If the high lifts are not running or if the plant is isolated from the distribution system water cannot be produced.
The emergency generator should be load tested.	\$3,500.00	This is prescribed in CSA guidelines.
Chlorination system should be installed at the tower	25,000.00	The chlorine residuals are quite low in portions of the system and the MOE has shown concern.
The turbidity meters need to be replaced. The current meters are failing. Process pH will be added at the same time	\$15,500.00	The current meters are showing signs of failure. It is cheaper to buy new turbidity meters than to repair the current ones. The units fail when temperature falls.
Chemical pump parts	\$2,500.00	There should be an annual budget for Chemical pump parts for repairs and maintenance
Pocket Colorimeter	\$1,000.00	Portable analyzer for consistency with the verification of the online analyzers
Maintenance of "Tempered Water Controls"	\$1,250.00	This relates to health and safety and the system should be annually checked by a licensed technician
Treated PH meter installed	\$3,500.00	Optimization of the process. Monitoring operations
Portable ph meter	\$1,250.00	Process monitoring and online verification
Tower Interior and Exterior LANDMARK recommendation's	\$150,000.00	Interior and Exterior tank work, as per report
Tower Security and health and safety work	75,000.00	As per the Landmark report

Temagami North Sewage Treatment Facilities

Proposed Expenditure	Estimated Cost	Rational
Generator at Spruce Drive Pump Station	\$1,200.00	Annual Service
Desludging of Cells	\$30,000.00	The desludging of cells in an integral part of the operations of the system. Capital should be planned annually
Aeration Line Repair	\$10,000.00	Repair lines and headers for better treatment
Lagoon electrical building repair	75,000.00	The existing panel and electrical components need to be reviewed and renewed. Many issues with existing electrical equipment which could possibly be detrimental to the equipment.
Spruce Drive Pumping station clean out	\$2,500.00	Annual grit and sludge removal.

Temagami South Water Treatment Plant

Proposed Expenditure	Estimated Cost	Rational
Water plant	1,250,000.00	The backup plant for Temagami South has severe deficiencies with regards to the integrity of the plant. An assessment will need to be conducted with recommendations on a new train for backup to the existing plant that was installed in 2005/2006
Waste Pit Miltronics control	16,500.00	Waste pit should be monitored on a regular basis. No monitoring of overflow at this point if pumps fail
2 Chemical tanks 1500 litres (Alum and Soda Ash)	5,000.00	For safety reasons, spill containment is not large enough and the existing tanks are single walled.
Chemical pump parts	\$2,500.00	There should be an annual budget for Chemical pump parts for repairs and maintenance
Portable ph meter	\$1,250.00	Process monitoring and online verification

Pocket Colorimeter	\$1,000.00	Portable analyzer for consistency with the verification of the online analyzers
Second backwash pump Service	10,000.00	The Second Backwash pump should be serviced for longevity.
The clear wells should be inspected and if required cleaned	\$6,000.00	This should occur on a five year cycle.
Investigate and repair water tower riser leak	\$65,000.00	As per LANDMARK insp. report and recommendations.
Internal and External water tower repairs	475,000.00	As per LANDMARK insp. report and recommendations.
Safety and Equipment upgrades to water tower	20,000.00	Health and Safety upgrades including to equipment replacement

$Temagami\ South\ Sewage\ Treatment\ Facility 1$

Proposed Expenditure	Estimated Cost	Rational
ECA amendment to allow for GEO TUBE technology	\$5,000.00	After de-sludge of the existing south cell, the sludge was allowed to be stored in geo tube bags under Bishop Technologies ECA for no more than 13 months. Temagami South lagoon should amend ECA to allow this maintenance technology.
Heater in Ferric Room	5,000.00	A permanent heater needs to be installed in the ferric room. This will be more efficient heating and also assist in the protection to chemical and piping.
Chemical tank valves and piping renewal	\$4,500.00	All ferric tank piping and valves showing signs of deterioration and needs to be renewed before an environment issue. Ferric spill
Ferric tank clean out	\$2,500.00	Tank should be flushed and cleaned regularly for crystallization of chemical
Temagami Shores Radio install	35,000.00	Alarming and monitoring of station operations all year round. Have all data collection and operations se4nt to Temagami South Water Plant. Elevates public works plowing unsafe conditions during winter operations

DWQMS and Response Required

In regards to the recently implemented Drinking Water Quality Management System (DWQMS), a written response to this correspondence has become mandatory. Please provide your response to this letter at your earliest convenience, and if any decision is to be deferred to a later date, please advise as to the dates and particulars so that we can maintain the records as required by the province.

I hope that the above supplies you with an accurate estimate of capital requirements for 2020. However, despite best maintenance practices, unexpected equipment failures can occur as your facility ages. A contingency fund for such an event can make it much less painful.

Sincerely,

Victor Legault Senior Operations Manager Northeastern Ontario Hub, Ontario Clean Water Agency