

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON AUGUST 29, 2017
FROM:	KELLY SCHERR, P.ENG. MANAGING DIRECTOR OF ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT	SINGLE SOURCE PURCHASE FOR WASTEWATER FACILITY CHANNEL GRINDER REPAIRS

RECOMMENDATION

That, on the recommendation of the Managing Director of Environmental and Engineering Services & City Engineer, Envirocan and H2Flow **BE APPROVED** for ongoing refurbishment of channel grinders in accordance with section 14.4 d) & e) of the City's Procurement of Goods and Services Policy.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

None.

BACKGROUND

Purpose

To seek Council approval to use the original equipment manufacturer program to rebuild/exchange channel grinders for the City's wastewater pumping facilities.

Context

A channel grinder is a piece of wastewater treatment equipment located upstream of a wastewater pumping station or treatment plant that grinds waste into a fine slurry prior to pumping the waste to another location. These grinders function optimally over a 5-10 year period and then require refurbishment.

DISCUSSION

Channel grinders installed in wastewater facilities grind solids to prevent plugged pumps and debris buildup in station wet wells. Operating without a grinder increases the probability of a station failure related to plugged pumps and rag accumulations. With the introduction of "Flushable Wipes" these grinders have become even more critical. The ongoing education of the general public about what should and should not go down the toilet will help alleviate these problems but the grinders will remain a critical piece of equipment.

There are currently 12 units installed at various stations throughout the City of London's wastewater system. Only routine maintenance is required over the first 5-10 years of a grinder's life. The performance of a unit declines over time and requires a major refurbishment. In the past, several units have been refurbished in-house. It has been the experience of EES Staff that using the original equipment manufacturer exchange program is a more economical and timely alternative to in-house refurbishment. The parts and labour required for the City to rebuild a unit exceeds the cost of the original equipment manufacturer exchange. The average cost for a refurbishment of a channel grinder by the manufacturer is between \$40,000 and \$60,000 depending on the model.

The original equipment manufacturer exchange program is offered by two channel grinder suppliers: Envirocan and H2Flow. It is requested that single source contracts under section 14.4 d) & e) of the City's Procurement of Goods and Services Policy be developed with Envirocan or H2Flow to take advantage of the original equipment manufacturer exchange program.

Financial Impacts

These repairs will be completed using the annual wastewater treatment Equipment Replacement account-ES5084xx.

CONCLUSIONS

Grinders are a critical piece of equipment in wastewater treatment facility and a quick turnaround on repairs is needed to prevent problems related to plugged pumps and debris accumulation. Approval to complete these repairs as a single source purchase with the respective original equipment manufacturer exchange program will help reduce the time these units are out of service and reduce the risk of blockages and resultant sewer system overflows.

Acknowledgements:

This report was prepared within the Wastewater Treatment Operations Division by Angelo Marcoccia, Mechanical Maintenance Manager.

PREPARED BY:	REVIEWED & CONCURRED BY:
GEORDIE GAULD DIVISION MANAGER WASTEWATER TREATMENT OPERATIONS	SCOTT MATHERS, P.ENG. MPA DIRECTOR-WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P.ENG. MANAGING DIRECTOR OF ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

Cc: John Freeman, Gary McDonald